September 16, 1995

This is a copy of the English language (original) draft of a lecture, entitled "The Development of Diminutions in American Jazz." that I delivered in various Amerika Huser in Germany and Austria, under the aegis of the United States Information Agency, in spring 1958, before I came to Yale and while I was teaching in New York at Columbia Teachers College (Piano) and at the Mannes College of Music (Schenker).

The actual lectures were read from the German language translation of this paper, prepared by Ernst Oster. The little question marks in the margins here and there are his. The musical examples are all mine--I did the transcriptions from recordings. After I had finished them I asked Milton Babbitt to check them for accuracy, which he did. No corrections. There are, however, a few corrections here and there that I made later on, notably on Ex. 12.

Please bear in mind that this was intended for a particular audience, written at a particular time, and that the paper was intended to be read aloud.

I no longer have the recordings, although I am sure that they now exist on cds. Parker's improvisation on "I'm in The Mood For Love" is especially eloquent, and I wish I could hear the original. I don't even know where it is on the multiple reissues of his music. I thought about including it in my book on the American popular ballad, but discarded the idea.

Allen Forte
first stage are retained and which undergo transformation.

**RECORD: Lester Young - Salute to Fats**

Although this solo is similar in many respects to the development is apparent in the chromatic of Louis Armstrong solo, the diminutions are more chromatic and in the chordal accompaniment is more elaborate chord succession:

**SILM: Chord succession**

Notice that in m. 2 the flattened 3rd has been incorporated absorbed into the chord, a IV7. And in m. 6 the chromatic passing tone, A flat, is also carried by the accompaniment. In m. 8, however, the accompaniment does not include the dissonances which arise in the solo diminutions. In more recent blues improvisations these are included.

The second example, from this stage is by the same existist player.

**RECORD: Lester Young - Blues 'n Bells**

Let's examine the relationship this improvisation.

**SLIDE: Young - Blues 'n Bells**

I direct your attention to m. 8 where the accompaniment plays a chromatic passing chord, a chord of the seventh. Above this chord the soloist plays a diminution centering upon G xxxxxxxxxxxxxxxxxxx which is dissonant in relation to the accompaniment chord. This situation is purely the result of accident. The soloist bases his diminution upon a C minor 7th chord while the exist accompanist plays, instead, a chromatic passing chord. Accidental conflicts
of this type characterize jazz at this intermediate stage when the basic chord succession is undergoing further elaboration. At the next stage of development diminutional events of some complexity can be traced back to these earlier accidents.

I should like to take a moment to explain how the blues chord succession was probably elaborated. The slide: chord ‘evolution’

The incorporation of chromatic progressions in the blues chord succession begins with the cadence. AtAx This chordal elaboration is melodically derived from the blue notes. At A we see the purely melodic blue third. At B we see how this occurs over a V-I cadence, which thus gives rise to a more complex chord. At C we see how the flatted 7th is introduced within the I. At D we see a logical extension of these dissonant relationships in the form of chromatic adjacent tones in all voices.

Subsequently, chromatic successions of this type occur in other parts of the blues succession, and of course in non-blues jazz improvisations.

PART FIVE

Let us now turn to the third stage in the development of jazz diminution technique. Here is a recent blues recording:

RECORD - Modern Jazz Quartet - Bluesology
Now the notation:

SLIDE: Bluesology

in m. 2

Observe how the characteristic flatted 7th persists in this highly stylized blues "theme". Notice also that it is mxxxoccurs both as a chord element (M. 4) and as a purely melodic dissonance (m. 1 and m. 5). In m. 2 the flat 3 is presented first as a lower adjacent tone to A flat.

I direct your attention to the further elaboration of the blues chord succession which now includes a modified fifths progression in the bass; the (III7 - V7 - I). Here the V7 is elided. This progression was probably introduced from non-blues improvisations. It was easily absorbed and retained, because it better supports the flatted third that frequently occurs in the melodic diminutions during those measures. If the flatted third occurs mxxx above the V7, mxxx, a diminished fourth is formed with the leading tone, that is carried by the V7. This tends to force the flatted third to resolve instead of retaining its idomatic "fixed" identity as a stable melodic dissonance, so to speak.

Again, I stress that the original blue notes have at every stage been conditioned (conditioned) the melodic as well as a chordal development of jazz, determining the acceptance or rejection of new elements as well as the transformation of old ones.

As a final example of blues diminutions I would like to play for you a recording of an improvisation by the Alto saxophone player, Charlie Parker, which represents the complicity of that diminution technique practiced in the mid-1940s and early 1950s. RECORD: Parker - Blues, first chorus
Let us examine the notation of this rather complicated example.

\section*{Slide: Parker, first chorus of Blues}

I should like to draw your attention to certain general features. First, notice how the melodic line is unified by repetitions, for example, in the repeated upbeat at the beginning of each group and in the conclusion of each phrase on F.

Second, observe the long phrases employing notes of equal value, as compared to the many note values in the short phrase of Louis Armstrong heard earlier. These features probably represent the development of instrumental technique, rather than purely musical development.

Third, observe the difference between the chord pattern used here and the pattern of the early blues.

\section*{Slide: comparing old and new progressions}

The bare triad does not occur in the new version. The triad is always augmented by a sixth above the root. In m. 4 of the new version we now have a chord of the 9th substituted for the original 7th chord. And again in m. 5 we see the same substitution. In m. 9 we have a II9 introduced by parallel motion from the previous measure.

Here is the first variation on this blues theme:

\section*{Record: Parker - Blues, 2nd chorus}

And the notation:

\section*{Slide: Parker - Blues, 2nd chorus}

I have notated here first the variation in full. Immediately below that I have given a simple reduction which shows the tones
that receive diminutions, in short, the melodic skeleton.

Thus, in the first four measures we have a fundamental
descending line that emphasizes the flattened 7th and 3rd.
The specific diminutions are as follows:
The diminution of B flat in m.1 consists of lower and upper
adjacent tones. The diminution of A flat, the flattened 7th,
consists of an upper adjacent tone followed by
passing tones which connect to the next tone in the fundamental
line, F. In m. 3 we find the tonic triad filled in with
passing tones and embellished by an accented adjacent tone, A.
In m. 4 the diminution upon D flat (flattened 3rd) and consists
of a chord arpeggiation. In m. 5 D flat is still the
main tone. Here is is preceded by a motion within the E flat
9th chord. The diminution here is in the form of a prefix.
Observe the complex of diatonic and chromatic adjacent tones
in mm. 6 and 7. Measures 9 and 10 are based upon a descending
arpeggiation of the II7, with emphasis upon the chromatic
passing tone, A, first introduced as an adjacent
tone to G on the second beat of m. 5. The diminution
was introduced at the diminished
adjacent tone. And finally in
m. 11 we have a complete adjacent tone figure centering
upon the 3.

This elaborate improvisation utilizes familiar techniques
of diminution, but in complex and unusual combinations. Its
variety and fluency are quite remarkable.

Aspects of the rhythm to observe are: the grouping of the
melody according to a two-beat measure. Only the bass and
drums carry the full four beats in each measure. The frequent
offbeat accents on the sixteenth notes which forms a rhythmic
counterpoint to the metric accents.
A comparison of the fundamental line that underlies this improvisation with the Bessie Smith vocal line examined earlier would reveal their essential similarity and point up again the persistence of the basic melodic characteristics of the blues.

PART SIX

I have now briefly sketched the development of diminution technique in jazz from an early period up to the present time, using as examples only improvisations on the 12 bar blues. The question naturally arises: How do blues diminutions relate to diminutions upon other structures? To answer this question, let us now listen to an excerpt from a non-blues improvisation, based upon the second eight measure period of a popular song.

RECORD: Lester Young - These Foolish Things

And the notation:

Here we see many similarities to blues diminutions. First, the given original melody is not the underlying melodic structure for the diminutions, but as in the blues -- the improvised melody is based solely upon the chord succession. In order to show clearly the structure of the diminutions in this excerpt I have constructed a rudimentary sketch of the fundamental line which underlies them. This is shown directly below the improvised melody, which is given in full. The sketch shows the polyphonic structure of the improvisation and its continuity. It also reveals clearly the original treatment of the dissonances.
These arise within the long descending progression as appoggiaturas, suspensions, accented chromatic passing tones and chromatic adjacent tones. Observe the delayed resolutions of these dissonances. The origin of this, of course, the retention and repetition of the blue notes above all the chords in the blues succession.

Here is another example of a non-blues diminution, an improvisation by Charlie Parker on a standard popular song.

**RECORD:** Parker - I'm in the Mood for Love

This very elaborate diminution has several features of interest. Observe the elided tone in m. 1 which is implied by the rhythm. In m. 2 the incomplete upper adjacent tone, which is picked up in m. 8 where it serves as the lower adjacent tone to A flat. Melodic connections of this kind abound here and provide an unity not often achieved in an improvisation. Rhythmically the diminution is complex. Notice now in mm. 5-6 the arpeggiation is first stated, then contracted, and finally expanded again in the original form of a sextuplet, but with a different metric placement. The accentual rhythm of the melody often does not match the metric accents. Care is taken to avoid squareness of this kind. And the phrases are supplied with prefixes and suffixes in order to overcome any unwanted metric accents. This is a stylistic consideration.

Here we find several blues elements. For example, the flatted seventh occurs in m. 8 (C flat) above the V7. Amongst other unusual events is the anticipation in m. 11. The actual chord in that measure is an E flat 7th,
but the melodic line belongs to an A flat 7th chord.

The individual diminution techniques themselves are both familiar. They involve adjacent tones, chromatic and diatonic (m. 14), arpeggiation (m. 7), and passing tones that span intervals of various sizes (note the octave in m. 13). The complexity of the improvisation resides in the combination of these techniques as well as the rapidity and fluency with which they succeed one another.

The reduction indicates more specifically the nature of these diminutions and their continuity. I direct your attention particularly to the diminution technique in m. 7. Here the main tone is the chord 7th, D flat. It is prolonged first by a prefix from F through an implied E flat (shown at A), then by a chord arpeggiation below D flat (shown at B). The resolution of D flat then takes place through the chromatic lower adjacent tone, B. This tone of resolution is, however, treated as a passing tone which leads to the chromatic succession, B-A-A flat, to the chord third, F, on the downbeat of m. 8; second, as an harmonic equivalent of the blue third, C, which occurs in m. 8.

There is also an interesting technique employed in mm. 9-12. The G flat which is introduced as an appoggiatura resolves downward as expected to F. Similarly immediately following this resolution the A flat is superimposed and retained to become a suspension in m. 10, where it forms a fourth with the bass. A flat is then retained during the first part of m. 11 while another tone is superimposed. Finally, instead of resolving downward
to G flat as expected when the bass changes to A flat, the upper voice A flat moves upward to B flat over the bass D flat. This elaborate technique is similar to those found in late 19th century chromatic music.

**CONCLUSION**

Thus, in conclusion, we see that within its limited scope the development of jazz diminution technique in jazz parallels that in certain periods of Western European music. The early vocal and instrumental blues, illustrated by the Bessie Smith and Louis Armstrong excerpts employ relatively simple techniques, analogous to those of early tonal music, whereas in the improvisations of Charlie Parker we witness complex techniques similar to those found in music of the later 19th century.

I emphasize again that the unique features of jazz diminutions, as distinct from those which it shares with European music, stem from the original blue notes, which These opened the way for more elaborate chromatic events in the melody as well as for an elaboration of chord succession through the incorporation of dissonant melodic elements.

Current diminution practices in jazz, curiously enough, tend toward conservatism. Chromaticism is much less prevalent now than ten years ago. This may reflect the consciously accepted influence of composed contemporary music of the so-called "neo-classic" school, since jazz players have made a determined effort to achieve respectability in recent years by attempting to associate themselves with the main stream of contemporary musical development. Their efforts in this
direction are usually futile and often pathetic. What is considered "progressive" technique in modern jazz circles is invariably outdated in serious music circles.

It is my feeling that the main interest in jazz lies in the development of improvisation technique. And the apex of this development may well lie in the past rather than in the future.
INTRODUCTION

I have selected jazz as the topic of this brief talk not from any misguided feelings of national pride or because I believe that jazz offers any real solutions to the problems of either traditional or contemporary music, but for a much simpler and purely "musical" reason which I will now explain.

Jazz within its brief life span presents an interesting case of structural development that proceeds from a relatively simple to a relatively more complex stage. Since the essential process of jazz, improvisation, was also very important to the past development of European tonal music it would seem worthwhile to give consideration to the development of improvisation techniques in jazz. That is to say, some additional light may be thrown upon improvisational and compositional practices in the tonal music of Western Europe by examining the development of jazz, which constitutes a relatively self-contained, though limited somewhat instance. An analogous situation exists in linguistics, where new insights regarding the structure of, say, the Romance languages have been obtained through study of other language groups. In this connection, it is curious that a recently published treatise on improvisation practices, Ernest Ferand's "Die Improvisation in Beispielen aus neun Jahrhunderten", does not contain a single example of jazz improvisation, although it is generally recognized that jazz is the only existing branch of Western European music where improvisation is still widely practiced today.
I would, therefore, like to summarize briefly before tracing the technical development of jazz improvisation. It will be necessary to explain certain basic concepts and terms. All of these will be perfectly familiar to you, and I apologize in advance for stating the obvious. But I do so only in order to achieve a firm basis from which to proceed.

PART ONE

Jazz improvisation is essentially melodic in nature. Therefore, it can best be studied in terms of diminution techniques. By diminution technique is meant the melodic means (as distinct from, say, rhythmic or chordal) by which a given basic tonal structure is varied so as to expand or prolong its content. Here is an example of such a basic structure, drawn from composed European music: not from jazz.

SLIDE: Reduction of Händel Air in B flat

Let us examine the three aspects of this structure: harmony (chord succession), melody, and rhythm.

Let us examine the melody of this structure. At the beginning it rises from 1 to 3. The 3 is then embellished by lower and upper adjacent tones. This embellishment prolongs the main tone 3. Thus, it is more than purely ornamental in purpose. In order to indicate the structural significance of this embellishment, I shall use the traditional term, diminution. The term, diminution, therefore includes the notion of embellishment, but goes beyond to stress the structural purpose of embellishment: prolongation. As you know, the concept of prolongation at specific structural levels is part of Heinrich Schenker's
theoretical work. This concept underlies the present lecture.

In m. 3, we have another type of diminution. This consists of a motion within the chord which extends a third above the 3. This short example thus illustrates two fundamental diminution techniques, the first involving the adjacent tone, the second involving the passing tone.

Now let us see how the melodic content of this structure is still further expanded by diminution techniques.

**SLIDE:** Air in entirety

You recognize, of course, the familiar Händel Air in B flat, a rudimentary reduction of which was just presented to you in order to show the underlying structure. Observe how the rising line in m. 1 is now expanded. The passing tone, C, is expanded by its upper and lower adjacent tones which occur in the form of a trill with an afterbeat. The D on the third beat receives a diminution consisting of a descending and an ascending motion that spans the interval of a third within the chord. And rhythmically we now have a more elaborate structure.

The following example shows a further melodic expansion.

**SLIDE:** Händel's Var. 3

The most striking transformation here is rhythmic: the subdivision of the original quarter notes into eighth note triplets. But this rhythmic subdivision is the result of the diminutional technique by which each tone in the rising line is supplied with its own three-note group which reflects the overall ascent of a third.

Now let us examine one of Brahms' variations on the same basic structure:

**SLIDE:** Brahms' Var. 2
The main reason for this is that jazz diminution technique
has been applied only in
its application to improvisation; for the most part;
unlike its European counterpart it has not undergone
extensive development in the works of gifted composers over a period
of hundreds of years. Thus, jazz lacks both the complexity
and the finesse of diminution technique in composed music.

And yet, considering its humble beginnings and its almost
complete separation from the main stream of composed music,
jazz improvisation has achieved some remarkable achievements of jazz improvisation are quite remarkable.
Here as in the Handel variation, we have a rhythmic sub-
division into triplets. However, the melodic diminutions are
more elaborate, consisting of chromatic lower adjacent tones
in the upper voice combined with chromatic passing tones in
both the inner voices and bass line.

In comparing the Handel with the Brahms variation it is
evident that the Brahms exhibits a greater degree of complexity
in terms of the number of different diminutional events which
occur within all the component voices, and also in terms of the extent to which it departs from the
given basic structure. We can, thus assume that the Brahms
variation represents a later stage in the development of
diminution technique.

PART TWO

In jazz, a development of diminution technique comparable to that
in the composed music of Europe does not occur. Nevertheless,
it is interesting to consider similarities and differences.

The beginnings of jazz are to be found in the American
Negro's blues, which of course has its roots in Africa. Here
is an example of this form:

**RECORD:** Blind Willie Johnson - Dark was
the night (slowly)

This primitive but expressive music was shaped
by the forces of Western European music until it took
on the specific form shown here:

**SLIDE:** 12 bar blues in A flat
Let us examine this structure more closely. It comprises twelve measures and is known as the twelve-bar blues. The chord succession is elementary. The melody, however, is unique. I should say the melodic characteristic instead of melody, since there is not fixed melody in the blues. These unique melodic elements are the flatted third and flatted seventh degrees of the diatonic scale. They are known as "blue notes". You will hear them frequently. They are heard throughout the recording which I will play for you in a moment. They were present in the recording which I just played, but in a third form as quarter-tone inflections. And of course in that recording the diatonic basis was not clear. As we proceed to tracing the development of jazz, it will become evident that these blue notes are central to diminution technique and also affect the chord structure, enabling it to incorporate naturally the complex chords which are characteristic of French Impressionism.

The essential rhythmic characteristic of the blues and of jazz is the subdivision of the beat into triplets. In the recording which I am about to play for you this will be heard in the guitar accompaniment, shown here:

**SLIDE**: Guitar figuration

Note that this figuration also emphasizes the flatted 7th.

Now let us hear a vocal blues which is representative of those that preceded the more complex instrumental blues.

**RECORD**: Bessie Smith - Mean Ol' Bedbug Blues

**PART THREE**

The twelve-bar blues is the basic for jazz improvisation. It persists up to the present day. Therefore, by
Following its tracing the development we can at the same time achieve a clear picture of the development technique in jazz. The basic blues structure remains the same, but undergoes considerable melodic, rhythmic, and chordal transformation. There are, later roughly three main stages in the development of jazz—and I speak now of instrumental jazz. The first stage covers the 1920's, the "post-ragtime" period. I will now play a representative recorded blues from that period.

RECORD: Louis Armstrong - Bridewell Blues

This improvisation is particularly interesting because it illustrates how the melodic diminutions, with their emphasis upon the blue notes will eventually affect the basic chord succession. Here is the improvisation we have just heard:

SLIDE: Armstrong - Bridewell Blues

Directly below the improvised melody I have indicated the main tones upon which the diminution occurs. Observe the flatted 3rd in mm. 1 and 2 which serves as a diminution of 1. Then in m. 3 observe how the flatted 7th implies a change of chord. This change is not affected by the accompaniment until the following measure. Similarly, in m. 8 the chromatic passing tone, A flat, is not supported by the chord in the accompaniment. These events point the way forecast later diminution practices as well as the elaboration of the chord succession.

Other diminutional characteristics to be observed are the abundance of upper adjacent tones and the use of chromatic adjacent and passing tones to prolong dissonances. Notice, for example, the bracketed figure in m. 4.
and diatonic adjacent tone diminution of the flatted 7th becomes common in later jazz improvisations. On the downbeat of m. 5 we find an unresolved upper adjacent tone. In blues improvisations from a later period this dissonance is absorbed into the chord, the familiar chord of the added sixth.

In m. 6 the diminution of B flat is an arpeggiation combined with passing tones. The chord is the basic E flat (IV) chord. The melodic diminution of a third above the chord fifth (B flat) creates the effect of a seventh b chord. Rather again, does not incorporate this dissonance but again here the accompaniment continues its rudimentary chord pattern.

In m. 9 the diminution of E flat takes the form of an arpeggiation of the V7 chord. Notice that at several points, for example in m. 10, the melody anticipates the chord change. Here again is an early version of what later becomes almost a mannerism in jazz improvisations.

Finally, observe the elaborate rhythmic figurations. The four 16th-note patterns are actually incomplete sextuplets as shown in parentheses below the first measure, but I have simplified the notation here in accord with the usual practice. The rhythmic accent shifts constantly and moves freely above the strict metric pattern carried by the accompaniment. And frequently, expected accents are negated, which contributes further to the freedom of the melodic line.

PART FOUR

I will now play two examples from the second stage in the development of jazz diminution technique. Then, with the aid of the notation we will determine which elements from the