Levels Analysis Of Jazz Tunes

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by

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* * * *

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To Sandie
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PART I

EIGHTEEN GRAPHIC ANALYSES OF JAZZ TUNES
COMPOSED FROM THE 1930s THROUGH THE 1960s
CHAPTER I

INTRODUCTION

Extensions of Schenkerian analysis have been used to analyze contemporary art music by twentieth-century music theorists. Levels analysis techniques used to analyze post-tonal music share certain mechanical features with Schenkerian analysis, but it may be rightly argued that a levels analysis so used is not "Schenkerian" at all. Irrespective of such arguments, it is generally accepted that a levels analysis of some sort may be successfully applied to nearly any piece of music regardless of its pitch organization and style.

Relatively little effort has been spent by theorists to apply Schenkerian analysis to jazz. Questions exist as to whether Schenkerian analysis can explain the contrapuntal/melodic events in jazz. No standards exist as to how individual elements of Schenkerian analysis can be effectively applied in their pure forms to jazz, and which elements require modifications. A wide variety of jazz styles presents problems in trying to set analytic standards.

To date, the largest effort in applying Schenkerian analysis to jazz is Steven L. Larson's excellent dissertation *Schenkerian Analysis Of Modern Jazz*. (See Chapter IV of
Larson used Schenkerian analysis to probe the structural levels of jazz improvisation. It wasn’t his intent to develop and propose analytic norms for subjecting compositions of numerous jazz styles to Schenkerian analysis. Larson noted that relatively little information exists concerning Schenkerian analysis and jazz. On page two, volume 1 of his dissertation, Larson listed as a footnote most of the printed material concerning the application of Schenkerian analysis to jazz.

With so little to draw from, I will have to make my own way in this thesis. I will begin my analyses by adhering as closely as possible to precise Schenkerian methods.¹ I will make additions in terminology and notation only when a pure application of Schenkerian analysis will not allow me to describe and notate similar events occurring in numerous jazz tunes. I will not attempt to develop a levels analysis embodying concepts, terminology and notation that will explain the conditions encountered in all jazz tunes in all sub-styles. Rather, I will garner the information gathered from a levels analysis of more tradition jazz tunes, and identify any consistently occurring phenomena that dictates that modifications of, or additions to Schenker’s methods are necessary to produce meaningful graphs. Each of the three chapters (covering background, middleground and foreground) will spell out new concepts relative to the structural level of concern and will demonstrate the notation necessary to graph the new concepts. All new concepts may not require new notation. In such cases only new terminology should be necessary. Each chapter will be followed by a summary of the concepts presented in that chapter.

I will describe any jazz composition that I use in this thesis as a “tune,” irrespective of whether it is a vocal song or an instrumental composition. I limited my analysis to jazz tunes dating from the 1930s through the 1960s. In the decades from the 1930s to the 1950s, jazz enjoyed wide popularity. In the 1940s and 1950s, sub-styles,
such as bebop and cool jazz were introduced. By the 1960s jazz had diverged into numerous sub-styles. Rock-and-roll and country music proved to be more digestable styles than later jazz styles for the mass audience from the 1950s on.

Complete levels analyses of eighteen jazz tunes are presented in Part I of this thesis. The ideas presented in Part II are taken in part from those analyses. The jazz tunes are notated in a lead sheet format. Melodies are notated in a “generic” swing rhythm or with “straight quarter notes” unless particular situations dictate otherwise. Harmony is given as chord symbols. (See Appendices A and B for help in reading the chord symbols and jazz harmonic analysis symbols.) My analyses of the chosen jazz tunes make reference to no particular performances. It should be understood that some deviations from performance to performance would occur. Deviations would possibly occur on all structural levels and affect representative graphs. Also, I considered one pass through a tune as representing a completed fundamental structure unless the tune exhibits extreme structural syncopation. (See Chapter IV.) An analysis of any complete multiple chorus arrangement of a tune would probably yield graphs that deviate from a single chorus analysis. My concern will be to analyze the more or less “fixed” part of jazz. The fixed part is the composed tune and supporting harmony. Improvisations are based typically on the same chords used to support the melody. With respect to melody/harmony relationships and linear prolongations, jazz improvisations do many of the same sorts of things that jazz melodies do. Although I will not present the analysis of any improvisations in this thesis, I believe that many of the conclusions that I reached are applicable to the analysis of jazz improvisations. Most jazz tunes use some type of repeating form. Repetitions of form had to be taken into account in many analyses to explain prolongations that fill spaces caused by structural syncopation.
When comparing jazz to tonal music of the past I will use the term "tonal art music" to refer to the earlier music (tonal music of the seventeenth-, eighteenth-, and nineteenth-centuries) rather than the more common term, "Classical music." I will not name any particular composer, nor will I indicate particular compositions. For tonal art music, it is widely understood who the composers were and what they composed.

I will use the American Standard System of octave designation in this thesis.
End Notes

1 Schenkerian terms are widely used today in music theory, (although it might be argued, they are not quite so widely understood). Definitions will not be given for those terms in this thesis. For definitions to Schenkerian terms, see Heinrich Schenker. *Five Graphic Music Analyses*. Introduction and glossary by Felix Salzer. 2nd edition. New York: Dover Publications, 1969.
CHAPTER II

Eighteen Graphic Analyses of Jazz Tunes
Composed from the 1930s Through the 1960s
(Lead Sheets and Analyses)
All My Tomorrows

Ursatz

First-level middleground
All My Tomorrows

Second-level middleground
All My Tomorrows

Third-level middleground

\[ \text{\textit{A}} \begin{array}{c} \text{\textit{A}} \\ \text{\textit{A}} \\ \text{\textit{A}} \end{array} \]

\[ \text{G.} \quad \text{II}^{m7} \quad \text{II}^{m7} \]

\[ \text{\textit{B}} \]

\[ \text{II}^{m7} \quad \text{I}^{m7} \quad \text{I}^{m7} \quad \text{II}^{m7} \quad \text{b} \text{VII}^{m7} \]

\[ \text{\textit{A}} \begin{array}{c} \text{\textit{A}} \\ \text{\textit{A}} \end{array} \]

\[ \text{I}^{m7} \quad \text{II}^{m7} \quad \text{II}^{m7} \quad \text{II}^{m7} \]
All My Tomorrows

Third-level middleground, continued

Foreground
All My Tomorrows

Foreground, continued
All The Things You Are

_Ursatz_

False fundamental structure

First-level middleground (fundamental structure embedded in the false fundamental structure)
All The Things You Are

Second-level middleground
All The Things You Are

Third-level middleground
All The Things You Are

Third-level middleground, continued

Foreground
All The Things You Are

Foreground, continued
Blue in Green (1959) Bill Evans
Blue in Green

_Ursatz_

First-level middleground

Second-level middleground
Blue in Green

Third-level middleground
Blue in Green

Foreground
Con Alma

Ursatz

First-level middleground

Second-level middleground
Con Alma

Second-level middleground, continued

Third-level middleground
Con Alma

Third-level middleground, continued

Foreground
Con Alma

Foreground, continued
Forest Flower (1964) Charles Lloyd
Forest Flower

Ursatz

\[ T = \text{Tension} \]

(Only two levels of the middleground are necessary to show prolongations.)

First-level middleground
Forest Flower

Second-level middleground

\[ A \quad T_4 \quad T_7 \quad T_9 \quad T_7 \quad T_9 \quad A \]

\[ A^m \quad G^m \quad C^m \quad Bb^m \quad C^m \quad Bb^m \quad A^m \]

\[ G^m \quad C^m \quad Bb^m \quad C^m \quad Bb^m \]

\[ B \quad T_7 \quad T_9 \quad T_9 \quad T_9 \quad T_9 \quad 3 \]

\[ E^b^m \quad G^b^m \quad E^b^m \quad C^6 \]
Forest Flower

Foreground

A

A\nG\nC\nBb\nDb\nG7\nC\n
C\nBb\nA\nG\nC\nBb
Forest Flower

Foreground, continued
Giant Steps (1959) John Coltrane
Giant Steps

_Ursatz_

(Only two levels of the middleground are necessary to show prolongations.)

First-level middleground
Giant Steps

Second-level middleground

Foreground
Giant Steps

Foreground, continued
The Girl from Ipanema

Ursatz

First-level middleground

Second-level middleground
Second-level middleground, continued
The Girl from Ipanema

Third-level middleground
The Girl from Ipanema

Foreground

\[\text{A}_1 \quad \text{A}_2\]

\[F\quad I_m^7 \quad II_m^3 \quad \text{sub} \quad V^7 \quad I_m^7 \quad \text{sub} \quad I_m^7 \]

\[\text{B}_1\]

\[II_m^7 \quad \text{sub} \quad V^7 \quad I_m^7 \quad bII_m^7 \quad IV^7\]
The Girl from Ipanema

Foreground, continued
I Got It Bad (1941) Duke Ellington
I Got It Bad

Ursatz

(Only two levels of the middleground are necessary to show prolongations.)

First-level middleground
I Got It Bad

Second-level middleground
I Got It Bad

Foreground
I Love You (1943) Cole Porter
I Love You

Ursatz

First-level middleground

Second-level middleground
I Love You

Second-level middleground, continued

Third-level middleground
I Love You

Third-level middleground, continued
I Love You

Foreground

Musical notation diagram with chord symbols and musical notation.
I Love You

Foreground, continued
I Should Care (1944) Alex Stordahl
I Should Care

Ursatz

First-level middleground
I Should Care

Second-level middleground
I Should Care

Third-level middleground
I Should Care

Foreground
I Should Care

Foreground, continued
In Your Own Sweet Way (1956) Dave Brubeck

INTERLUDE BETWEEN EACH CHORD:

Dave Brubeck - "Greatest Hits"
In Your Own Sweet Way

Ursatz

First-level middleground
Second-level middleground

In Your Own Sweet Way
In Your Own Sweet Way

Second-level middleground, continued

Third-level middleground
In Your Own Sweet Way

Third-level middleground, continued
In Your Own Sweet Way

Foreground, continued
In Your Own Sweet Way

Foreground, continued
Pent Up House (1956) Sonny Rollins
Pent Up House

\textit{Ursatz}

\begin{align*}
&\begin{array}{c}
& \text{\#} \quad \hat{5} \quad \hat{4} \quad \hat{3} \quad \hat{2} \quad \hat{1} \\
& \text{\#} \quad \hat{5} \quad \text{\#} \quad \text{\#} \quad \text{\#} \quad \text{\#} \\
& \text{\#} \quad \hat{5} \\
\end{array} \\
&G: \quad I^{m7} \quad \text{Sub}^{\#} IV^{7} \quad I
\end{align*}

(Only two levels of the middleground are necessary to show prolongations.)

First-level middleground

\begin{align*}
&\begin{array}{c}
& A \quad \hat{5} \quad A \quad \hat{5} \quad \hat{4} \quad \hat{3} \quad \hat{2} \quad 3 \quad 2 \quad 1 \\
& B \quad \hat{1} \quad 3 \quad \hat{5} \quad \text{line} \quad \text{line} \\
& \text{line} \quad \text{line} \\
& G: \quad II^{m7} \quad \text{Sub}^{\#} IV^{7} \quad I^{m7} \quad IV^{m7}
\end{array}
\end{align*}
Pent Up House

First-level middleground, continued

Second-level middleground
Pent Up House

Second-level middleground, continued

Foreground
Pent Up House

Foreground, continued
Peri's Scope (1959) Bill Evans
Peri's Scope

Ursatz

First-level middleground

Second-level middleground
Peri's Scope

Third-level middleground

Foreground
Peri's Scope

Foreground, continued
Satin Doll (1958) Duke Ellington

[Musical notation image]
Satin Doll

Ursatz

First-level middleground
Satin Doll

Second-level middleground
Satin Doll

Third-level middleground
Satin Doll

Third-level middleground, continued

Foreground

\[ \begin{align*}
C & \rightarrow \Pi^{n} V^{7} \quad \Pi^{n} V^{7}/\Pi \quad \Pi^{n} V^{7}/V \\
\text{Sub}^{n} V^{7} & \rightarrow \text{I}
\end{align*} \]
Scrapple from the Apple (1947) Charlie Parker
Scraple from the Apple

Ursatz

First-level middleground
Scrapple from the Apple

First-level middleground, continued

Second-level middleground
Scapple from the Apple

Second-level middleground, continued

Third-level middleground
Scrapple from the Apple

Third-level middleground, continued

Foreground
Scapple from the Apple

Foreground, continued
Scrapple from the Apple

Foreground, continued
Shades of Light

_Ursatz_

First-level middleground

Second-level middleground
Shades of Light

Second-level middleground, continued

Third-level middleground
Shades of Light

Foreground
Stella by Starlight (1946) Victor Young

\[ E-7 \quad A-7 \quad C-7 \quad F-7 \]

\[ F-7 \quad Bb7 \quad Ebm7 \quad Ab7 \]

\[ Bbm7 \quad E-7 \quad A-7 \quad D-7 \quad Bb7 \quad Eb \]

\[ Fm7 \quad E-7 \quad A7 \quad A-7 \quad D-7 \quad Bb7 \]

\[ G-7 \quad C-7 \]

\[ Ab7 \quad Bbm7 \]

\[ E-7 \quad A-7 \quad D-7 \quad Gb7 \]

\[ C-7 \quad F-7 \quad Bbm7 \]
Stella by Starlight

_Ursatz_

First-level middleground

Stella by Starlight

Second-level middleground
Stella by Starlight

Third-level middleground

\[ A \]

\[ \text{\footnotesize \#II m7} \quad \text{II m7} \quad \text{IV m7} \quad \text{I m7} \quad \text{V m7} \]

\[ \text{\footnotesize ^3\text{line}} \]

\[ \text{\footnotesize ^5 \quad 7 \quad 3 \quad ^2} \]

\[ \text{\footnotesize bII m7} \quad \text{I m7} \quad \text{\#II m7} \quad \text{V m7} \quad \text{\#II m7} \quad \text{V m7} \quad \text{I m7} \]

\[ \text{\footnotesize ^3\text{line}} \]
Stella by Starlight

Foreground

A

B

"\text{\textcopyright 1932 by Hal Leonard Corporation. All rights reserved.}"
Stella by Starlight

Foreground, continued
Tune-Up (1953) Miles Davis
Tune-Up

*Ursatz*

\[ D: \quad I^7 \quad b\text{III}^7 \]

(Only two levels of the middleground are necessary to show prolongations.)

First-level middleground

\[ D: \quad II^7 \quad \text{V}^7 \quad \text{I}^7 \quad b\text{VII}^7 \quad b\text{VI}^7 \]
Tune-Up

Second-level middleground
Tune-Up

Foreground

\[
\begin{align*}
&\text{D: } II_{m}^{n} \rightarrow IV_{m}^{7} \rightarrow I_{m}^{n} \rightarrow IV_{m}^{7/\text{bVII}} \rightarrow \text{bVI}_{m}^{n} \\
&\text{bVI}_{m}^{n} \rightarrow \text{bII}_{m}^{n} \rightarrow (II_{m}^{n}/\text{bVI}_{m}^{n}) \rightarrow \text{bVI}_{m}^{n}
\end{align*}
\]
PART II

CONCLUSIONS FROM THE ANALYSES
CHAPTER III

The *Ursatz* In Jazz Tunes:

The *Urlinie* and Fundamental Bass Arpeggiation

Realignment of Structurally Syncopated Fundamental Structures

As foreground and middleground features are peeled away, most jazz melodies and supporting basses for the period of concern (1930s-1960s) reveal that they are controlled by the same fundamental arpeggiation that generated and governed linear motion in tonal art music. It is often not immediately apparent that this is the case, due to a first-level middleground activity that will be called *structural syncopation* \(^2\) in this study. Structural syncopation will be discussed in some detail in Chapter II of this thesis. The fundamental structure for Duke Ellington’s “I Got It Bad” is given in Example 1. Example 2 shows the fundamental structure for Bill Evans’ “Peri’s Scope.” A lead sheet for each tune is given before its analysis in Part I. Comparing the fundamental structure (*Ursatz*) of each tune to its lead sheet, the fundamental structure for “I Got It Bad” can be extracted with no difficulty. It is relatively easy from the lead sheet to deduce that the fundamental line is a fifth-line supported by a I/V/I fundamental bass arpeggiation. The ease in seeing the fundamental structure is due in part to its *alignment* with the tune. The two voices of the fundamental structure coincide with the tune’s beginning and end. It is not readily apparent from the lead sheet of “Peri’s Scope” that the fundamental line is a fifth-line supported by a I/V/I arpeggiation of the fundamental bass. (The fundamental line does not begin activity on the headtone. See Chapter IV, “Complex Structural
Syncopation.”) In this case, both voices of the fundamental structure show extremely syncopated relationships with the tune’s beginning and end. The fundamental structure given in Example 2 shows a realignment of the beginning and end of the tune with the beginning and end of the two fundamental voices in order to show the boundaries of fundamental linear motion. Without realignment, a graph of the Ursatz of “Peri’s Scope” would appear as in Example 3. The structural syncopation of the beginning and end of the two fundamental voices with the beginning and end of the tune is a contrapuntal rhythmic manipulation of the fundamental structure that lies on the first-level middleground. A graph of the fundamental structure should rightly be devoid of later level rhythmic manipulations. Hereinafter, graphs of fundamental structures for all structurally syncopated tunes will be structurally realigned.

Example 1. “I Got It Bad” Ursatz.
Example 2. "Peri's Scope" *Ursatz* (structurally realigned).


Tensions

In addition to intervals of thirds and fifths, jazz also accepts sevenths, ninths, elevenths, thirteenth, and added sixths as members of tertian structures. (A sixth above a root is considered to be a thirteenth if a seventh above the same root is present.) With the exception of the added sixths these intervals are called "tensions." Hereinafter, these intervals will be so labeled. In jazz, tensions and added sixths make up a significant portion of the pitches of foreground melodies and are freely used with no concern for resolving the tensions and added sixths to triadic chord members. In large part, tensions and added sixths give jazz its distinctive sound. Example 4 is a "tensions analysis" of the
melody to Cole Porter’s, “I Love You.” A graph of the fundamental structure is also given. There are numerous tensions in the melody at the foreground level. The fundamental line contains no tensions. The same is true for most jazz tunes.

Example 4. “I Love You” Tensions analysis of the melody. (T= Tension.)

“I Love You” Ursatz.
Tension Headtones

Fundamental structure headtones are a product of pre-Ursatz arpeggiations of tertian structures. From the third, fifth, or octave that Schenker’s models allow, fundamental lines in jazz include those that reach further up above the root of the tonic chord by successive thirds. The higher reach of some fundamental arpeggiations in jazz produces Urlinie headtones that form tension relationships (sevenths, ninths, elevenths, or thirteenths) with the tonic-chord root of the fundamental bass. In this study, a headtone that exists as one of the aforenamed intervals will be called a tension headtone. With tension headtones, pitches that could traditionally only have been consonant at the foreground and possibly middleground levels, and act only as unsupported motion in the Ursatz, are supported with a fundamental bass and given the ability to generate subsequent linear motion and to bear prolongations. Example 5 is the Ursatz of the tune “Shades of Light” by Hubert Laws. The graph shows that the Urlinie is a fifth-line that travels from the headtone, scale degree 7, to the goaltone, scale degree 3. In jazz, tensions are common in the foreground. They are also common at middleground levels but rare in the Ursatz. Chapter IV examines middleground level manipulations of the fundamental structure that make tensions largely unnecessary in the Ursatz.

Example 5. “Shades Of Light” Ursatz.
Mixture in the Ursatz

In tonal art music, mixture may appear as early as the middleground. In jazz, it may occur in the background. Example 6 gives the Ursatz for Duke Ellington's tune, "Satin Doll." The notes of mixture are the lowered 7th scale degree, B♭4 and the lowered 6th scale degree, A♭4. (The notes of mixture, as is typical, are borrowed from the parallel minor key.) In "Satin Doll," mixture occurs in the Urlinie. Mixture also occurs in the fundamental bass. (See the Ursatz graph of Miles Davis' tune, "Tune-Up," in Example 8.)


Bass Arpeggiation Substitution

In addition to fifth-related dominants, jazz harmony permits a dominant lying a half step above the chord of resolution, known as a "SubV(7)" for "(Tritone) Substitute Dominant." The application of a dominant chord a half step above any diatonic or modal interchange (mixture) chord is an extension of the augmented sixth chord idea. Indeed,
all Sub$V^7$ chords in jazz are spelled as augmented sixth chords. Tonal art music applied augmented sixth chords principally, but not exclusively, to the primary dominant in the key. In jazz, we find the role of the augmented sixth chord extended from its primarily ornamental function at the foreground level into the role of the structural dominant in the *Ursatz*. In tunes where this is the case, the bass span of the fundamental structure is scale degrees $1 \text{ } / b^2 / 1$. Duke Ellington’s “Satin Doll” contains a fundamental bass span of I/Sub$V^7$/I ($1 \text{ } / b^2 / 1$), seen in Example 7.

Example 7. “Satin Doll” bass arpeggiation substitution.

![Example 7](image)

Atypical Fundamental Structures

Principles of pitch organization developed by contemporary composers of art music were borrowed by jazz composers of the 1940s through the 1960s and used to determine the root relationship of structurally significant tertian structures, but rarely to generate pitch content in the foreground. A favored method of organization, similar to the idea of a symmetrical division of the octave, was ordering the root relationship of structurally significant chords by thirds. The *Ursatz* and foreground level graphs for
Miles Davis' tune, "Tune-Up," are given in Example 8. The graphs show that the fundamental bass spans an interval of a major third, moving from the tonic D$_3$, down to the modal interchange Bb$^7$. An analysis of the harmony indicates that "Tune-Up" was probably conceived in the key of D. The fundamental bass plays down the sense of key by placing more emphasis on the outlining of the third from D to Bb, than on the arpeggiation to the dominant A and the return to the tonic D.


"Tune-Up" foreground.
Example 8. continued, “Tune-Up” foreground.

\[ bVI^m \quad bII^m \quad (IV^m/bVI^m) \quad bVI^m \]

_Ursatz_ and foreground graphs for “Con Alma” by Dizzie Gillespie are given in
Example 9. “Con Alma” has structurally significant chords with roots a major third apart. The fundamental bass moves from the third-divider E3, to the tonic C3. “Con Alma” omits the initial tonic. The first note of the fundamental bass is the third-divider E. The third-divider in this case resides in the background. The fundamental bass arpeggiates up from the third-divider to the dominant and falls to the tonic at the end of the A section and again at the end of the tune. The result for the fundamental bass is an incomplete arpeggiation. Despite some deviation in the fundamental bass, the fundamental structure for “Con Alma” retains most features of a typical Schenkerian model.

"Con Alma" foreground.
Example 9. continued, "Con Alma" foreground.
Ursatz and foreground graphs for the tune “Forest Flower” by Charles Lloyd, are
given in Example 10. In the Ursatz, the fundamental bass spans a minor third from A₂ to
C₃. Neither the A nor the C is treated as tonic. There is no arpeggiation of the
fundamental bass to the dominant of either. The Eᵇ₃ (third measure, B section) does have
an arpeggiation to its dominant. This occurs at a middleground level and is not an
arpeggiation of the fundamental bass. It is impossible to determine the key of “Forest
Flower.” In this situation, the concept of key has no meaning. All of the chords
constructed on the bass notes of the Ursatz are equally “tonic” in nature. Should we
assume that the last chord in the tune is automatically I? Certainly, in “Forest Flower”
there is nothing to indicate that the C chord at the end is any more “tonic” than the A chord
that begins the piece, or than the Eᵇ chord in the B section of the tune. The fundamental
structure reveals that the tune was organized according to principles unlike those of tonal
art music.

Example 10. “Forest Flower” Ursatz.
Example 10. continued, "Forest Flower" foreground.
Some jazz tunes such as “Forest Flower,” shown in Example 10, and “Giant Steps,” shown in Example 11, have fundamental structures that are clearly divorced from the control of traditional tonal principles. Other tunes such as “Tune-Up” and “Con Alma,” shown in Examples 8 and 9, respectively, have fundamental structures containing types of activities that are found only in levels above the background in tonal art music. Jazz composers created many different types of fundamental structures by placing middleground-level activities into the background, and by adopting atonal principles at the background. Even in situations where the Ursatz is not tonal, tonal principles remain in force from the middleground forward. This is shown in Example 11, in the Ursatz and foreground graphs for John Coltrane’s “Giant Steps.” The Ursatz graph reveals that structurally significant chords are separated by a major third. In the Ursatz there is no arpeggiation to the dominant of any of the three structurally significant chords. The middleground contains arpeggiations to the dominants of each of the chords. Prolongational activities at the middleground levels (and the foreground) are tonal. This situation is typically true for jazz tunes containing non-tonal fundamental structures. (“Forest Flower,” given above in Example 10, is atonal at the Ursatz stratum, but tonal from the middleground forward.)

Example 11. “Giant Steps” Ursatz.
Example 11. continued, "Giant Steps" foreground.
Summary

Five principal ideas are presented in Chapter III:

1. One of Schenker's models of a third-line, a fifth-line or an octave-line serves as the fundamental line in jazz tunes to the extent that the tunes illustrated in Chapter III (and the analyses presented in Part I, Chapter II) are representative of the genre. The fundamental bass arpeggiation is usually I/V/I. The fundamental bass may substitute I/SubV\textsuperscript{7}/I for I/V/I.

2. A tension may serve as the *Urlinie* headtone, but this is less likely than a headtone of a third, fifth, or an octave above the tonic root of the fundamental bass.

3. In jazz, mixture occurs in the *Ursatz*.

4. Jazz tunes may contain fundamental structures that deviate from the norm through mixing middleground features into the background. The fundamental structure may be atonal.

5. Jazz tunes that do not have tonal fundamental structures are usually controlled by tonal principles from the middleground level forward, and still generally use tertian structures at the foreground level.
End Notes

2 Structural syncopations should not be confused with ultimate-foreground (realization level) syncopations. Structural syncopation occurs at the first-level middleground and affects the rhythmic relationship of the fundamental line, the fundamental bass arpeggiation and external tune form. Ultimate-foreground syncopations are rhythmically resolved at the third-level or second-level middleground. Structural syncopations are rhythmically resolved only in the Ursatz. (See Structural Realignment.)

3 SubV(7) chords typically contain a seventh.

4 The root relationship between the fifth-related dominant and the SubV7 is a tritone. For example, in the key of C the fifth-related dominant is G. The SubV7 is Db7. The interval from the root of the fifth-related dominant to root of the SubV7 is a tritone.

5 Root relationships of a third between structurally significant chords occurred in tonal art music as early as the beginning of the 19th century. In those cases the root relationships were the result of middleground level events. In jazz, third-spans of the bass are found at the background level.

6 There is the possibility of a modal fundamental structure. In this case the term “nontonal” would be better to describe atonal and modal fundamental structures as a group.
CHAPTER IV

The Middleground in Jazz Tunes:
Structural Alignment, Simple and Complex
Structural Syncopation, Circularity

In earlier jazz tunes from the 1920s and 1930s, generally speaking, the placement of the beginning of the fundamental bass (initial tonic) and the beginning of the *Urlinie* (head tone) was at the beginning of the tune. The ends of the fundamental bass (final tonic) and *Urlinie* (goal tone) were reached by the end of the tune. The three elements of 1) *surface architecture*, as defined by motives, phrases and sections, 2) the fundamental bass and, 3) the *Urlinie*, were relatively aligned. When a tune is described as being *structurally aligned*, or in *structural alignment*, the above named three elements begin and end at approximately the same time. It should be noted that many jazz tunes composed after the 1930s continued to make use of a fundamental bass and *Urlinie* structurally aligned with *surface architecture* and that some tunes composed before the 1940s show structural syncopations of these same elements. Example 12 demonstrates the concept of structural alignment in a non-Schenkerian graph form.

Example 12. Structural Alignment. The head tone of the *Urlinie* and the initial tonic of the fundamental bass both begin at the beginning of the tune. The goal tone of the *Urlinie* and the final tonic of the fundamental bass are reached by the end of the tune.
Example 13 gives the Ursatz and first-level middleground graphs for the tune, “I Got It Bad.” The first-level middleground graph shows that the fundamental structure remains in structural alignment at this level. Structural syncopation occurs at the first-level middleground. Therefore, the fundamental structure for “I Got It Bad” remains in alignment up through the foreground.

Example 13. continued, “I Got It Bad” first-level middleground.

In a tune described as being *structurally syncopated*, the three elements—surface architecture, fundamental bass, and *Urlinie*—do not begin and often do not end at the same time. Structural syncopation allows such a high degree of independence of the three elements that each can assume the character of a highly individual “voice.” Indeed, with structural syncopation, a type of three-part counterpoint exists among the three elements, with the surface architecture of the tune being the first “voice,” and the fundamental bass and *Urlinie* being the second and third voices, in either order. There are five possible configurations of *simple structural syncopation* with respect to the entrance orders of the surface architecture of the tune, the *Urlinie* and the fundamental bass. The surface architecture, of course, always begins at the beginning of the tune. In tunes showing simple structural syncopation, the *Urlinie* and fundamental bass are completed by the end of a single pass through the tune. The five configurations of entrance order for simple structural syncopation are shown in Example 14.
Example 14. Simple structural syncopation. 8

1.

\[
\begin{array}{c}
\text{Urlinie} \\
\text{Fundamental Bass} \\
\text{Surface Architecture}
\end{array}
\]

\[\text{Head tone} \quad \text{Goal tone} \quad \text{Initial Tonic} \quad \text{Final Tonic} \quad \text{Beginning of tune} \quad \text{End of tune} \]

(The head tone of the Urlinie enters after the initial tonic of the fundamental bass is stated. The initial tonic of the fundamental bass is stated at the beginning of the tune.)

2.

\[
\begin{array}{c}
\text{Urlinie} \\
\text{Fundamental Bass} \\
\text{Surface Architecture}
\end{array}
\]

\[\text{Head tone} \quad \text{Goal tone} \quad \text{Initial Tonic} \quad \text{Final Tonic} \quad \text{Beginning of tune} \quad \text{End of tune} \]

(The head tone of the Urlinie and the initial tonic of the fundamental bass begin together. The entrances of both are delayed, beginning some time after the beginning of the tune.)

3.

\[
\begin{array}{c}
\text{Urlinie} \\
\text{Fundamental Bass} \\
\text{Surface Architecture}
\end{array}
\]

\[\text{Head tone} \quad \text{Goal tone} \quad \text{Initial Tonic} \quad \text{Final Tonic} \quad \text{Beginning of tune} \quad \text{End of tune} \]

(The head tone of the Urlinie is stated at the beginning of the tune. The initial tonic of the fundamental bass is delayed, beginning some time after the beginning of the tune.)
4.

\[\begin{align*}
\text{Urlinie} & \quad \bullet \text{Head tone} \quad \bullet \text{Goal tone} \\
\text{Fundamental Bass} & \quad \bullet \text{Initial Tonic} \quad \bullet \text{Final Tonic} \\
\text{Surface Architecture} & \quad \text{Beginning of tune} \quad \text{End of tune}
\end{align*}\]

(The initial tonic of the fundamental bass is stated some time after the beginning of the tune. The head tone of the \textit{Urlinie} is likewise delayed. Its entrance occurs later than the entrance of the initial tonic of the fundamental bass.)

5.

\[\begin{align*}
\text{Urlinie} & \quad \bullet \text{Head tone} \quad \bullet \text{Goal tone} \\
\text{Fundamental Bass} & \quad \bullet \text{Initial Tonic} \quad \bullet \text{Final Tonic} \\
\text{Surface Architecture} & \quad \text{Beginning of tune} \quad \text{End of tune}
\end{align*}\]

(The head tone of the \textit{Urlinie} is stated some time after the beginning of the tune. The entrance of the initial tonic of fundamental bass is likewise delayed. Its entrance occurs later than the entrance of the head tone of the \textit{Urlinie}.)

Structural syncopation occurs at the first-level middleground. One or both voices of the \textit{Ursatz} may be shifted into non-alignment with the surface architecture of the tune. Some new notation is suggested in order to show structural syncopation and how it interacts with strophic forms to produce \textit{circularity}.

The following paragraphs explain the concept of circularity. The new notation with musical examples follows this section.

Circularity exists in a tune when either some “fundamental structure activity” remains incomplete at the end of a tune and wraps back around to the beginning of the tune for completion (complex structural syncopation—see below), or some completed
line of the fundamental structure bears prolongations that fill a space caused by simple structural syncopation. The *Urlinie* and fundamental bass may mix either of the above two conditions in any combination. An *Urlinie* or fundamental bass showing either of these conditions at the first-level middleground will be described as being “circular.”

Non-strophic forms pass in a straight line through the *Ursatz* once only. Strophic forms pass through the *Ursatz* repeatedly. Aligned strophic forms, with the surface architecture, *Urlinie*, and fundamental bass beginning and ending at the same time, are very regular and “square” in the repetition of the *Ursatz*. Structurally syncopated strophic forms in jazz, to the contrary, show a propensity for having a circular relationship with the *Ursatz* from the first-level middleground forward. At least one voice of the fundamental structure must be circular for a tune to show circularity. In simple structural syncopation the fundamental bass and the *Urlinie* may be aligned or syncopated as shown in the five configurations in Example 14. A structurally syncopated fundamental bass is always circular. 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. The final tonic of the fundamental bass reaches back around to the front of the tune and creates its own new beginning. In his article “Jazz Harmony: A Syntactic Background,” 10 Henry Martin calls harmonic prolongation without an initially stated tonic prolongation by arrival. He states that “prolongation by arrival contrasts with the more common practice of stating a tonic, deviating from it, then returning to it.” This author agrees that the tonic chord is being prolonged, even though it is not initially stated at the beginning of the tune. However, a critical point not addressed in prolongation by arrival is circularity. In a circular environment the initial tonic is present—at the end of the tune. Martin’s concept of prolongation by arrival is fine to explain the prolongational process for a single pass
through, or for the first pass through, a structurally syncopated tune. For structurally syncopated-repeating forms, however, circularity exists from the onset. The activity that fills the space from the beginning of the tune to the instantiation of the head tone and the instantiation of the initial tonic of the fundamental bass either owes its origins to the goal tone and final tonic of the fundamental bass at the end of the tune, or it completes one or both voices of the fundamental structure not completed at the end of the tune.

A structurally syncopated *Urlinie* may be circular, but need not be. The case where a structurally syncopated *Urlinie* is not circular is very specific. The structurally syncopated *Urlinie* is not circular when the instantiation of the head tone is delayed by an initial ascent that does not owe its origin to the goal tone of the *Urlinie* at the end of the tune. In all other cases the structurally syncopated *Urlinie* is circular. Various types of middleground and foreground activities fill the space from the beginning of the thematic process of the tune to the instantiation of the head tone. Individual cases will be considered as they are encountered in subsequent graphs.

With structural syncopation and circularity square repetition is avoided. The three "voices" of surface architecture, *Urlinie*, and fundamental bass are involved in a "structural round." Structurally syncopated-circular tunes go around and around without having clearly audible edges. Tunes that are circular behave as if they are *stepping into a linear process that is already in motion*. A jazz tune may step into, and exit the *Urlinie* and fundamental bass at any point in the circle. Before encountering complex structural syncopation, we will first look at a tune showing simple structural syncopation, and also consider its circularity. Example 15 gives the *Ursatz* and first-level middleground graphs for Cole Porter's "I Love You." The middleground graph contains the notation that is suggested to show simple structural syncopation and circularity.
Example 15. “I Love You” Ursatz.

The notation reveals the following about “I Love You.” The Urlinie is a fifth-line with a head tone stated at the beginning of the tune. The Urlinie therefore is not structurally syncopated. It is also not circular. The fundamental bass arpeggiates I/V/I. The instantiation of the fundamental bass is delayed. The broken beam under the bass at the beginning the tune shows that the bass is structurally syncopated (in this case, simple structural syncopation occurs because the final tonic of the bass is reached by the end of the tune). The beam points to the left and is picked up by the right-pointing broken beam at the end of the tune. Together, the two broken beams indicate that the bass notes at the
beginning of the tune supporting the *Urlinie* up to the beginning of the fundamental bass were arpeggiated from the final tonic of the fundamental bass at the end of the tune. The arpeggiation from the final tonic returns, backwards, to the initial tonic at the beginning of the fundamental bass. The beginning of the fundamental bass is the end of an arpeggiation that began at the end of the fundamental bass. Notes of the fundamental bass are connected with a solid beam indicating that only those notes of the bass belong to the fundamental structure. The bass is circular. The tune is circular.

**False Urlinie and Bass Relationships**

Structural syncopation of either type may create a false relationship between the *Urlinie* and the supporting bass. The false aspect is that, given the supporting bass notes, the head tone of the *Urlinie* may sound as thought it is a tension when in fact it may be a third, fifth, or an octave above the root of the tonic chord. This situation can exist only when the *Urlinie* and fundamental bass are not structurally aligned with each other. In Example 15 (above, middleground) the head tone C5, although a fifth above the tonic root, sounds like a “tension 11” above the supporting G4 bass. Herein may be the reason that fewer fundamental lines in jazz contain tensions than might be expected. *Structural syncopation produces the “higher interval sounds”* (9ths, 11ths, and 13ths) *desired in the style while maintaining triadic, clearly tonal fundamental structures.* The surface of a tune so treated is infused with the types of sounds desired in the style while the *Urlinie* retains its crucial boundaries (beginning and ending on notes of the tonic triad).
Complex Structural Syncopation

The surface architecture, the *Urlinie*, and the fundamental bass are shown as three embedded circles in Example 16a. The entrance configurations for surface architecture, *Urlinie*, and fundamental bass as shown in Example 14 are here given in a circular form. The broken lines in the *Urlinie* and fundamental bass circles show the connective prolongations that sew the end of a tune to its beginning. Example 16b shows a simple structural syncopation of the fundamental bass. The *Urlinie* is not structurally syncopated. The goal tone of the *Urlinie* and the final tonic of the fundamental bass are reached by the end of the tune. This is the configuration for Cole Porter's "I Love You." When circularity is not present repetitions are "square" and are not described by this concept.

Example 16a. Simple structural syncopation/circularity. (h.t.=head tone, g.t.=goal tone, s.a.=surface architecture, c.p.=connective prolongations, f.b.=fundamental bass, *U.*=*Urlinie*, i.t.=initial tonic, f.t.=final tonic, b.t.=beginning of tune, e.t.=end of tune.)

1. s.a.  
   f.b.  
   U.  
   c.p.  
   g.t.  
   h.t.  
   f.t.  
   i.t.  
   e.t.  
   b.t.

2. s.a.  
   f.b.  
   U.  
   c.p.  
   g.t.  
   h.t.  
   f.t.  
   i.t.  
   e.t.  
   b.t.
Example 16a. continued, simple structural syncopation/circularity.
Example 16b. Structurally aligned *Urlinie*. Fundamental bass showing simple structural syncopation.

The configurations of the circles are now not limited to the five “dialings” shown in Example 16a. The circles can be dialed into any configuration desired. Example 17 shows a complex structural syncopation of the *Urlinie*. The *Urlinie* is rotated so far out of alignment with the surface architecture of the tune that its final descent circles back around to the front of the tune for completion.

Example 17. Complex structural syncopation.\(^\text{13}\)
A tune that behaves in this fashion is "Blue in Green," by Bill Evans (previously attributed to Miles Davis). Example 18 gives the Ursatz and first-level middleground graphs for "Blue in Green."

Example 18. "Blue in Green" Ursatz.

"Blue in Green" first-level middleground.

The above middleground graph is illogical if complex structural syncopation and circularity are not taken into account. A performance of the music, because it is locked in a particular moment in time, appears to be creating the fundamental structure in a single
straight line course rather than traveling simultaneously around multiple circles in an already defined course.

Structurally Aligned Analysis versus Structurally Syncopation/Circular Analysis

A structurally aligned analysis of the "Blue in Green" is possible (only for the Urlinie). A first-level middleground graph is given in Example 19. The Urlinie spans from tension-9 down to scale degree 5 and contains a note of mixture (the B♭). Mechanically this analysis is fine, but it does not appear to be true. Specifically, problems begin in this analysis with the incorrect indication of E₅ and A₄ as the head tone and goal tone, respectively, of the fundamental line. The D₅ note in the Urlinie near the middle of the tune is an end point of a span that began on an F₄ note a few measures later. Fundamental linear motion begins on the indicated F₄ and is carried to the indicated D₅ where it rests. The end of the tune must be wrapped around to its beginning to see this, but after that, it is very clear. The two boundaries for the fundamental line are F₄ and D₅, not E₅ and A₄. The problems encountered in forcing a structurally aligned analysis on "Blue in Green" arise in the analysis of many jazz tunes. In such cases, a structurally syncopation-circular analysis may yield graphs that depict fundamental linear motion more accurately.

Structural syncopation and circularity de-emphasize the goal-attaining tendency of the *Urlinie* and to a lesser extent de-emphasize the return of a fundamental bass arpeggiation to the tonic. In a structurally aligned fundamental structure, the *Urlinie* goal tone is supported by tonic harmony. Arrival at the goal tone is typically emphasized with some "thematic and architectural process." The gathering of forces that push towards completion of the fundamental structure say to the listener, "we are arriving." With structural syncopation and circularity, these same forces are scattered, each chasing the other around a circle. The fundamental line, unsupported by these forces, is divorced from most of its goal-attaining nature and becomes more of a "controlling span" than a "directional line." Fundamental linear activity is contained within the span. Emphasizing the head tone as the point of departure and the goal tone as the point of arrival is under these circumstances no longer the primary thrust of the fundamental line. There is now an emancipation of the secondary note(s) of the fundamental line. A secondary note may now bear the type of later level linear activity that was heretofore reserved for the head tone only. This situation is encountered in A.Carlos Jobim's tune "The Girl from Ipanema." The example may be seen in the section below under the heading "False Head Tones and Descending Linear Progressions of the First Order."
Open-Circular and Closed-Circular Basses

For structurally syncopated basses, the circular models given in Example 16 show connective prolongations that fill the gap between the end of the fundamental bass and its new beginning somewhere after the beginning of a tune. This type of fundamental bass will be described as being open-circular. For a closed-circular fundamental bass, a single tonic chord serves as the beginning and end of the fundamental bass arpeggiation. There is no such thing as a closed-circular Urlinie since the Urlinie must begin on a pitch that is higher than its arrival pitch. In a closed-circular fundamental bass there is no gap to be filled with connective prolongation. The circle is closed. Ursatz and first-level middleground graphs for Hubert Laws' "Shades of Light" are given in Example 20. The fundamental bass of "Shades of Light" is closed-circular.


"Shades of Light" first-level middleground.
False Head Tones and Descending Linear

Progressions of the First Order

In jazz, because of complex structural syncopation, a tune may begin on a note of the *Urlinie* other than the head tone. In such a case the head tone of the *Urlinie* begins somewhere in the middle of the tune. (If the head tone is prolonged to the end of the tune and picked back up at the tune’s front for completion as seen in “Tune-Up” [Example 8, foreground], the *Urlinie* is still considered to show complex structural syncopation. In such a situation, there is no false head tone.) A tone of the *Urlinie* other than the head tone at the beginning of a tune, regardless of whether it is initially stated at that point or retained from the end of the tune, will act as a *false head tone*. False head tones may be prolonged with descending linear progressions of the first order. This is contrary to Schenker’s model of the first-level middleground which allows only the head tone to bear prolongation by a line of the first order. Example 21 gives the *Ursatz* and first-level middleground graphs of A. Carlos Jobim’s, “The Girl from Ipanema.”

Example 21. continued, "The Girl from Ipanema" first-level middleground.

The *Urlinie* of "The Girl from Ipanema" is a third-line, with the note A₄ as the head tone, and the note F₄ as the goal tone. The "fundamental passing tone," G₄, acts as a false head tone and is prolonged with a linear progression of the first order. The false head tone G₄ is supported with the first note of the fundamental bass (F₃). False *Urlinie* and bass relationships may be created this way in addition to the type where the true head tone is supported by prolongational notes of the final fundamental bass tonic.

Descending linear progressions of the first order in jazz are for the most part third-, fifth-, or octave-lines. Linear progressions of the first order do, however, span other intervals. A first-level middleground graph of Jimmy Van Heusen's "All My Tomorrows" reveals a linear progression of the first order that is a sixth-line. See Example 22.
Example 22. “All My Tomorrows” first-level middleground.

Tensions at Middleground Levels

Other than tension relationships that occur between the *Urlinie* and bass as a result of structural syncopation, notes that are in the service of prolonging the head tone, or in the service of prolonging other *Urlinie* notes, may form tensions with supporting bass notes. Typically, arpeggiations that prolong the final tonic of a structurally syncopated
fundamental bass form tensions with the *Urlinie* and its notes of prolongation. The *Urlinie* and its prolongations form tension relationships with supporting bass notes up to the point where the *Urlinie* and fundamental bass align at a triadic interval. The "triadic alignment" usually occurs at the interruption, or at the end of the tune where the goal tone of the *Urlinie* and the final tonic of the fundamental bass align. Structural syncopation is typically the progenitor of tensions that exist from the first-level middleground forward to the foreground. For a tension to exist at the middleground level, it must be supported by the same bass down to its first level of occurrence. Of course this must happen no later than the third-level middleground. For example, consider as seen in Example 23, foreground and first-level middleground graphs of Charlie Parker's "Scrapple from the Apple." (Only the first part of the foreground graph need be given here.) There are two tensions of concern given in the foreground graph. One is the A₅ note that forms a tension-9 above the supporting G₃ bass. The other is the Dᵇ₄ note that forms a tension-flat 9 above the supporting C₄ bass. Earlier levels (towards the *Ursatz*) show that the A₅ note is still supported by the G₃ bass at the first-level middleground and the Dᵇ₄ note is still supported by the C₄ bass at its earliest level, the first-level middleground.

Example 23. "Scrapple from the Apple" foreground. (Partial graph)
Example 23. continued, “Scrapple from the Apple” foreground. (Partial graph)

"Scrapple from the Apple" first-level middleground.
Example 23. continued, “Scrapple from the Apple” first-level middleground.

With this new information, further insights into “The Girl from Ipanema are possible.” A graph of the second-level middleground is given in Example 24. Refer again to the above graph of the tune for the first-level middleground (Example 21). Shown in the the second-level middleground graph, a line of the first order prolongs the false head tone G4. The goal tone of the line is the note C4. The C4 is supported by a Gb3 bass forming a tension-sharp 11. A line of the first order is a first-level middleground operation. In this case the Gb3 that supports the C4 is a bass arpeggiation at the second-level middleground. The goal tone of the line, C4, is supported by the fundamental bass tonic F3. The Gb3 is a second-level middleground arpeggiation that prolongs the fundamental bass tonic F3. In this case there is no tension below the second-level middleground.
False Fundamental Structures

The gap caused by simple structural syncopation of the fundamental bass is filled with prolongation of the final tonic of the fundamental bass. In simple structural syncopation, the space from the beginning of the tune to the initial tonic of the fundamental bass ranges from proportionately small, to proportionately large. Comparing third-level middleground graphs of Porter’s “I Love You” (Example 25a) to Dave Brubeck’s “In Your Own Sweet Way,” (Example 25b), “In Your Own Sweet Way” shows a later arrival of the fundamental bass than does “I Love You.” The bass of “In Your Own Sweet Way” begins five fifths (roots) from the tonic while the bass of “I Love You” begins two fifths from the tonic. The two basses are different only in quantity. In both tunes the bass executes the same function of prolongation of the final tonic of the fundamental bass. The basses begin at their respective positions along the circle of diatonic fifths and proceed with little delay to the tonic. In neither case is there an attempt to tonicize any harmonic area other than the tonic. Both basses are initially clearly in the service of prolonging their respective fundamental basses and exhibit no behavior independent of that function. The two above example are very tidy in this respect, but they are not unusual.

Example 25b. “In Your Own Sweet Way” third-level middleground.
Example 25b. continued, “In Your Own Sweet Way” third-level middleground.
Bass prolongations that fill the gap created by simple structural syncopation sometimes function in ways that contradict their primary function of prolonging the fundamental bass. In such cases, a bass note of secondary structural importance involved in prolonging the fundamental bass, through its own prolongation, appears to be a fundamental bass tonic. A bass characterized by this feature will be described as a *false fundamental bass*. Example 26 shows a third-level middleground graph of Jimmy Van Heusen’s tune “All My Tomorrows.” Shown in the graph, the initial bass note A₃ is involved in later level activity that prolongs the final tonic of the fundamental bass. The pro-longation activity appears to be independent of its primary role. The supertonic A₂ is treated as a key center. The supertonic has its own arpeggations to its dominant, E₅. The half cadence on E at the end of the first phrase is in the service of this pretense. When the bass finally gets around to the true tonic G₃, the bVII₇ to I₇ cadence weakens the arrival and postpones the articulation of G as the the true key. The dominant of the supertonic appears to be the divider dominant. It is near the end of the tune when the fundamental bass finally reaches up to its dominant and reveals the true key.

Example 26. “All My Tomorrows” third-level middleground.
Example 26 continued, “All My Tomorrows” third-level middleground.

The new notation used in Example 26 to indicate a false fundamental bass includes the double stems which intersect structurally more important notes of prolongation with the fundamental bass. The purpose of intersection is to show that a tonicized note of prolongation owes its origin to the fundamental bass. The false
fundamental bass also has its own beaming. The beam gathers the notes of prolongation together and helps the eye to see that taken together, the notes mimic important features of a fundamental bass. The false fundamental bass ends when it is absorbed into linear motion of the true fundamental bass. At the point of absorption the false fundamental bass ceases to exist in any way that is independent of the fundamental bass.

"All My Tomorrows" contains only the bottom voice of a false fundamental structure. This is usually the case. A more complex and much less common occurrence of an almost complete false fundamental structure is encountered in Jerome Kern's "All The Things You Are." See in Examples 27a, the fundamental structure, in 27b, the false fundamental structure (as implied at the first-level middleground), and in 27c, a first-level middleground graph showing how the fundamental structure is embedded in the false fundamental structure. The false fundamental structure prolongs the submediant F3. The tonic A♭₃ of the fundamental bass is initially treated as the third-divider of the false fundamental bass and retains that role until it absorbs the false fundamental bass near the end of the tune. The false Urlinie does not behave so independently of the Urlinie and is more like a secondary inner line. The false Urlinie has an interruption. The interruption of the false Urlinie and the divider dominant of the false fundamental bass occur at the same time and are motivically and architecturally articulated. The true fundamental structure has an interruption of the Urlinie supported by the divider dominant in the key. The event is not articulated at later levels and is not perceived as the primary structural interruption. The false fundamental structure intersects with the true fundamental structure near the end of the tune for a final time and is absorbed into fundamental linear motion.
Example 27a. "All The Things You Are" fundamental structure (Ursatz).

![Example 27a Diagram]

Example 27b. False fundamental structure.

![Example 27b Diagram]

Example 27c. Fundamental structure embedded in the false fundamental structure at the first-level middleground.

![Example 27c Diagram]
Example 28 gives Henry Martin’s structural analysis of “All The Things You Are.” Martin’s graph expresses a more traditional attitude towards structural analysis than is expressed in Example 27. The analysis in Example 27 reveals some structural features of the tune that Martin’s more traditional approach fails to capture.

Example 28. Henry Martin’s structural analysis of “All The Things You Are.”
Martin's graph indicates B₄ as the note where the descent of the *Urlinie* is interrupted. Examples 27 and 28 are particularly at odds over this point. Martin's graph indicates the dominant of the submediant as the divider dominant. There is agreement here. Example 27 shows that there is an interruption of the false *Urlinie* at the point where Example 28 shows an interruption of the *Urlinie*. Example 27 indicates a different function for the same B₄. The B₄ is part of a later level filling of a span the begins on the head tone and moves down to the G♯₄ note. The false *Urlinie* is interrupted when it "moves" from A♭₄ to G♯₄. The A♭ and G♯ would sound the same in the absence of their supporting harmony. Given those harmonies, the G♯ has a different meaning than has the A♭. It cannot be said that the A♭ is retained at this level (the lead sheet incorrectly spells the G♯ as an A♭). When the G♯ "moves" back to the A♭, the original meaning of the pitch that sounds G♯/A♭ has been regained. The act of regaining the head tone has in this instance been translated into an act of regaining original meaning rather than regaining an original pitch. The *Urlinie* has an interruption when the A section returns. The neighbor-note D♭₅ substitutes for the expected B♭₄ at the point of interruption. The fundamental bass has a double arpeggiation. The divider dominant (in the key) supports the *Urlinie* interruption. Owing to its occurrence internally in the return of the A section, the interruption is cloaked from easy perception.

**Structural Interruption**

In jazz, the fundamental line and fundamental bass often act independently of one another with respect to interruption and double arpeggiation. This is no surprise, considering the general independence of the two fundamental voices caused by structural syncopation. In addition to combinations of *Urlinie* interruption or non-interruption and single or double fundamental bass arpeggiation, similar behavior in a false fundamental
structure (usually in the bass only) must be included in any examination of structural interruption. Complicating the picture further still are arpeggiation in the bass to remote dominants that act as divider dominants and delayed descents of fundamental lines that have the surface quality of interruptions. In jazz, the idea of structural interruption is very much alive, and expressions of the idea seem nearly endless. Example 29 (a,b,c and d) gives first-level middleground graphs of four tunes. Different circumstances concerning Urbinie interruption and double arpeggiation exist in each case. Commentary follows each example.\textsuperscript{17}

Example 29-a. "I Should Care" first-level middleground.
"I Should Care" contains a double arpeggiation of the fundamental bass. The divider dominant coincides with the interruption of the fundamental line. The arrival of the bass back to the tonic is delayed after the divider dominant. The fundamental line acts independently of the bass and moves immediately back to the head tone. Other than the rather lengthy delay of the fundamental bass and the independently acting fundamental line, this interruption shows no unusual features.

Example 29b. "The Girl from Ipanema" first-level middleground.

* (Any expression of an interruption that does not actually occur at the first-level middleground will be identified with the following symbol: (II).)
"The Girl from Ipanema" contains a double arpeggiation of the fundamental bass. The divider dominant is V\(^7\). The structural dominant is SubV\(^7\). While there is no real interruption of the fundamental line, there is a hint of an interruption. The later level F\(^\#4\) note, supported by the divider dominant, acts like the 2nd scale degree of the false head tone G\(_4\). The movement from the F\(^\#4\) back to the false head tone G\(_4\) coincides with the bass's return to the tonic. Although this is not an interruption, it does mimic enough features of an interruption to pass as such at the foreground.

Example 29c. "Stella by Starlight" first-level middleground.
“Stella by Starlight” has no interruption of the fundamental line or double arpeggiation of the fundamental bass. The fundamental line C₅ note that occurs at the end of the B section is set up to be an interruption of the fundamental line. The fundamental line, however, does not return to the head tone. The C₅ is picked up at the front of the tune and moves on down to the goal tone. At the foreground the descent of C to the goal tone is delayed. The C is left hanging. The combination of these conditions gives the appearance of an interruption.

Example 29c. “Pent Up House” first-level middleground.

“Pent Up House” does not have a structural interruption. No later level activity mimics an interruption.
Summary

Six principal ideas are presented in Chapter IV:

I. In jazz tunes, the fundamental line and the fundamental bass may be contrapuntally independent of one another and contrapuntally independent of the surface architecture of a tune. Specific situations are given below.

A. Structural Alignment: The two fundamental voices begin and end with the beginning and end of a tune. In this case the two fundamental voices are not acting with any contrapuntal independence.

B. Structural syncopation occurs at the first-level middleground.

1. Simple structural syncopation: One or both voices of the fundamental structure begin after the beginning of a tune and are completed by the end of the tune.

a. In the case of a structurally syncopated fundamental bass, prolongation of the final tonic of the fundamental bass fills the space from the beginning of the tune up to initial tonic of the fundamental bass. A bass so affected is circular.

b. An Urline rhythmically displaced by simple structural syncopation is circular unless it is delayed by an initial ascent that is independent of the goal tone at the end of the tune. Various types of middleground activities fill the gap created by an Urline rhythmically displaced by simple structural syncopation.
2. Complex structural syncopation: A voice (one or both) of the fundamental structure is not completed by the end of a tune and wraps back around to the beginning of the tune for completion. A tune so affected enters the structurally syncopated fundamental voice at some mid-point. The motion of the structurally syncopated voice is completed and begins again before the end of the tune. A fundamental voice rhythmically displaced by complex structural syncopation is always circular.

C. Circularity has two conditions:

1. Some voice of the fundamental structure completed by the end of a tune bears prolongation that fills a gap caused by simple structural syncopation.

2. Some fundamental structure activity not completed by the end of a tune wraps back around to the beginning of the tune for completion. A fundamental voice so affected is rhythmically displaced by complex structural syncopation.

   a. A fundamental bass may be open-circular or closed-circular.

      i. Open-circular: Some prolongational activity fills the gap from the end of the fundamental bass to its new beginning. The prolongations may occur in simple and complex structural syncopation.

      ii. Closed-circular: The same tonic serves as the initial and final tonic. No gap exists to be filled with connective prolongations.
II. Simple and complex structural syncopation may create a false relationship
between the *Urlinie* and the supporting bass.

A. If the *Urlinie* and fundamental bass are out of alignment with each other, notes
of the *Urlinie* will often sound as if they are tensions when they may in fact be
the head tone or secondary notes of a third-, fifth-, or octave-line.

III. A false head tone exists when the *Urlinie* is rhythmically displaced by complex
structural syncopation (unless the head tone is retained from the end of the tune,
then there is no false head tone).

A. A tune so composed (with complex structural syncopation) begins linear
activity on a secondary note of the *Urlinie*. The secondary note acts like a head
tone and may be prolonged with a line of the first order.

1. In jazz, lines of the first order may span intervals other than the third,
fifth, or octave.

IV. Tensions encountered at the foreground level often are created at the first level
middleground through structural syncopation.

V. Much of a tune’s features above the *Ursatz* may be controlled by a false
fundamental structure.

A. Only the bass voice of a false fundamental structure is typically encountered.

Often in a tune so composed, the divider dominant of the false fundamental
bass occurs at the structural interruption. The tune appears to be in the key of
the prolonged false fundamental bass. Any voice belonging to a false
fundamental structure *intersects* with the fundamental structure, usually just
before the end of the tune, and is *absorbed* into fundamental linear motion. At
this point the fundamental bass moves to the dominant and returns to the tonic, revealing the true key of the composition.

VI. Structural interruptions do not always occur in jazz tunes. The idea of interruption finds many expressions in jazz tunes.

A. The *Urlinie* and fundamental bass may act independently of one another with respect to structural interruption. An appearance of interruption may occur at levels above the first-level middleground. A tune may have a divider dominant at any level with no interruption of the *Urlinie*. The divider dominant may belong to the fundamental structure, or it may belong to a false fundamental bass, or it may be a later level arpeggiation that serves as a divider dominant. Besides true middleground interruptions of the *Urlinie*, interruption may occur in a false *Urlinie*. Later level activity may mimic an interruption of the *Urlinie*. (A false *Urlinie* may be more properly seen as an instance of pronounced activity on an inner voice.)
End Notes

7 A bass that begins on a chord other than the tonic is considered to be structurally syncopated, even if only one chord precedes the tonic. However, in practice, a minimum of two chords typically precede the tonic chord (usually some type of II-V pair). If the *Urlinie* head tone is stated in the first measure, regardless of the beat it falls on, it is considered to be structurally aligned unless the delay in stating the head tone is caused by some activity stemming from the goal tone at the end of the tune. In the latter case the head tone is structurally syncopated and circular.

8 Note in every case that the goal tone of the *Urlinie* and the final tonic of the fundamental bass are reached by the end of the tune.

9 Most jazz tunes are composed in some strophic form. Through-composed jazz compositions are relatively rare.


11 Explanations concerning the entrance orders of the headtone of the *Urlinie* and the initial tonic of the fundamental bass are given in Example 14.

12 Examples 16b and 17 use the more typical "scale degrees" for the *Urlinie* and Roman numerals for the fundamental bass. Since reference is being made to specific tunes, *Urlinie* spans and bass arpeggiations are known. All notes of each are represented in the examples.

13 To see the application of Example 17 to "Blue in Green," treat the V as a later level dominant until the last repetition of the tune. At that point the V is the structural dominant.

14 In the Ursatz for "The Girl from Ipanema," the second scale degree of the fundamental line forms a tension-flat 9 above the root of the structural dominant. Since
the fundamental structure is structurally syncopated from the first-level middleground forward, the interval never actually sounds.

15 The concept of an embedded structure and the resultant graph given in Example 27b are decidedly non-Schenkerian. Henry Martin's graph of "All The Things You Are" (Example 28) is much closer to a traditional Schenkerian model, although it is argued here that the traditional model is unable to capture some interesting features of the tune.


17 See Part I of this thesis for more examples of structural interruption.
CHAPTER V

The Foreground in Jazz Tunes:
Schenkerian Notation and the Foreground in Jazz

Chapter III stated that tensions at the *Ursatz* level are produced by the same process of third-interval arpeggiation above a root that produces triads. In the “Tension Headtones” section of Chapter III, the concern was to show that a Schenker-derived theory does describe the mechanical process through which tensions may be produced at the background level. It should not be assumed that above the *Ursatz* level tensions are always produced by the superimposition of thirds. From the first-level middleground forward to the foreground, tensions are, irrespective of how they occur, involved in *the same types of mechanical activities exhibited by triadic pitches at these levels*. In addition to describing the fundamental process that produces tensions at the *Ursatz* level, and possibly at later levels, Schenker’s theory also gives us the mechanical basis for explaining the types of prolongational activities that tensions exhibit at later levels. No new notation is necessary to graph these later level activities.

Schenkerian Analysis and Jazz Tensions

Schenkerian analysis accepts as consonant members of vertical structures only the intervals of a third, a fifth, or an octave above a root. The theory accounts only for situations where the intervals of sevenths, ninths, elevenths (4ths), or thirteenths (6ths)
above a root are structurally inferior to the root and triadic chord members above the root. The theory contains no rules for explaining situations where these higher intervals are equal to, or displace both the notes and functions of their structurally more important triadic neighbors.

Tensions at the Foreground: Their Levels of Origin and Causes

Steven L. Larson deals in part with the problem of accounting for tensions with Schenkerian analysis in his dissertation “Schenkerian Analysis of Modern Jazz” (1987). Larson states that “a dissonance derives its meaning from consonance at deeper levels.” Discounting instances where tensions occur in the Ursatz, this author would agree with his statement. Yet, Larson does not state from what level dissonances derive their meanings and the processes that produce the dissonances. He does say that tensions are not always the product of a vertical process of piling up thirds, as is generally assumed. He offers the following quotes from Aldwell and Schachter and Steven Strunk respectively, to support his belief.

Partly because these tones typically appear in the highest voice, some theorists refer to such 4ths and 6ths as “11ths” and “13ths.” These terms also result from the erroneous idea that such dissonances are chordal in origin, that “9ths,” “11ths,” and “13ths,” result from adding thirds above seventh chords. In some twentieth-century music, dissonant chords might really result from the piling up of thirds . . . But in earlier music, dissonant chords originate in melodic motion, not in the piling up of vertical intervals. There is no reason, therefore, to regard “11ths,” and “13ths,” as anything but 4ths and 6ths that replace, rather than resolve to, 3rds and 5ths belonging to seventh chords. Some passages in music of the late nineteenth century might, perhaps, form an intermediate category.
The terms "chordal extension" and "superimposition" have been used along with numerical designations for these tones when they are explained as arising from superimposed thirds over the chord root. This explanation is probably not the best way to understand the phenomenon, as these notes generally behave as melodic, not harmonic events. I have maintained the numerical designation in the following discussion because of their firmly established general use. However, in order to separate these pitches from the vertical concept of chordal extension, these and certain other notes will be referred to collectively as *tensions*, defined as the following: In a tonal diatonic setting, a tension is 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. Most tensions are located a step above their resolutions. The concept of tension is broader than that of suspension, appoggiatura, passing tone or neighbor tone, as there is no requirement of manner of approach, manner of leaving, or rhythmic position in its definition.  

Larson's dissertation covers some of the problems in accounting for tensions. He is astute in recognizing that the above quotes contain ideas necessary to account for tensions. Larson's explanation of tensions centers on their contrapuntal treatment as dissonances that may, or may not, be resolved to consonances. No information is given as to how one can 1) determine the level of origin of a tension and 2) determine the process that generates the tension. The following ideas are offered explaining at what levels tension may occur and the processes through which they are produced.

The criteria for tracing a tension to deep structural levels are no different than the criteria used for tracing the root, third, or fifth of a triad to the same levels. The criteria will not be spelled out. They are already well understood by Schenkerian theorists. A tension may occasionally be traced to the *Ursatz*. A tension that is traced to the *Ursatz* is generated by pre-*Ursatz* superimposition of thirds above a root. More often, a tension can be traced only to the first-level middleground where, if it is a note of the *Urlinie*, it
was probably generated through structural syncopation of the *Urlinie*, structural syncopation of the fundamental bass, or structural syncopation of both fundamental voices.

In a case where the tension is produced at the first-level middleground, the tension is not generated by a superimposition of thirds above a root, but rather is generated by structural syncopation of the two fundamental voices. If a tension is traceable to the middleground and is not a note of the *Urlinie*, it will be involved in some type of activity that prolongs the head tone or that prolongs secondary notes of the *Urlinie*. Without respect to supporting bass notes, tensions involved in middleground prolongations typically appear mechanically identical to triadic notes that serve the same functions at these levels. Tensions of these types are “made” tensions as a secondary consequence of structural syncopation. The primary consequence of structural syncopation is, with respect to vertical considerations, the tension relationships that are created between the head tone and secondary notes of the *Urlinie*, and supporting bass notes. The secondary consequence of structural syncopation is tension relationships that are created between notes in the service of prolonging a fundamental line member, and notes in the service of prolonging the final tonic of the fundamental bass. When *not* judged one against the other, the fundamental-line prolongations and fundamental-bass prolongations would usually appear normal in a triadic environment. Their “abnormality” is a consequence of structural syncopation. Tensions of this category are also typically not the result of a superimposition of thirds above a root. Finally, if a tension is not produced at the pre-*Ursatz* level through arpeggiation, or is not produced at the first-level middleground level through structural syncopation, or is not produced by any middleground prolongational process as a secondary consequence of structural syncopation, then it is necessarily a product of some foreground activity. Foreground
tensions also are not necessarily a result of stacking up thirds above a root. Foreground activities are similar in kind to earlier level activities. It makes sense that foreground tensions would not be limited to those which are produced by the superimposition of thirds above a root.

**Registroal Stratification:**

**Chord Sound/Function Definition Register,**

**Non-Duplication Register**

In tonal art music, notes that appear as dissonances at more remote levels are made consonant at the next higher level by a consonant supporting bass. This process continues up to, but does not include, dissonances at the *ultimate foreground*. Tonal art music, for the most part, achieved dissonance only at the foreground. Even at the foreground, dissonant pitches were typically clearly subordinate to the structurally superior triadic pitches they ornamented. Example 30a shows the treatment of a foreground dissonance as it might be encountered in tonal art music. Example 30b shows that at an unspecified more remote level, the dissonance has no existence independent of the triadic chord member it ornaments. In the register of the bass and in the register of the melody, the “meanings” of triadic chord members as more significant structural components and dissonant notes as less significance structural components are maintained. In both registers (generally: the harmony and the melody) all notes have the same “values.” A consonance is a consonance. A dissonance is a dissonance. The higher register of the melody duplicates the values of the lower register of the bass and harmony.
Ex. 30a. Foreground dissonance ornamenting a triadic chord member.

Ex. 30b. Resolution of the dissonance at an unspecified more remote level into the triadic chord member it ornaments at the foreground.

Strunk states that "in a tonal diatonic setting, a tension is 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."\textsuperscript{22}

The clause, "in the register in which it occurs," is the germinal idea for explaining some of the behavior of tensions in jazz. By placing dissonance (tensions) into deeper structural levels, jazz composers create a situation in which dissonances have to be structurally superior to triadic chord members that they displace. If this were not the case, dissonant notes could not bear the amount of proportionately long prolongations that they
typically do. The dissonances would serve the same purposes as dissonances do in tonal art music. In jazz, however, if dissonant notes were allowed to replace triadic notes at all levels and in all registers, the tonal conditions of the fundamental structure could be destroyed. Replacing the fundamental bass arpeggiation of scale degrees $1/5/1$ (or the $1/b2/1$ substitution) with dissonant notes would destroy the tonality of a tune so affected. Dissonant notes (tension headtones) do occur in the Ursatz. (When a tension headtone is used, the goaltone is typically the third or fifth of the tonic triad.) At the background, dissonance may exist in the upper register (fundamental line) but not in the lower register (fundamental bass). Indeed, in jazz, at all structural levels, dissonance usually occurs in the upper register and consonance usually occurs in the lower register. In the upper register of the melody (and harmonic tensions) below the foreground, dissonant notes are often treated as structurally superior to the triadic notes they replace. In the lower register, dissonant notes are treated as structurally inferior to triadic notes that they neighbor at all levels. What is being described is an attitude towards register that is quite contrary to the “homogenized” notion of register generally seen in tonal art music. In tonal art music, for all registers from the bass to the top note, notes that are dissonant and notes that are consonant have the same meanings. This is not the condition in jazz. Jazz composers may use most or all of the notes available in a chord scale at one time. In order to maintain clear chord sound and root motion with all of this pitch information occurring at one time, jazz stratifies pitch space into two registers where notes in one register may not have the same meanings as notes in the other register. Specifically, triadic notes in a higher register do not duplicate the values of triadic notes in a lower register. Triadic notes in the lower register have the job of defining basic chord sound and moving the chords clearly from root to root. Typically, only notes of the triad are involved in this activity. In this register, dissonant notes are subordinate to notes of the triad. In this register, notes of the triad and their dissonant neighbors receive nearly the same treatment that they received
in earlier tonal art music. The lower register where basic chord sound and root motion are defined will be called, the *chord sound* function *definition register*. In the upper register, tensions are added to the harmonic structure and the melody is stated. Structurally more important notes of the melody typically form tension relationships with the supporting bass notes. The upper register where tensions are equal or superior to notes of the supporting triad will be called the *non-duplication register*. Dissonances in this register have been emancipated from serving the triad in the way that dissonances serve the triad in the lower register. Thinking of registers in this fashion requires the notion that the two registers are in some way independent “voices.” Although no registers have any meaning beyond the notes that occur in those registers, the idea of independent registers as “voices” may help to clarify these concepts as well as those that follow. The two registers are in practice somewhat mixed. The non-duplication register has more freedom than the chord-sound and function-definition register in mixing notes of the triad with tensions.

The melody has the option of using a note of the lower supporting triad or replacing the note with a tension. Situations often occur where the melody uses one note then the other without treating one note as being superior to the other. Example 31 shows the first two measures of “All My Tomorrows.” In the first full measure the melody begins on the pitch B₄, which would be considered a tension-9 in a vertical analysis. The melody moves to A₄ on the third eighth note of that measure then back to the same B₄ on the third beat. It is incorrect to see the A₄ as a neighbor note to the B₄. A₄ belongs to the supporting triad, A minor. How is it a non-harmonic tone? The B₄ is structurally superior to the A₄, but that judgment does not translate into a judgment about the harmonic or non-harmonic function of the note on the foreground.
Ex. 31. “All My Tomorrows”

Jazz composers for the most part have given up the game of harmonic tones versus non-harmonic tones in the non-duplication register. At the foreground, jazz melodies often treat notes of the supporting triad and tensions as having equal values. Neither is subordinate to the other. In the non-duplication register at levels below the foreground, tensions are more apt to be structurally superior notes, but their triadic neighbors are still not necessarily “dissonances” that must be resolved into the tensions at some still earlier level.

Tension may occur in the chord sound/function definition register. If this is not handled carefully, clouding of chord sound may result; or even worse, the destruction of chord sound and its function may result. Example 32 is a typical jazz voicing showing a clear separation of the chord sound/function definition register from the non-duplication register. In the bottom register, the notes of the triad plus a seventh are voiced. In the higher register the tensions are added. With this voicing chord sound is very clear. Within a key, its function would also be easily understood.
Ex. 32. A clear jazz voicing showing good separation of the two registers.

Example 33 overlaps the two registers by placing two of the tensions used in the example above in the lower register next to the triadic notes that they typically replace. There are now four pairs of seconds sounding. This voicing is less transparent than the above voicing. We are still able to hear the lower triadic (or seventh chord) notes as the foundation sonority and the tensions as higher additions to that sonority. This is a viable voicing in the style.
Example 33. A less clear jazz voicing showing an overlapping of the two registers.

Example 34 confuses the function of the two registers. This could be seen as a type of registral crossing. With actual voices, injudicious crossing can confuse the ear as to where the crossed voices really moved. Likewise, injudicious crossing of functionally independent registers can confuse the ear as to chord-sound and function when extended chord harmony is being used. The voicing below is confusing.
Ex. 34. A confused jazz voicing showing a crossing of the two registers.

The concept of functionally stratified registers is included in the foreground section of this thesis because of its applicability to purely vertical considerations. Beyond explaining deeper level processes, registral stratification serves as a foundation concept for explaining the placement of tensions in jazz voicings. It does not matter at what level a tension originates if its location in a vertical sonority is the prime concern. Nevertheless, it should be understood that for structurally more important tensions, stratification generally occurs at the middleground level through some type of structural syncopation.
Summary

Four principal ideas are presented in Chapter V:

1. In jazz, tensions are involved in the same types of activities as are triadic notes. Some tensions are prolonged, some prolong other tensions or triadic notes. No new notation is required to graph this activity.

2. Tonal art music typically demonstrates a homogenized function of notes in all registers. Consonance and dissonance serve largely the same purposes in all registers. Dissonances are structurally inferior to the triadic notes that they ornament. Dissonances do not penetrate into deeper levels. Foreground dissonances are quickly resolved at a lower level into structurally more significant triadic notes.

3. In order to use tensions and maintain clear chord sound and root motion, pitch space in jazz is stratified into two different registers where octave-equivalent notes have different meanings. The lower stratum sees the placement of basic chord sound and root motion. Dissonances in the lower stratum ornament neighboring triadic notes. In the upper stratum tensions (dissonances) are added to the supporting triad or seventh chord and the melody is stated. The melody freely mixes tensions and notes of the supporting triad. In the melody (at the foreground), one is not considered as being superior to the other. Dissonances in the upper stratum do not ornament neighboring triadic notes.

4. Tensions are usually not produced by piling up thirds above a root. They are most often produced at middleground levels as a primary or secondary result of structural syncopation.
End Notes


21 There is some general disagreement among Schenkerian theorists concerning the absolute meaning of the term “foreground.” The term “ultimate foreground” in this thesis means the level of the actual composition (sometimes called the realization). No attempt is made to precisely “place” the foreground. Its placement in this thesis is to be understood as being very near the ultimate foreground.


23 A seventh may also occur in this register. The seventh may be seen as the note where the two registers properly overlap.

24 Tones at certain intervals are treated as non-harmonic in specific situations. For example, the interval of a perfect fourth is a non-harmonic tone when it occurs above the root of a chord containing a major third above the same root.

25 A note which is a tension at the foreground to the first level-middleground may actually be a triadic member of the fundamental structure in the *Ursatz*.

26 A jazz voicing that uses a note of a triad and the tension that typically replaces that note in the same register places the resulting interval of a second in the middle of the voicing to achieve the best results.
Appendix A: Jazz Chord Symbols

The preferred symbol is given first, directly beneath each chord. Other symbols sometimes used to indicate the same chord are listed to the right of the preferred symbol.

\[
\begin{align*}
\text{C}^7 & \quad \text{C}^\text{maj}, \text{C}^\text{maj7}, \text{C}^\text{A} \\
\text{C}^\text{m7}, \text{C}^\text{min7}, \text{C}^{-7} \\
\text{C}^\text{7}, \text{C}^\#5, \text{C}^\text{Aug} \\
\text{C}^\text{add6}, \text{C}^6
\end{align*}
\]
Appendix B: Jazz Harmonic Analysis

In jazz harmonic analysis, a solid arrow is used to indicate the resolution of fifth-related dominant chords to chords of resolution (1). A broken arrow is used to show the resolution of SubV7 chords (2). Any two adjacent chords that form a II-IV pair are coupled with brackets. A solid bracket couples fifth-related II-V chords (3). A broken bracket couples half step-related II-SubV7 chords (4). When it is not possible to provide a Roman numeral for the chord that acts as II in a II-IV pair, a bracket is still used (5).

1. $\text{G7} \rightarrow \text{Cm7}$  
   $C: \text{I7} \rightarrow \text{I} \text{m7}$  

2. $\text{Db7} \rightarrow \text{Cm7}$  
   $C: \text{SubIV7} \rightarrow \text{I} \text{m7}$

3. $\text{Am7} \rightarrow \text{D7} \rightarrow \text{G7}$  
   $C: \text{VI} \text{m7} \rightarrow \text{IV7} \rightarrow \text{V} \text{m7}$

4. $\text{Am7} \rightarrow \text{Ab7} \rightarrow \text{G7}$  
   $C: \text{VI} \text{m7} \rightarrow \text{SubIV7} \rightarrow \text{V} \text{m7}$

5. $\text{Eb7} \rightarrow \text{Ab7} \rightarrow \text{Dbm7}$  
   $C: \text{V7/IV7} \rightarrow \text{bII} \text{m7}$

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Bibliography


