

DAVID BAKER'S

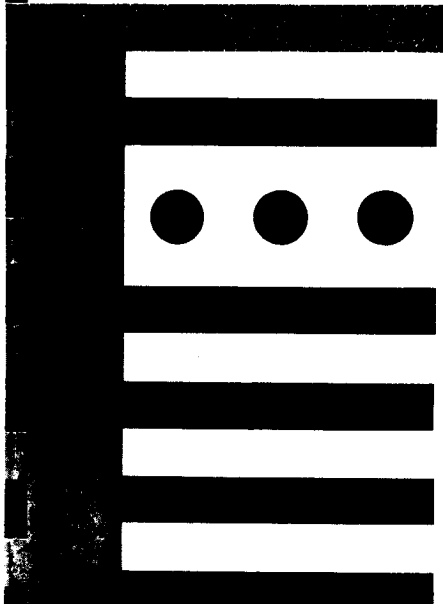
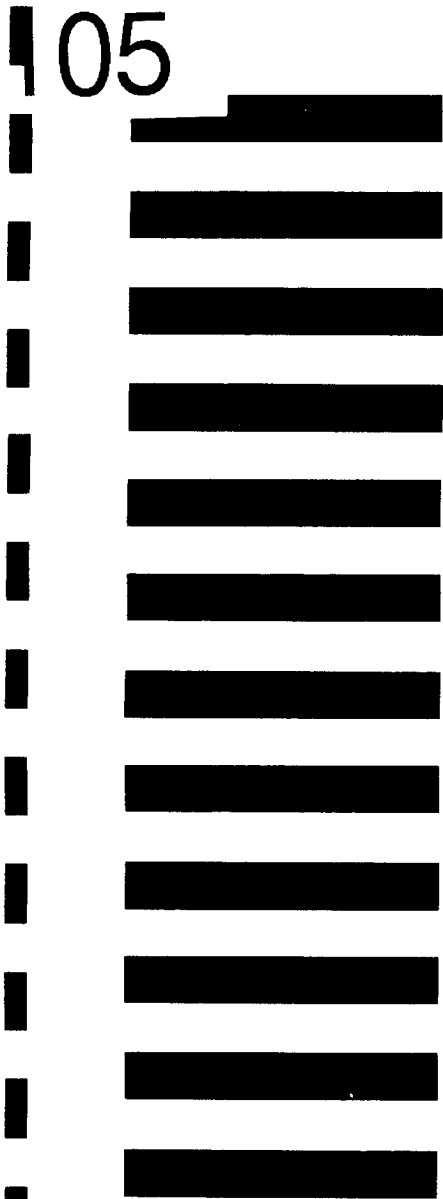
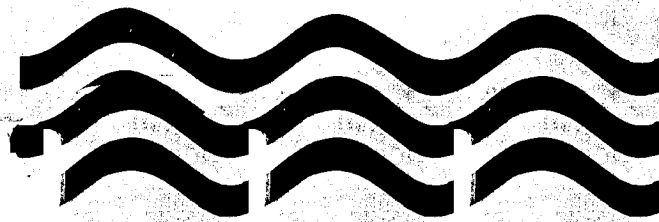
1

HOW TO BEBOP

105

FOR ALL INSTRUMENTS

The Bebop Scales
and Other Scales in Common Use



Preface

Of all the styles to emerge from jazz, perhaps the most important and pervasive in terms of influence and consequence is that body of music which had its inception in the early 1940s. In the playing of its two main giants, Dizzy Gillespie and Charlie Parker, the music which is now known as bebop was born.

In the ensuing years, the music and its musicians have not only endured but have grown in stature and influence. Since Diz and Bird, virtually every voice in jazz has demonstrated an indebtedness to them and the exciting new style that they pioneered.

I think that one could say without fear of contradiction that bebop is the common practice period of jazz. Very little music in popular idioms has escaped its influence and older styles that coexist with it have absorbed many of its characteristics and strengths.

Almost all later styles—cool, hard bop, funky, contemporary mainstream (4ths, pentatonics, angularity, etc.), thirdstream, fusion, etc.—have all borrowed liberally from the language, structure, syntax, grammar, gestures, etc., of bebop.

For years it has been an unwritten law that the understanding of, and ability to function comfortably in bebop represents a solid basis for dealing with almost all other jazz styles; even though many of the styles of “free jazz” seemed to have leaped backwards to earlier styles for their major impetuses, the base majority of today’s players came from bebop or one of its myriad offshoots.

One need only observe the ever important groups such as those of the master Dizzy Gillespie, Art Blakey’s Jazz Messengers, Horace Silver’s groups, groups led by such musicians as J. J. Johnson, Freddie Hubbard, Woody Shaw, Sonny Rollins, Dexter Gordon, Stan Getz, McCoy Tyner, James Moody, Wynton Marsalis, etc., to realize that bebop is still the main center of the jazz universe.

In our major educational institutions the bebop flame continues to burn brightly as we see generation after generation of young talent emerging with a healthy respect and solid understanding of this rich tradition. To be sure, many of these players will choose styles such as fusion, various areas of free improvisation, etc., but their musical vistas will be infinitely wider for having come to terms with bebop. Perhaps saxophonist-composer-educator-bandleader Frank Foster really hit the nail on the head when he referred to the music in this way: “Bebop, the music of the future.”

Table of Contents

Part I The Bebop Scales

The Bebop Dominant Scale	1
The Bebop Major Scale	12
Bebop Solo	38

Part II Other Scales and Their Use

Scale Syllabus	40
20 Public Domain Whole-Tone Patterns	43
26 Public Domain Diminished Patterns	45

Part I

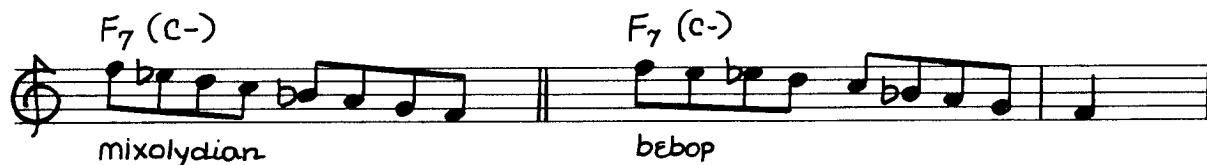
THE BEBOP SCALES

From the early 1920s, jazz musicians attempted to make their improvised lines flow more smoothly by connecting scales and scale tones through the use of chromatic passing tones. In a detailed analysis of more than 500 solos by the acknowledged giants from Louis Armstrong through Lester Young and Coleman Hawkins, one is aware, first, of the increased use of scales (as opposed to arpeggios and chord outlines) and then the increasing use of chromaticism within these scales. An unusual fact about this increased chromaticism is that, despite the frequent re-occurrence of certain licks or patterns, no discernible design with regard to how the extra chromatic tones are added emerges. The overall impression is a somewhat arbitrary or random use of chromaticism.

When one listens to the great players from the distant and near past, one of the main things that tends to "date" their playing (aside from technological improvements in recording techniques, changes with regard to harmonic and rhythmic formulae, etc.) is this lack of unanimity with regard to the use of melodic chromaticism.

From his earliest recordings Charlie Parker can be observed groping for a method for making the modes of the major scale sound less awkward and for rendering them more conducive to swing and forward motion. Gradually, in a systematic and logical way, he began using certain scales with added chromatic tones. Dizzy, approaching the scales from an entirely different direction, began utilizing the same techniques for transforming them. These scales became the backbone of all jazz from bebop to modal music.

A study of a large number of representative solos from the bebop era yields a set of very complex governing rules that have now been internalized and are a part of the language of all good players in the bebop and post-bebop tradition. Very simply stated, the added chromatic tones make the scales "come out right." Play a descending mixolydian scale and then play the bebop version of the scale and see how much smoother the second scale moves.



There are a number of reasons why the second scale makes sense. First, in the second scale all of the chord tones are on down beats: and second, the tonic of the scale falls on beat one of each successive measure, and the fifth (C) falls on beat 3.

THE BEBOP DOMINANT SCALE

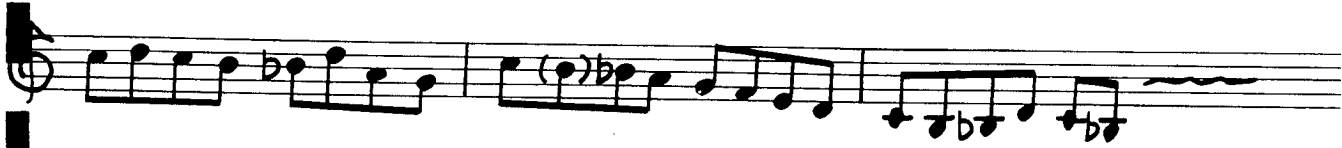
This scale is spelled 1-2-3-4-5-6-b7- \flat 7-1 and the rules governing its use are given with the dominant seventh chord as the point of reference. The scale is also used on the related minor seventh chord (II) and, under special conditions to be discussed later, on the related half-diminished seventh chord (VII), i.e. the following:

$$\left[\begin{array}{l} G- \\ C_7 \\ E\phi \text{ (under special conditions)} \end{array} \right] = C-D-E-F-G-A-B\flat-B\flat-C$$

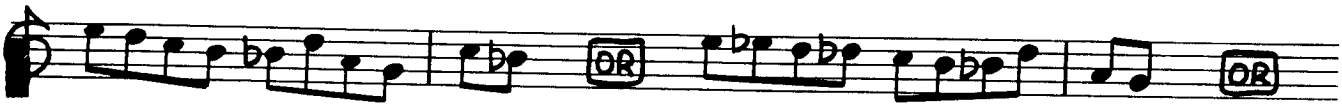
Rules

1. On a dominant seventh chord the scale is reckoned from the root of the chord, i.e., $C_7 = C$ dominant (bebop)
2. On a minor seventh chord the scale is reckoned from the root of the related dominant seventh chord, i.e., $G- = C$ dominant (bebop)

Please note that in examples #2 and #A the extra half step between the tonic and the b7 has been omitted. The rule governing this situation is as follows: if the line is ending, use a whole step as in examples #2 and #A; if the line is to continue, use the half step as usual, as in the following example:



Practice the different endings starting on other chord tones, as in the following examples:



Starting the Scale on Non-chord Tones

When starting the scale on a non-chord tone many options exist. Some of the most frequently used ones follow:

1. Use the scale without the extra half step, as in the following examples:



2. Use the scale without the extra half step until you reach the b7, at which time balance is restored and the previous rules are once more operative, as in the following examples:



3. Make the non-chord tone a quarter note, as in the following examples:

Two staves of musical notation in treble clef. The first staff contains two measures of music. The first measure has a quarter note G4, an eighth note A4, a quarter note Bb4, and an eighth note A4. The second measure has a quarter note G4, an eighth note F4, a quarter note E4, and an eighth note D4. Both measures have a boxed "OR" label. The second staff contains two measures of music. The first measure has a quarter note G4, an eighth note A4, a quarter note Bb4, and an eighth note A4. The second measure has a quarter note G4, an eighth note F4, a quarter note E4, and an eighth note D4. The staff ends with "etc."

4. Insert a half step before the first chord tone you come to, as in the following examples:

Three staves of musical notation in treble clef. The first staff contains two measures of music. The first measure has a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4. The second measure has a quarter note G4, an eighth note F4, a quarter note E4, and an eighth note D4. Both measures have a boxed "OR" label. The second staff contains two measures of music. The first measure has a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4. The second measure has a quarter note G4, an eighth note F4, a quarter note E4, and an eighth note D4. The staff ends with "etc.". The third staff contains two measures of music. The first measure has a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4. The second measure has a quarter note G4, an eighth note F4, a quarter note E4, and an eighth note D4. The staff ends with "etc."

5. Syncopate the first chord tone you come to, as in the following examples:

Two staves of musical notation in treble clef. The first staff contains two measures of music. The first measure has a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4. The second measure has a quarter note G4, an eighth note F4, a quarter note E4, and an eighth note D4. Both measures have a boxed "OR" label. The second staff contains two measures of music. The first measure has a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4. The second measure has a quarter note G4, an eighth note F4, a quarter note E4, and an eighth note D4. The staff ends with "etc."

6. From the b2, approach the tonic from a half step below, as in the following example:

One staff of musical notation in treble clef. The measure contains a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4.

7. From the b3 approach the 3rd from a half step above, as in the following example:

One staff of musical notation in treble clef. The measure contains a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4.

8. From the #4 descend chromatically to the 3rd, as in the following example:

One staff of musical notation in treble clef. The measure contains a quarter note G4, an eighth note Ab4, a quarter note Bb4, and an eighth note Ab4.

9. From the b6 approach the 5th from a half step below or ascend chromatically to the b7, as in the following examples:

10. When the line starts with a chord tone on an upbeat, all of the preceding nine non-chord tone rules are operative since it places a non-chord tone on a down beat.
11. Generally, move by step, half step, or skip until a chord tone occurs on a down beat. All of the preceding examples exemplify this rule.

Extending the Bebop Line

The bebop dominant scale may be extended through the use of a number of techniques which are a part of the common language of all good players. Some of the more common ones follow:

1. Upon arrival on the b7 the line may ascend along a major seventh chord (in this case Bb^Δ9), allowing for extension or change of direction, as in the following examples:

2. Upon arrival on the 3rd, 5th, or b7th, the line may proceed along the outline of the diminished chord containing that note, as in the following example (the diminished chord usually sets up a modulation):

(G) D major or D minor **OR**

(H) F major or F minor or D major, D minor, or B \flat major **OR** etc.

Examples A and B may be combined with examples C through H, as in the following example:

3. The bebop line may be extended through the use of what I shall hereafter refer to as deflection. When leaving the 5th of the scale, the line may be deflected in the manner of the following examples (make sure that when the line resumes its descent the 5th is on a down beat):

OR

OR

OR

etc.

Enclosure

The bebop line may be extended by enclosing the root or the 5th of the chord. This is accomplished by delaying the arrival of the chord tone by inserting the notes one half step above and one half step below the tone in question, as in the following examples:

OR

Examples of Enclosure in Actual Compositions

1. "Anthropology": measure 1, measure 7
2. "Bebop": introduction, measures 8-9; measure 8; measure 16; measures 18-19; measures 22-23; measure 32
3. "Confirmation": measure 7
4. "Donna Lee": measures 4-5; measure 13
5. "Groovin' High": pick-ups and beat 1, measure 4, measures 8-9, measure 12
6. "Little Willie Leaps": measure 4
7. "Nica's Dream": introduction, interlude, and tag
8. "Night in Tunisia": measures 7-8, measures 15-16, measures 31-32
9. "Ornithology": measures 13-14, measures 15-16, measures 29-30
10. "Quicksilver": measure 2, measures 9-10, measures 11-12, measure 50, measures 57-58, measure 59, measures 61-62
11. "The Serpent's Tooth": measure 1, measure 8, measure 25
12. "Woody'n You": measures 6-7-8, measures 14-15-16, measures 30-31-32

Achieving Variety with the Bebop Dominant Scales

1. Start the scale on something other than the first beat of the measure, as in the following examples:

Three musical staves illustrating different starting points for the bebop dominant scale. Each staff begins with a rest for a specific number of beats (2, 3, and 4 respectively) before the scale begins. The first two staves end with a boxed "OR" indicating an alternative ending, while the third ends with "etc.".

2. Vary the starting note (not just the tonic and not just chord tones), as in the following examples:

Four musical staves illustrating variations in the starting note of the bebop dominant scale. The first staff starts on the second degree (F) with a boxed "OR". The second staff starts on the third degree (G) with "etc." and a boxed "OR". The third staff starts on the fourth degree (A) with a boxed "OR". The fourth staff starts on the fifth degree (B).

3. Vary the endings, as in the following examples:

Four musical staves in treble clef showing a melodic line with various endings. The first staff has two boxed 'OR' options. The second staff has one boxed 'OR' option. The third staff has one boxed 'OR' option. The fourth staff ends with 'etc.'.

4. Balance ascending and descending motion, as in the following example:

A single musical staff in treble clef showing a melodic line that alternates between ascending and descending motion, ending with 'etc.'.

5. Bury the scale within a line, as in the following examples:

Seven musical staves in treble clef showing a scale buried within a line. Each staff has a boxed 'OR' option, except for the last one which ends with 'etc.'.

6. Turns may be used on any chord tone, as in the following examples:

Four musical staves in treble clef showing bebop scale variations. Each staff begins with a G7 chord (G, B, D, F) and ends with a C7 chord (C, E, G, Bb). The first staff shows a turn on the 3rd chord tone (B) in the G7 scale. The second staff shows a turn on the 7th chord tone (F) in the G7 scale. The third and fourth staves show similar variations with turns on other chord tones. Each staff has a boxed "OR" label at the end.

7. Join bebop scales to other bebop scales, as in the following examples:

Four musical staves in treble clef showing bebop scales joined together. The first staff shows a G7 scale (G, B, D, F, G, A, B, A, G) followed by a C7 scale (C, E, G, Bb, C, D, E, D, C) and then a Bb7 scale (Bb, D, F, Ab, Bb, C, D, C, Bb). The second staff shows an Eb7 scale (Eb, G, Bb, Db, Eb, F, G, F, Eb) followed by an Eb7 scale (Eb, G, Bb, Db, Eb, F, G, F, Eb) and then a C7 scale (C, E, G, Bb, C, D, E, D, C). The third staff shows a G7 scale (G, B, D, F, G, A, B, A, G) followed by a C7b9 scale (C, Eb, G, Bb, Ab, C, D, B, C) and then an Eb7 scale (Eb, G, Bb, Db, Eb, F, G, F, Eb). The fourth staff shows an Ab7 scale (Ab, C, Eb, G, Ab, Bb, C, B, Ab) followed by a D7 scale (D, F, A, C, D, E, F, E, D). Vertical dashed lines indicate the transitions between scales.

8. Join the bebop scales to other scale types, as in the following examples:

The first example is labeled "diminished" and shows a bebop dominant scale (C7 bebop) followed by a diminished scale (C7b9) and another bebop dominant scale. A box labeled "OR" is at the end.

The second example is labeled "diminished/whole tone" and shows a bebop dominant scale followed by a diminished/whole tone scale (C7b9 with a whole tone interval) and another bebop dominant scale. A box labeled "OR" is at the end.

The third example is labeled "whole tone" and shows a bebop dominant scale followed by a whole tone scale (C7 with a whole tone interval) and another bebop dominant scale.

9. Use various delays, as in the following examples:

The first example shows a bebop dominant scale with a delay on the 7th degree (Bb) and a box labeled "OR".

The second example shows a bebop dominant scale with a delay on the 7th degree (Bb) and the word "Etc." at the end.

10. Use extensions.

11. Use double time.

Using the Bebop Dominant Scale Over a Half-diminished Chord

When the half-diminished chord is treated as a minor seventh (II), then all of the aforementioned rules are operative, as exemplified here:

The notation shows a Gø chord with a note (Bb) and a C7 chord with a note (Eb). The text says ": use rules for C₇".

However, if the half-diminished chord is perceived as part of a II V₇ VII situation (i.e., G- C₇ Eø A₇ D- as in "Back Home Again in Indiana," "Whisper Not," etc.), then observe the following rule: treat the ø (VII) as the related II V progression, as in the following example:

The notation shows a progression of chords: G- (with notes G, A, B), C₇ (with notes C, D, Eb, E), Eø (with notes E, F, G), A₇ (with notes A, B, C, D), and D- (with notes D, E, F). The notes are connected by lines to show the scale.

THE BEBOP MAJOR SCALE

The rationale for the use of the bebop major scale is the same as that for the use of the bebop dominant scale. This scale is spelled 1-2-3-4-5-#5-6-7-8 and is used over any major type chord.

Rules

1. The scale usually moves in basic eighth note patterns and usually descends.
2. In pure form the scale invariably starts on a down beat.
3. In pure form the scale starts on a chord tone. For the purposes of the use of this scale the chord tones are 1, 3, 5, and 6 (not 7), as in the following example:

The image shows four musical staves in treble clef, each representing a different starting point for a scale based on a C major chord. The first staff is labeled 'C from the 1' and shows a scale starting on C4. The second staff is labeled 'from the 3' and shows a scale starting on E4. The third staff is labeled 'from the 5' and shows a scale starting on G4. The fourth staff is labeled 'from the 6' and shows a scale starting on F4. Each scale is written in eighth notes and descends. The notes are: C4-B3-A3-G3-F3-E3-D3-C3, E4-D4-C4-B3-A3-G3-F3-E3-D3-C3, G4-F4-E4-D4-C4-B3-A3-G3-F3-E3-D3-C3, and F4-E4-D4-C4-B3-A3-G3-F3-E3-D3-C3. Each staff ends with a double bar line and a wavy line indicating continuation.

4. As long as the scale starts on a chord tone, the line may ascend and/or descend in scalar fashion, as in the following examples:

The image shows two musical staves in treble clef. The first staff shows a scale starting on C4, ascending to G4, and then descending to C3. The word 'OR' is written in a box at the end of the staff. The second staff shows a scale starting on C4, descending to C3, and then ascending to G4. The word 'Etc.' is written at the end of the staff.

5. When the scale starts on the 9th, descend chromatically to the major 7th, then observe the basic rule, as in the following examples:

The image shows three musical staves in treble clef. The first staff shows a scale starting on D4 (the 9th of a C major chord), descending chromatically to C4 (the major 7th), and then continuing the scale. The word 'OR' is written in a box at the end of the staff. The second staff shows a similar pattern starting on E4. The word 'OR' is written in a box at the end of the staff. The third staff shows a similar pattern starting on F4. The word 'Etc.' is written at the end of the staff.

6. When the scale starts on the major 7th, descend chromatically to the 5th of the chord, as in the following examples:

The image shows one musical staff in treble clef. The scale starts on C4 (the major 7th of a C major chord), descends chromatically to G3 (the 5th of the chord), and then continues the scale. The word 'OR' is written in a box at the end of the staff, followed by 'Etc.' written at the end of the staff.

7. When starting on a non-chord tone move by step, half step, or skip until a chord tone (1, 3, 5, or 6) occurs on a down beat.
8. When the solo line starts on a non-chord tone or when the line has a chord tone on an upbeat, insert a half step just before a chord tone to restore balance to the line, as in the following examples:

Four musical staves illustrating examples for rule 8. Each staff shows a melodic line starting on a non-chord tone and moving to a chord tone. The first three staves end with a boxed "OR" indicating an alternative phrasing. The fourth staff ends with "Etc.".

9. For variety, approach the chord tone which initiates the line by a half step above and a half step below (enclosure), as in the following examples:

Three musical staves illustrating examples for rule 9. Each staff shows a melodic line with an enclosure (half step above and half step below) approaching a chord tone. The first two staves end with a boxed "OR" indicating an alternative phrasing. The third staff ends with "Etc.".

Achieving Variety with the Bebop Major Scale

1. Start the scale on something other than the first beat of the measure.
2. Vary the starting note (not just the tonic and not just chord tones).
3. Balance ascending and descending motion.
4. Bury the scale within less obvious lines.
5. Turns may be used on any chord tone, as in the following examples:

Two musical staves illustrating examples for rule 5. Each staff shows a melodic line with a turn on a chord tone. Both staves end with a boxed "OR" indicating an alternative phrasing.

Three musical staves in treble clef showing bebop scale exercises. The first two staves end with a box containing the word "OR". The third staff ends with "Etc.".

Internalizing the Bebop Scales: Some Exercises

1. Broken 3rds.

A. When ascending or descending resume the diatonic line from a chord tone on a down beat. (This rule maintains whether starting from a chord tone or a non-chord tone.)

Five musical staves labeled (A) through (E) showing broken 3rds exercises. Each staff ends with "Etc.".

B. In broken lines the extra half step is usually omitted, i.e. the following example:

A musical staff labeled C_7 showing a broken line exercise. A circled (b) indicates an omitted half step.

2. To resume the diatonic line from a non-chord tone, use one of the rules governing non-chord tones, i.e. the following examples:

A. Omit the half step.

A musical staff labeled (A) and C_7 showing an exercise where a half step is omitted.

B. Use a quarter note on the non-chord tone.

(B)

C. Syncopate the next chord tone.

(c)

D. Add an extra half step before the next chord tone.

(D)

**In short, get to a chord tone on a down beat as soon as possible.

3. Broken triads.

A. Resume the diatonic line with a chord tone, as in the following examples:

C7

B. If the line is resumed with a non-chord tone, use one of the rules for dealing with non-chord tones, as in the following examples:

C7

4. Broken chords.

A. Resume the diatonic line with a chord tone, as in the following examples:



B. If the line resumes from a non-chord tone, use one of the rules governing non-chord tones, as in the following examples:



7. Triplets. If the scale is to function normally, make the middle note of the triplet the chord tone (and when going to the tonic, start on the major 7th), as in the following examples:

8. Triplets. When starting the triplet on a chord tone, use one of the rules for non-chord tones, as in the following examples:

Tonic

- A. Enclosure (extra half step)

(A)

- B. Non-chord tone as a quarter note

(B)

- C. Chord tone syncopated

(C)

- D. Extra half step omitted

(D)

3rd

- E. Extra half step

(E)

F. Non-chord tone as a quarter note

(F)

G. Chord tone syncopated

(G)

H. Extra half step omitted

(H)

5th

I. Extra half step

(I)

J. Non-chord tone as a quarter note

(J)

K. Chord tone syncopated

(K)

L. Extra half step omitted

(L)

7th (This is the only exception of the chord tone in the middle.)
 M. Extra half step

M)

N. Non-chord tone as a quarter note

N)

O. Chord tone syncopated

O)

P. Extra half step omitted

P)

Although less frequently used, the above rules maintain for ascending triplet figures, as in the following examples (starting on a non-chord tone):

9. In a string of triplets the last triplet determines the rule, as in the following examples:

starting on a non-chord tone

A)

B)

More Exercises for Internalizing the Bebop Scales

1. Bebop scales (dominant). Play into the sound of the chord as quickly as possible. Use the cycle, with each chord lasting two measures.
 - A. From the tonic of the chord
 - B. From other predetermined chord tones (3, 5, b7)
 - C. From predetermined non-chord tones
 - D. All scales from a single predetermined starting tone, as in the following example using C:

(* indicates a non-chord tone)

- E. Start each successive scale from the next highest chord tone in rotation, as in the following example:

- F. Start each successive scale from the next highest or lowest chromatic tone, as in the following examples:

- G. Choose starting tones randomly.
- H. Playing a continuous line, move into each new chord by conjunct motion (by half step or whole step), as in the following example:

Exercise H shows a continuous line of eighth notes across three staves. The first staff starts with a C7 chord and moves to F7. The second staff continues from F7 to Bb7. The third staff continues from Bb7 to Eb7 and ends with "etc.". The notes are: C7 (C, D, E, F, G, A, B, A, G, F, E, D, C), F7 (F, G, A, B, C, D, E, D, C, B, A, G, F), Bb7 (Bb, C, D, Eb, F, G, Ab, G, F, Eb, D, C, Bb), and Eb7 (Eb, F, G, Ab, Bb, C, Db, C, Bb, Ab, G, F, Eb).

- 2. Bebop scales (dominant). Repeat all exercises from #1 (A-H). Use changes that move at the rate of one per measure, as in the following:

Exercise 2 shows four measures of dominant chords on a single staff: C7, F7, Bb7, and Eb7, followed by "etc.". Each chord is held for one measure.

- 3. Playing by EAR realize random 7th and minor 7th chords using the bebop scales from a single starting tone, as in the following example using C:

Exercise 3 shows four staves of bebop scales starting from C7. The first staff moves to Ab7. The second staff moves to E7. The third staff moves to F#-(B7). The fourth staff moves to D7 and ends with "etc.". The notes are: C7 (C, D, E, F, G, A, B, A, G, F, E, D, C), Ab7 (Ab, Bb, C, Db, Eb, F, G, F, Eb, D, C, Bb, Ab), E7 (E, F, G, Ab, Bb, C, D, C, Bb, Ab, G, F, E), F#-(B7) (F#, G, Ab, Bb, C, D, Eb, D, C, Bb, Ab, G, F#), and D7 (D, E, F, G, Ab, Bb, C, B, Ab, G, F, E, D).

Using starting notes chosen randomly, play the preceding exercise. As preparation, practice the following exercise, leaving a measure to listen to each new chord before playing.

4 note spins:

(1) Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-D4-E4-F4. The second measure is D4-E4-F4-G4. The third measure is E4-F4-G4-A4. The fourth measure is F4-G4-A4-Bb4.

Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-D4-E4-F4. The second measure is D4-E4-F4-G4. The third measure is E4-F4-G4-A4. The fourth measure is F4-G4-A4-Bb4.

(2) Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-Bb4-A4-G4. The second measure is Bb4-A4-G4-F4. The third measure is A4-G4-F4-E4. The fourth measure is G4-F4-E4-D4.

5 note spins:

Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-D4-E4-F4-G4. The second measure is D4-E4-F4-G4-A4. The third measure is E4-F4-G4-A4-Bb4. The fourth measure is F4-G4-A4-Bb4.

6 note spins:

(1) Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-D4-E4-F4-G4-A4. The second measure is D4-E4-F4-G4-A4-Bb4. The third measure is E4-F4-G4-A4-Bb4. The fourth measure is F4-G4-A4-Bb4.

(2) Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-Bb4-A4-G4-F4. The second measure is Bb4-A4-G4-F4-E4. The third measure is A4-G4-F4-E4-D4. The fourth measure is G4-F4-E4-D4.

7. Spins from non-chord tones.

(1) Musical staff with treble clef and a key signature of one flat. The exercise is labeled C7. It consists of four measures of eighth-note runs. The first measure is C4-D4-E4-F4. The second measure is D4-E4-F4-G4. The third measure is E4-F4-G4-A4. The fourth measure is F4-G4-A4-Bb4.

(2) Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-Bb4-A4-G4. The second measure is Bb4-A4-G4-F4. The third measure is A4-G4-F4-E4. The fourth measure is G4-F4-E4-D4.

(3) Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-D4-E4-F4. The second measure is D4-E4-F4-G4. The third measure is E4-F4-G4-A4. The fourth measure is F4-G4-A4-Bb4. A box labeled "OR" is placed between the third and fourth measures.

(4) Musical staff with treble clef and a key signature of one flat. The exercise consists of four measures of eighth-note runs. The first measure is C4-Bb4-A4-G4. The second measure is Bb4-A4-G4-F4. The third measure is A4-G4-F4-E4. The fourth measure is G4-F4-E4-D4.

Some Examples of Embellishment with Ascending Scales

(1) 

(2) 

(3) 

An Example of a Bebop Solo Using Bebop Scales, Enclosure, Embellishment, Etc.

Because of copyright restrictions it is not possible to print Clifford Brown's solo on "Confirmation," but by numbering the four choruses of the solo (A), (B), (C), and (D), examples of these devices will be indicated. This solo can be found on the album *A Night At Birdland: Blue Note 1522*; published transcriptions can be found in *28 Modern Jazz Trumpet Solos* by Ken Slone and *The Jazz Style of Clifford Brown* by David Baker.

Bebop Scales

- (A) measures 8, 11-12, 12-13, 17-18, 26, 29-30, and 30-31
- (B) measures 4-5, 6, 7, 11-13, 15, 17, 22, and 27
- (C) measures 3, 6, and 18-19
- (D) measures 3, 6-7, and 11-12

Enclosures

- (A) measures 2, 3-4, 22, 29, and 31
- (B) measures 7, 9-10, and 25-26
- (C) measures 16-17, 28, and 30
- (D) measures 8-9, 9-10, 16, and 18-19

Other Embellishments

- (A) measures 6, 15, and 27-28

A Perpetual Motion Exercise

This exercise is designed to help a player develop a sense of line. The pattern may be used whenever a set of changes (II V₇ or V₇) move around the key circle at the rate of two measures apiece, as in the following examples:

1. Blues

$$\left| F_7 \right| F_7 \left[\left| C^- \right| F_7 \right| Bb \right]$$

(A) 

2. Bridge of "I Got Rhythm"

(A-) D₇
(D-) G₇
(G-) C₇
(C-) F₇

|| — 2 — |
| — 2 — |
| — 2 — |
| — 2 — ||

(B)

Musical notation for the bridge of "I Got Rhythm" in G major. It consists of three staves of music. The first staff starts with a D₇ chord and ends with a G₇ chord. The second staff starts with a C₇ chord. The third staff starts with an F₇ chord. The melody is written in treble clef with a key signature of one sharp (F#).

3. "Donna Lee"

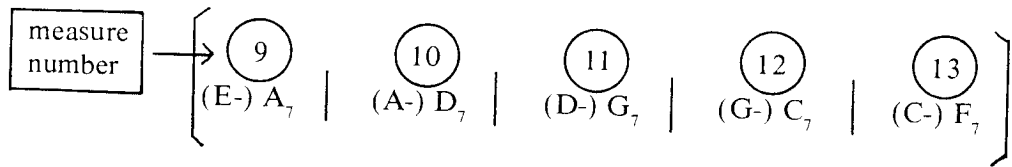
|| Ab Gb₇ |
F₇ |
(F-) Bb₇ |
(Bb-) Eb₇ |
(Eb-) Ab₇ |
) Db

| — 2 — |
| — 2 — |
| — 2 — |

(C)

Musical notation for "Donna Lee" in D minor. It consists of three staves of music. The first staff has chords Ab, Gb₇, F₇, and Bb₇ (F-). The second staff has chords Eb₇ (Bb-) and (Ab₇). The third staff has chords Eb-, Ab₇, and Db. The melody is written in treble clef with a key signature of two flats (Bb, Eb).

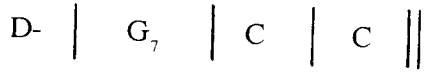
4. "Yesterdays"



Double-time the line.

(D) Musical notation for exercise (D) showing a double-time line. The melody consists of eighth notes. Chords are indicated above the staff: A₇ (measures 1-2), D₇ (measures 3-4), and G₇ (measures 5-6). The line ends with "etc.".

5. The pattern may be treated as a II V₇ I pattern (incomplete).



(E) Musical notation for exercise (E) showing a double-time line. The melody consists of eighth notes. Chords are indicated above the staff: D- (measures 1-2), G₇(b₉) (measures 3-4), and C (measures 5-6). The line ends with "etc.".

The perpetual motion exercise. Start on any II chord and play back to the point of origination.

The musical score consists of eight staves of music in 4/4 time. Each staff contains a sequence of chords and corresponding melodic lines. The chords are: Staff 1: G-, C7 b9, C-; Staff 2: F7 b9, F-, Bb7 b9; Staff 3: Bb-, Eb7 b9, Eb-; Staff 4: Ab7 b9, Ab-, Db7 b9; Staff 5: Db-, Gb7 b9, F#-; Staff 6: B7 b9, B-, E7 b9; Staff 7: E-, A7 b9, A-; Staff 8: D7 b9, D-, G7 b9. The melodic lines are composed of eighth and quarter notes, often with ties, creating a continuous, flowing motion across the staves.

Perpetual motion exercise #2.

The musical score consists of 12 staves of music, each containing a continuous melodic line. The time signature changes frequently, alternating between 4/4, 5/4, and 4/2. The key signature changes are indicated by chord labels above the staves: G-C7, C-F7, F-Bb7, Bb-Eb7, Eb-Ab7, Ab-Db7, Db-Gb7, F#-B7, B-E7, and Bb-Eb7. The notation includes various rhythmic values such as eighth and sixteenth notes, and rests, creating a complex, flowing texture.

Jazz Calisthenics

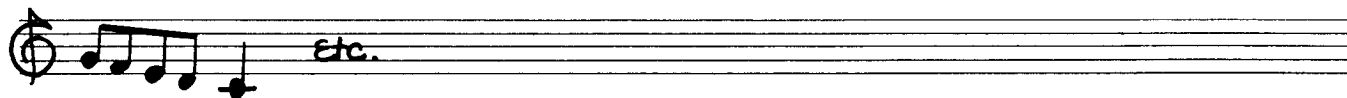
All of these exercises fit over these chords: G-, C₇, E ϕ

Each of the following exercises takes four forms:

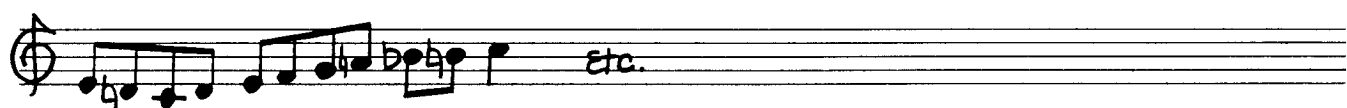
Practice the four forms from the 3rd of the chord, as in the following examples:

Some possible continuations using enclosure.

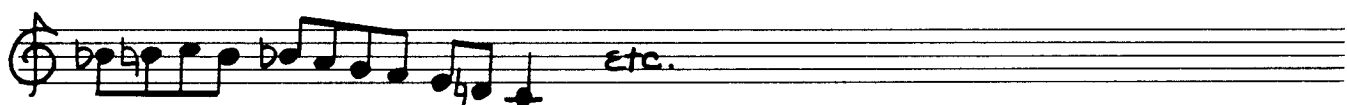
(1) 

 Etc.

(2) 

 Etc.

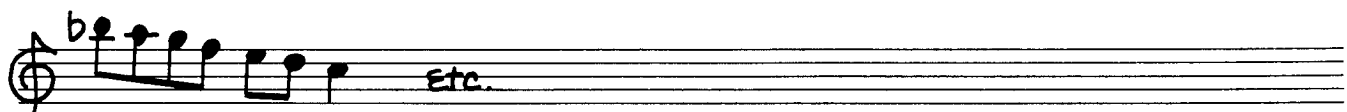
(3) 

 Etc.

(4) 

 Etc.

(5) 

 Etc.

(6) 

 Etc.

BEBOP SOLO

() = indication of enclosure

[] = indication of bebop scale

The musical score consists of 12 staves of music in 4/4 time. The key signature has one flat (Bb). The score includes the following elements:

- Staff 1:** Chords Eb, Eb, A-.
- Staff 2:** Chords D7, Eb, Eb.
- Staff 3:** Chords G-, C7, C-.
- Staff 4:** Chords F7, F-, Bb7. Includes a triplet of eighth notes.
- Staff 5:** Chords G-, C7, F-. Includes a triplet of eighth notes.
- Staff 6:** Chords Bb7, Eb, Eb.
- Staff 7:** Chords A-, D7 (tritone substitution), Eb.
- Staff 8:** Chords Eb, G-, C7.
- Staff 9:** Chords C-, F7, F-.
- Staff 10:** Chords Bb7, F-, Bb7, Ab-, Db7.
- Staff 11:** Chords Eb, Gb, B, E7, Eb.

Additional markings include slurs, accents (>), and a dashed line labeled "tritone substitution" connecting the D7 chord in Staff 7 to the Eb chord in Staff 8.

This page of musical notation is arranged in ten systems, each consisting of two staves. The notation includes various chords and melodic lines. The chords are labeled as follows:

- System 1: Eb, A-, D7
- System 2: Eb, Eb, G-
- System 3: C7, C-, F7
- System 4: F-, Bb7, G-
- System 5: C7, F-, Bb7 #9 #5
- System 6: Eb, Eb, A-
- System 7: D7, Eb, Eb
- System 8: G-, C7, C-
- System 9: F7, F-, Bb7
- System 10: F-, Bb7, Ab-, Db7, Eb, Gb

The notation also includes various melodic elements such as triplets (marked with '3'), slurs, and accents. The key signature is one flat (Bb), and the time signature is 4/4.

Part II

OTHER SCALES AND THEIR USE

The following syllabus is based on information gleaned from the study of performance practices of the major jazz figures from bebop forward.

SCALE SYLLABUS

Relationship Of Chords To Scales

Major Family

Chord Type (I)	Scale Form
Major — 1 3 5 7 9	Major 1 2 3 4 5 6 7 8
Major (#4) 1 3 5 7 9 #11	Lydian 1 2 3 #4 5 6 7 8
Major (#4 #5) 1 3 #5 7 9 #11	Lydian Augmented 1 2 3 #4 #5 6 7 8
Major (b6 #9) 1 3 5 7 9 11 13	Augmented 1 #2 3 5 b6 7 1
Major 1 3 5 7 9	diminished 1 b2 b3 b4 #4 5 6 b7 8
Major 1 3 5 7 9	Harmonic Major 1 2 3 4 5 b6 7 8
Major 1 3 5 7 9	blues 1 b3 b4 #4 5 b7 8
Major 1 3 5 7 9	minor pentatonic 1 b3 4 5 b7 8
Major 1 3 5 7 9	Major pentatonic 1 2 3 5 6 8

minor Family

Chord Type	Scale Form	
minor, tonic (I) Function	Dorian 1 2 b3 4 5 6 b7 8	
	Natural minor 1 2 b3 4 5 b6 b7 8	
	Phrygian 1 b2 b3 4 5 b6 b7 8	
	Ascending Melodic minor 1 2 b3 4 5 6 7 8	
	Harmonic minor 1 2 b3 4 5 b6 7 8	
	minor pentatonic 1 b3 4 5 b7 8	
	Blues 1 b3 #4 5 b7 8	
	minor 7th (II) Function	Dorian 1 2 b3 4 5 6 b7 9
		Ascending melodic minor 1 2 b3 4 5 6 7 8
		Harmonic minor 1 2 b3 4 5 b6 7 1
minor Pentatonic 1 b3 4 5 b7 8		
	Blues 1 b3 3 4 #4 5 7 8	
	diminished (start with whole step) 1 2 b3 4 #4 #5 6 7 8	

Dominant Family

Chord Type	Scale Form
Dominant 7th unaltered 1 3 5 b7 9	Mixolydian 1 2 3 4 5 6 b7 8 Lydian Dominant 1 2 3 #4 5 6 b7 8 Major Pentatonic 1 2 3 5 6 8 minor Pentatonic 1 b3 4 5 b7 8 Blues 1 b3 #3 4 #4 5 b7 8
Dominant 7th #11 1 3 5 b7 9 #11	Lydian dominant 1 2 3 #4 5 6 b7 8
Dominant 7th b5, #5 or both 1 3 b5 b7 1 3 #5 b7 1 3 (b5 #5) b7	Whole Tone 1 2 3 #4 #5 #6

Chord Type	Scale Form
Dominant 7th (b9) 1 3 5 b7 b9	Diminished 1 b2 b3 #3 #4 5 6 b7 8
Dominant 7th #9 1 3 5 b7 #9	Diminished 1 b2 b3 #3 #4 5 b7 8 Diminished whole tone 1 b2 b3 #3 #4 #5 #6 8 Dorian 1 2 b3 4 5 6 b7 8 Blues 1 b3 #3 4 #4 5 b7 8 minor pentatonic 1 b3 4 5 b7 8
Dominant 7th b9 and #9	diminished 1 b2 b3 #3 #4 5 6 b7 8 diminished whole tone 1 b2 b3 #3 #4 #5 #6 8 minor pentatonic 1 b3 4 5 b7 8 Blues 1 b3 #3 4 #4 5 b7 8
Dominant 7th b5 and b9	diminished 1 b2 b3 #3 #4 5 6 b7 8 diminished whole tone 1 b2 b3 #3 #4 #5 #6 8 minor pentatonic 1 b3 4 5 b7 8 Blues 1 b3 #3 4 #4 5 b7 8
Dominant 7th b5 and b9 1 3 b5 b7 b9 #5 and #9 1 3 #5 b7 #9 b5 and #9 1 3 b5 b7 #9 #5 and b9 1 3 #5 b7 b9 (and/combinations)	diminished scale 1 b2 b3 #3 #4 5 6 b7 8 minor pentatonic 1 b3 4 5 b7 8 Blues 1 b3 #3 4 #4 5 b7 8

Half-diminished chords

Chord Type	Scale Form
(half-diminished 7th (ø7) or	Locrian 1 b2 b3 4 b5 b6 b7 8 Locrian #2 — 1 2 b3 4 b5 b6 b7 8
minor 7th (b5) 1 b3 b5 b7	diminished (start with whole step) 1 2 b3 4 #4 #5 6 7 8 blues 1 b3 b3 4 #4 5 b7 8

diminished chords

diminished 7th (o7) 1 b3 b5 6	diminished scale (start with whole step) 1 2 b3 4 #4 #5 6 7 8
---	---

For specific information about the use of these scales I recommend any good improvisation method or scale book, i.e., *Jazz Improvisation* by David Baker, *The Complete Method for Improvisation* by Jerry Coker, *The Lydian Concept* by George Russell, *A New Approach To Ear Training for the Jazz Musician* by David Baker, *Scales for Jazz Improvisation* by Dan Haerle, etc.

For all serious players the best method for learning the correct use of the scales is through the study of recordings by the jazz giants. One method of pursuing this information is to isolate situations in various tunes that logically suggest a particular scale, as in the following examples:

TAKE THE "A" TRAIN

Chords: C, D7#5, D-, G7, C

suggests a whole tone scale

CARAVAN

Chords: C7 b9, Gø, C7 b9, F-

suggests a diminished scale

NICA'S DREAM

Chords: Bb-A, Ab-A, Bb-A

suggests the use of ascending melodic minor scales

DEWEY SQUARE

Chords: Eb, Ab-Db7, G-, C7, F7 #11, Bb7, G- C7, F- Bb7

suggests a lydian dominant scale

Observe how established players play over those changes. It is advisable to transcribe those patterns and commit them to memory for future use. To locate those places in tunes (and what specific tunes), search various fake books, sheet music, play-along booklets, etc.

The following public domain patterns for whole tone and diminished scales were gleaned from various solos by the established giants. Study, learn, and use the patterns in your playing and personalize them. Once the player understands the technique, the process should then be used to build a vocabulary based on the other scales.

20 PUBLIC DOMAIN WHOLE-TONE PATTERNS

The image displays 20 musical patterns for whole-tone and diminished scales, organized into five groups of four staves each. Each group is numbered 1 through 5 on the left. The notation is in treble clef and includes various accidentals (sharps, flats, naturals) and note values (quarter, eighth, and sixteenth notes). The patterns are as follows:

- Group 1:** Four staves of notation, each starting with a treble clef and a common time signature. The notes are primarily quarter and eighth notes, with some sixteenth notes.
- Group 2:** Four staves of notation, similar in structure to Group 1, with various accidentals and note values.
- Group 3:** Four staves of notation, continuing the sequence of patterns.
- Group 4:** Four staves of notation, continuing the sequence of patterns.
- Group 5:** Four staves of notation, continuing the sequence of patterns.

17  Etc.

18  Etc.

19  Etc.

20  Etc.

26 PUBLIC DOMAIN DIMINISHED PATTERNS

1  P.

2  G.

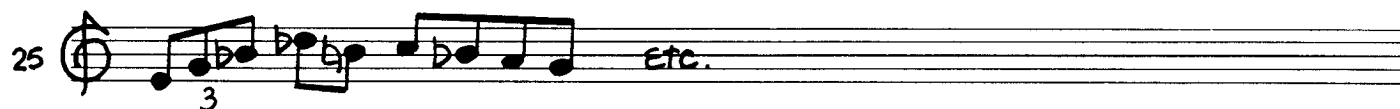
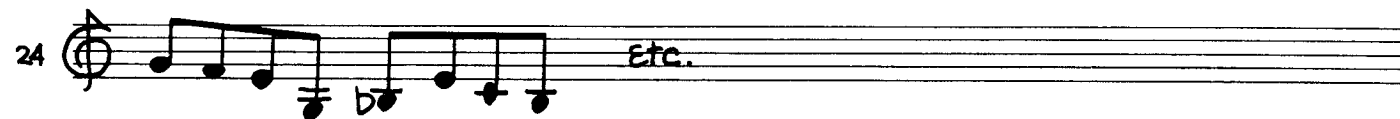
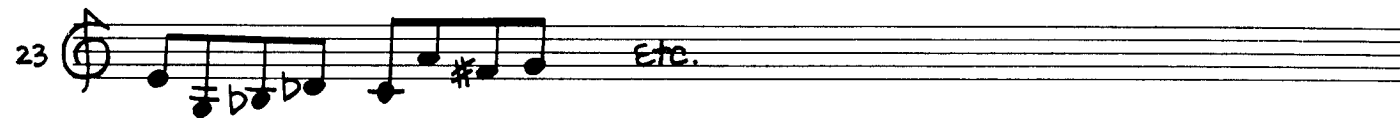
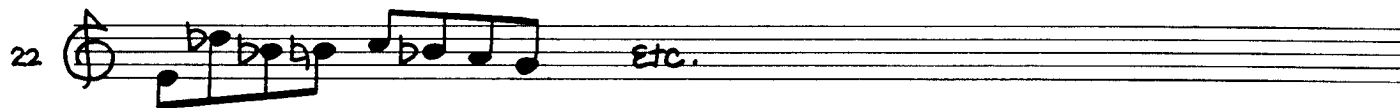
3  P.

4  G.

5  P.

6  G.

7  P.



The reader may wish to practice the exercises in this book with the Jamey Aebersold jazz play-along records, particularly the following:

- Volume 3: The II V₇ Progression
- Volume 6: All Bird
- Volume 16: Turnarounds, Cycles & II/V₇s
- Volume 21: Gettin' It Together
- Volume 24: Major & Minor