

around the the **HORN**



21 Modal Scales and Arpeggios
Every Jazz Musician Needs To Know

A Player's Guide For ALL Instruments

by

WALT WEISKOPF

Jamey Abersold Jazz[®]



AROUND THE HORN

21 Modal Scales and Arpeggios
every jazz musician needs to know

Studies and Etudes

for the

modern jazz player

A Player's Guide for ALL Instruments

by **Walt Weiskopf**

Digital eBook Edition

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Author's Note

In the course of my teaching over the last several years, the idea for this book came to me gradually. When I was learning how to play, it was suggested to me that I arpeggiate minor chords, dominant chords and major chords. Recently I started thinking about that idea. I realized that I had never arpeggiated any chords *except* minor, dominant and major chords. I began arpeggiating all different kinds of chords. This may seem rudimentary; and I think it is. I only know that I had not ever practiced anything like this and I suspect many musicians haven't as well. I realized that the practice routine I was developing for myself and my students had a lot of possibilities and also that I had not run across anything like it before.

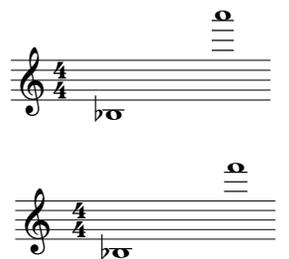
If living in the modern age as a professional musician has taught me one thing; it is that I must make the most of my practice time. I have developed this method of practice with the concept of efficiency in mind. It is a routine that builds physical stamina in addition to training the ears to hear tonalities that should be familiar to all contemporary musicians, but often are not. I know that I will be using this method of practice for the rest of my professional life.

When I began practicing in this manner with my students, the first thing I noticed was a definite change for the better in my own comfort level with less common modal tonalities like aeolian, phrygian and locrian. Even though these are modes of the major scale and should have been familiar to me, I always felt more comfortable with more common modes like ionian, dorian, mixolydian and lydian. Just as all musicians must eventually become as comfortable in the key of F# major as they are in C major, I realized that I needed to be as comfortable in C locrian as I was in C major. I'm not there yet, but I'm getting there. Now I can "hear" the difference between locrian and phrygian whereas I used to have to think to myself, "that must be either locrian or phrygian and I really should know which one." Not that I couldn't have figured it out...but hearing a tonality and recognizing it immediately is much different than being able to figure it out theoretically; because by the time it's been figured out, the song (or at least your solo chorus) is over.

During an improvised solo there is no time for figuring things out. Whatever you are going to play is already a part of you and whatever you haven't figured out yet is not going to be any part of a good solo. That's why it is not enough to know in theory how a phrygian scale (for example) is constructed. In order to be able to play in the phrygian mode it is necessary to be able to hear phrygian just as you hear the tonalities with which you are most comfortable.

For all instrumentalists

Around the Horn was written for all instruments. The scales and arpeggios on pages 18-78 span two octaves each so the total range starts with written Bb below the treble clef staff going to high A; in the space above the fourth ledger line above the treble clef staff. The studies and etudes on pages 90-203 generally limit the range to the traditional written range of the saxophone; low Bb to high F.



Acknowledgement

I would like to thank my students at New Jersey City University and Princeton University for helping me try out this material. I appreciate the enthusiasm with which they rose to the occasion. They proved to me and to themselves that practicing the method on the following pages develops the ability to hear all different kinds of modes as well as to build technique on their chosen instrument.

Forward

Even though "jazz improvisation" is a familiar term to most of us, it is enlightening to consider what it actually means. "Improvise" literally means 'to invent, compose, or recite without preparation.'¹ If you ask most good jazz players how they learned to play they will tell you without hesitation that they practiced alot. Is this preparation? Yes. So the word "improvisation" in the context of the phrase "jazz improvisation" can be misleading. That is why I like the term "jazz playing." Playing jazz is not as simple as the term "jazz improvisation" would suggest. At the risk of oversimplifying; jazz playing is like giving a speech. A jazz solo is more analogous to a speech than a conversation because it's all you (unless you're trading fours!). To play a good jazz solo you need vocabulary and the ability to deliver it in a manner that is spontaneous and convincing. It is a craft that requires practice, discipline and patience.

The reality about jazz playing is that most good jazz players have, over time and through practice and performance, acquired a musical vocabulary that is shared throughout the world of jazz. This vocabulary is fused with the artist's personality; which is why no two jazz musicians (or any musicians) ever sound the same even though they might sound similiar. The first step toward enjoyment and satisfaction as a jazz musician is listening to some great jazz every day. The second step is developing an efficient practice routine; such as the one outlined on the pages that follow. At the same time it's important to play with friends and fellow students of jazz. Without the opportunity to apply what you are practicing in a real situation - that is, with other living and breathing musicians, your progress will not be as rapid as it could be. Good luck!

Introduction

The objective of this book is to provide you, the aspiring jazz musician, with a practical method that will dramatically increase your harmonic vocabulary from an aural as well as theoretical perspective. To make the best use of this book you will need a basic proficiency on your instrument; as well as an understanding of fundamental music theory.

In order to function as a jazz musician it is useful to have a thorough command of your instrument as well as a theoretical knowledge of scales and arpeggios understood in a jazz context. Here is a practical example: you are reading through a new piece and arrive at the "solo" section. The first chord symbol you see is Fmaj7^{#11}. What does this trigger in your jazz vocabulary? It should at least trigger the F lydian scale and the F lydian arpeggio (see page 9) -- immediately. If this information is not at your fingertips instantly it will be difficult to play a good solo.

Most good jazz musicians have material that they have practiced and learned for different musical situations. For instance, if I see G7 - it immediately triggers in my mind a variety of musical patterns and "licks" that I have learned over the years. The objective is to amass as much material as possible and develop the ability to vary it spontaneously; and to be confident to the extent that the conviction of the performance is not in doubt. This kind of confidence comes with years of practice and experience. "Attitude" will not work by itself; ultimately you must have the goods to back it up.

Working with this book will improve your technic and at the same time give you a practical understanding of jazz theory; so that when you see a chord symbol you will have some vocabulary instantaneously. The more you practice, the better a jazz player you will be!

¹ The American Heritage Dictionary-Second College Edition; pub. Houghton-Mifflin Copyright 1982

Modal Scales and Arpeggios

The exercises beginning on page 14 are divided into three sections based on the major scale, melodic minor scale and harmonic minor scale. In each section all of the scales, arpeggios and studies are written out in every key starting on Bb. The last part of the book consists of 21 jazz etudes, one for each mode of the major scale, melodic minor scale and harmonic minor scale. These etudes were composed with two objectives. The first is to attempt to demonstrate how this material might be internalized to the extent that it could be reflected in a jazz solo. The second objective is to train the ear to begin to hear the sound of the different modes in the context of a jazz solo.

A practice routine based on the ii-V-I progression

Throughout this book the format for practice will be to play the arpeggios and scales in the following sequence: ii-V-I-IV-vi-iii-vii². There are some practical reasons for this. In this book we will practice arpeggios and modes of the major scale, melodic minor scale³ and harmonic minor scale. For now, consider only the modes of the major scale (Ionian, dorian, phrygian, lydian, mixolydian, aeolian and locrian).

The ii-V-I progression is a very common progression in jazz and it is helpful to get as familiar as possible with this progression. The ii-V-I progression is the basis of the ii-V-I-IV-vi-iii-vii routine. The rest of the ii-V-I-IV-vi-iii-vii routine (the IV-vi-iii-vii part) might seem random but it is not.

Most musicians would agree that a minor chord is "darker" than a major chord; and conversely that a major chord is "brighter" than a minor chord. The reason a minor triad sounds darker than a major triad is because it has a minor third instead of a major third. Of all the major scale modes, the brightest mode is lydian (the fourth mode) and the darkest mode is locrian. The initial ii-V-I tonicization in ii-V-I-IV-vi-iii-vii logically precedes the lydian mode (IV) because each preceding chord is one note darker than the last. In other words, the I chord, which has a major third and a major seventh, is one note darker than the IV chord; which has a major third, major seventh and a sharp-eleventh. The V chord is one note darker than the I chord because it has a major third but also a minor (dominant) seventh. And finally, the ii chord is one note darker than the V chord because it has a minor third and a minor seventh. So; the progression ii-V-I-IV goes from dark to bright.

The IV chord is followed by the remaining three modes of the major scale; aeolian, phrygian and locrian. These three chords get progressively darker. Locrian is the darkest mode of the major scale because it has, in addition to a minor third; a minor sixth, a minor second and a flatted fifth. Phrygian is one note brighter than locrian because it has a perfect fifth instead of a diminished (flatted) fifth. Aeolian is one note brighter than phrygian because it has a perfect fifth and also a major second instead of a minor second. Note that aeolian is one note darker than dorian because dorian has a major sixth instead of a minor sixth.

² A chord with a major third is indicated with a capital roman numeral. A chord with a minor third is indicated with a lower case roman numeral; i.e.; "ii" indicates a minor chord based on the second degree of the scale and "V" indicates a major chord built on the fifth degree of the scale. Alterations can be indicated also; i.e. "V7" indicates a dominant seventh chord built on the fifth degree of the scale, however, in this book a "V" chord will always have a dominant seventh.

³ In this book (and in jazz pedagogy in general), the notes of the melodic minor scale are the same ascending and descending. That is, the sixth and seventh degrees are raised ascending and descending. In "classical" music, the sixth and seventh degrees of the melodic minor scale are raised on the way up and lowered on the way down.

Practicing the ii-V-I-IV-vi-iii-vii sequence trains the ear to hear these distinctions. It would not be, in the author's estimation, particularly beneficial to practice in a sequence of, for instance, I-ii-iii-IV-V-vi-vii (ionian, dorian, phrygian, lydian, mixolydian, aeolian, locrian). It looks enticing and might be easier initially. Just in case you're tempted; the pages that follow are written out specifically for practicing the ii-V-I-IV-vi-iii-vii sequence.

Arpeggios

The term "arpeggio" simply refers to notes of a chord being played from bottom to top independently (as opposed to simultaneously; as when a chord is played on a chordal instrument like piano or guitar). In many cases the choice of chord tones that make up a particular chord is fairly well accepted; for instance: a Cmaj7 chord is composed of the notes C,E,G and B. These notes make up the arpeggio for Cmaj7. For chords that are not normally practiced in this manner the construction of an arpeggio is more subjective. The criteria used in deciding what a good arpeggio is for each chord is straightforward; which sequence of notes best connotes the tonality of the chord.

Defining Notes

Example 1: the arpeggio for Fmaj7^{#11} is F,A,B,E. Even though the note C is part of the F lydian scale (the scale from which Fmaj7^{#11} is derived); B is a very important note in this chord. One could even say that B is the "defining note" in the chord. The arpeggio of F,A,B,E, which incorporates the defining note (B), best connotes the tonality of Fmaj7^{#11}.

Example 2: the arpeggio for D phrygian is D,Eb,A,C (this tonality could be notated as Dmin7^{b2} but many musicians would agree that it is just as easy to write 'D phrygian'). The defining note in this tonality is Eb. Although there are other possibilities (to construct an arpeggio for D phrygian), this arpeggio succinctly connotes the tonality of D phrygian.

Example 3, below, shows the "stacked thirds" diatonic⁴ chords for the modes of Bb major. Example 4 shows the chosen arpeggios for practice in "Around the Horn."

diatonic "stacked thirds" in the key of Bb major

Ex. 3

Diagram showing diatonic "stacked thirds" chords in the key of Bb major:

- I: B^bMa⁷
- ii: Cmi⁷
- iii: Dmi⁷
- IV: E^bMa⁷
- V: F⁷
- vi: Gmi⁷
- vii: Ami^{7b5}

diatonic chords in the Key of Bb major for practice

Ex. 4

Diagram showing diatonic chords in the Key of Bb major for practice:

- I: B^bMa⁷
- ii: Cmi⁷(dor.)
- iii: Dmi^{7b2}(phryg.)
- IV: E^bMa^{7#11}(lyd.)
- V: F⁷(mixo.)
- vi: Gmi^{7b6}(aeol.)
- vii: Ami^{7b2}(loc.)

⁴ Diatonic means that all the notes are in the key. In Bb major the diatonic notes are Bb, C, D, Eb, F, G and A; the notes in the Bb major scale.

21 different arpeggios - one for each mode

For each arpeggio in this book, consideration was given toward the defining notes of each mode. Many of the resulting arpeggios differ from the ones that are derived by simply extracting diatonic thirds from each scale (see examples 3 and 4 on page 7). The idea is to construct a different arpeggio for each mode of the major, melodic minor and harmonic minor scales. For example; although the arpeggios for the first mode of Bb melodic minor and Bb harmonic minor could be the same (Bb,Db,F,A), they are intentionally different in this book (see pages 13 and 15). All 21 arpeggios (seven modes of the major scale, seven modes of the melodic minor scale and seven modes of the harmonic minor scale) are different and distinct.

For each mode of the major scale, melodic minor scale and harmonic minor scale a corresponding chord is noted for reference. This chord, as accurately as possible, corresponds to the arpeggio chosen for practice in each mode. For instance the chord normally associated with the second mode of Bb major is Cmin7. It could also be Cmin6, Cmin9, Cmin11 or just Cmi. It is helpful to remember that the chord chosen for each mode is not necessarily the only possible choice but that, hopefully, it is a practical choice and one that makes sense.

To understand the tonality of any chord it is important to view it in the context of the mode from which it is derived. In some cases; particularly with less familiar tonalities, it makes sense to notate the tonality by simply naming the scale like D phrygian instead of Dmi7^{b6,b2} unless a specific voicing is desired. In the etudes that follow (beginning on page 162) the chord notation will generally follow this practice.

Modes of the major scale - dorian (ii), mixolydian (V), ionian (I), lydian (IV), aeolian (vi), phrygian (iii), locrian (vii)

In the key of Bb major the ii chord is Cmin7, the V is F7, the I is Bbmaj.

To practice in the key of Bb major, play the following:

- ii **Cmi7** arpeggio (the arpeggio based on the ii chord)
C dorian scale (the second mode of Bb major)

- V **F7** arpeggio (the arpeggio based on the V chord)
F mixolydian scale (the fifth mode of Bb major)

- I **Bbmaj7** arpeggio (the arpeggio based on the I chord)
Bb major (ionian) scale (the first mode of Bb major)

- IV **Ebmaj7^{#11}** arpeggio (the arpeggio based on the IV chord)
Eb lydian scale (the fourth mode of Bb major)

- vi **Gmi7^{b6}** arpeggio (the arpeggio based on the vi chord)
G aeolian scale (the sixth mode of Bb major)

- iii **D** phrygian (Dmi7^{b6,b2}) arpeggio (the arpeggio based on the iii chord)
D phrygian scale (the third mode of Bb major)

- vii **A** locrian (Ami7^{b6,b5,b2}) arpeggio (the arpeggio based on the vii chord)
A locrian scale (the seventh mode of Bb major)

Major scale modes - chord, arpeggio and scale in Bb major

C_{mi}⁷ **C_{mi}⁷** (arpeggio: 1,m3,5,m7) **C dorian scale (2nd mode of Bb major)**

ii

This arpeggio has the root (C), minor third (Eb), fifth (G) and minor seventh (Bb).

F⁷ **F⁷** (arpeggio: 1,M3,5,m7) **F mixolydian scale (5th mode of Bb major)**

V

This arpeggio has the root (F), major third (A), fifth (C) and minor seventh (Eb).

B^b_{Ma}⁷ **B^b_{Ma}⁷** (arpeggio: 1,M3,5,M7) **Bb major (ionian) scale (first mode of Bb major)**

I

This arpeggio has the root (Bb), major third (D), fifth (F) and major seventh (A).

E^b_{Ma}^{7#11} **E^b_{Ma}^{7#11}** (arpeggio: 1,M3,#4,M7) **Eb lydian scale (fourth mode of Bb major)**

IV

This arpeggio has the root (Eb), major third (G), augmented fourth (A) and major seventh (D). The defining note is A.

G_{mi}^{b6} **G_{mi}^{b6}** (arpeggio: 1,m3,5,m6) **G aeolian scale (6th mode of Bb major)**

vi

This arpeggio has the root (G), minor third (Bb), fifth (D) and minor sixth (Eb). The defining note is Eb.

D_{mi}^{7(b6)} **D^{phryg.}** (arpeggio: 1,m2,5,m7) **D phrygian scale (3rd mode of Bb major)**

iii

This arpeggio has the root (D), minor second (Eb), fifth (A), and minor seventh (C). The defining note is Eb.

A_{mi}^{7(b6)} **A^{loc.}** (arpeggio: 1,m2,b5,m7) **A locrian scale (7th mode of Bb major)**

vii

This arpeggio has the root (A), minor second (Bb), flatted fifth (Eb), and minor seventh (G). The defining notes are Bb and Eb

**Melodic minor scale modes - dorian^{b2} (ii), mixolydian ^{b6} (V), melodic minor (i),
lydian-mixolydian (IV), diminished/whole-tone⁵ (vi),
lydian/augmented (III), inverted diminished/whole-tone⁵ (vii)**

Modulating the melodic minor scale is extremely enlightening. Aspiring jazz musicians often hit a snag when they encounter chords that occur frequently in jazz but cannot be analyzed with modes of the major scale. Two examples are Eb7^{#11} and Dmaj7^{#5}. These are chords that are derived from the melodic minor scale. The fourth mode of melodic minor reveals the lydian-mixolydian scale which can be played over dominant seventh/raised eleventh chords, like Eb7^{#11}. The third mode, the lydian-augmented scale, is used on major seventh/raised fifth chords like Dmaj7^{#5}. The seventh mode, the inverted diminished/whole-tone scale is played on altered dominant chords⁶.

To practice in the key of Bb melodic minor, play the following:

- ii** **Cm6^{b2}** arpeggio (the arpeggio based on the ii chord)
C dorian ^{b2} scale (the second mode of Bb melodic minor)

- V** **F7^{#5}** arpeggio (the arpeggio based on the V chord)
F mixolydian ^{b6} scale (the fifth mode of Bb melodic minor)

- i** **Bbmin/maj7** arpeggio (the arpeggio based on the i chord)
Bb melodic minor scale (the first mode of Bb melodic minor)

- IV** **Eb7^{#11}** arpeggio (the arpeggio based on the IV chord)
Eb lydian/mixolydian scale (the fourth mode of Bb melodic minor)

- vi** **Gm9^{b5}** arpeggio (the arpeggio based on the vi chord)
G diminished/whole-tone scale (the sixth mode of Bb melodic minor)

- III** **Dmaj7^{#5}** arpeggio (the arpeggio based on the III chord)
D lydian/augmented scale (the third mode of Bb melodic minor)

- vii** **A7^{b9}** arpeggio (the arpeggio based on the vii chord)
A inverted diminished/whole-tone scale (the seventh mode of Bb melodic minor)

⁵ The seventh mode of the melodic minor scale has had quite a few names associated with it. This scale used to be called the "altered" scale because the scale is so useful over altered dominant chords and, in that context, contains all the altered chord tones (the b9, #9, b5, #5). More recently this same scale began to be called the "diminished/whole-tone" scale because the scale begins as a diminished scale and ends with whole steps. The term diminished/whole-tone is useful and descriptive but since many people normally identify a diminished scale as beginning with a whole step and an *inverted* diminished scale as beginning with a half-step (and since it is more exacting and descriptive to refer to them in this manner); the seventh mode of melodic minor is referred to in this book as *inverted* diminished/whole-tone because this scale begins with a half-step. The sixth mode of melodic minor is called diminished/whole-tone because it starts with a whole-step.

⁶ An "altered" dominant chord is a dominant seventh chord with every possible alteration; that is, the b9, #9, b5, #5. However, the altered (inverted diminished/whole-tone) scale is often used on chords like C7^{#9} and other chords that might not have every possible alteration but could work with the altered scale.

Melodic minor modes - chord, arpeggio and scale in Bb melodic minor

C_{mi}^{6b2} (arpeggio: 1,m2,5,M6) **C dorian b2 scale (2nd mode of Bb melodic minor)**

ii This arpeggio has the root, flatted second, perfect fifth and major sixth. The defining notes are Db and A.

F^{7#5} **F^{7#5} (arpeggio: 1,M3,#5,m7)** **F mixolydian b6 scale (5th mode of Bb melodic minor)**

V This arpeggio has the root, major third, raised fifth and dominant seventh. the defining note is C#.

B^b_{mi/ma}⁷ **B^b_{mi/ma}⁷ (arpeggio: 1,m3,5,M7)** **Bb melodic minor scale**

i This arpeggio has the root, minor third, perfect fifth and major seventh.

E^b_{7#11} **E^b_{7#11} (arpeggio: 1,M3,#4,m7)** **E^b lydian/mixolydian scale (4th mode of Bb melodic minor)**

IV This arpeggio has the root, major third, augmented fourth and dominant seventh. The defining notes are A and Db.

G_{mi}^{9b5} **G_{mi}^{9b5} (arpeggio: 1,M2,b5,m6)** **G diminished/whole-tone scale (6th mode of Bb melodic minor)**

vi This arpeggio has the root, major second, flatted fifth and dominant seventh. The defining notes are A and Db.

D^b_{ma}^{7#5} **D^b_{ma}^{7#5} (arpeggio: 1,M3,#5,M7)** **Db lydian/augmented scale (3rd mode of Bb melodic minor)**

III This arpeggio has the root, major third, raised fifth and major seventh. The defining note is A.

A^{7b9} **A^{7b9} (arpeggio: 1,m2,M3,m7)** **A inverted diminished/whole-tone scale (7th mode of Bb melodic minor)**

vii This arpeggio has the root, minor second, major third and dominant seventh. The defining notes are Bb and C#.

**Harmonic minor scale modes - half-diminished (ii), augmented/phrygian (V),
harmonic minor (i), minor lydian/mixolydian (iv), lydian/split-third (vi),
major/augmented (III), altered b6 (vii)**

The modes of the harmonic minor scale begin to adventure into some more exotic sounds that are found in many facets of jazz as well as other western music and music from other parts of the world. The interval of the minor third (between Gb and A in the key illustrated, Bb harmonic minor) is a larger interval than ever occurs in either the major scale or the melodic minor scale. Much of traditional bebop, particularly in minor keys, is directly extracted from the modes of the harmonic minor scale. In a more contemporary context, a chord such as Gbmaj7^{#9} is derived from the sixth mode of the Bb harmonic minor scale.

To practice in the key of Bb harmonic minor, play the following:

- ii **Cmi7^{b5(b9)}** arpeggio (the arpeggio based on the ii chord)
C half-diminished scale (the second mode of Bb harmonic minor)

- V **F7^{b9}** arpeggio (the arpeggio based on the V chord)
F augmented/phrygian scale (the fifth mode of Bb harmonic minor)

- i **Bbmin/maj7** arpeggio (the arpeggio based on the i chord)
Bb harmonic minor scale (the first mode of Bb harmonic minor)

- iv **Ebmi9^{b5}** arpeggio (the arpeggio based on the iv chord)
Eb minor lydian/mixolydian scale (the fourth mode of Bb harmonic minor)

- VI **Gbmaj7^{#9}** arpeggio (the arpeggio based on the VI chord)
Gb lydian "split third" scale (the sixth mode of Bb harmonic minor)

- III **Dbmaj9^{#5}** arpeggio (the arpeggio based on the III chord)
Db major/augmented scale (the third mode of Bb harmonic minor)

- vii **Adim7^{add9}** arpeggio (the arpeggio based on the vii chord)
A altered b6/whole-tone scale (the seventh mode of Bb harmonic minor)

five note diatonic chords in the Key of Bb harmonic minor

B^bmi/maj⁹ **Cmi^{7b5(b9)}** **D^bMa^{9#5}** **E^bmi^{9b5}** **F7^{b9}** **G^bMa^{7#9}** **A^{dim}7^{b9}**
i **ii** **III** **iv** **V** **vi** **vii**

five note diatonic chords in the Key of Bb harmonic minor for practice (within the octave)

B^bmi/maj⁹ **Cmi^{7b5(b9)}** **D^bMa^{9#5}** **E^bmi^{9b5}** **F7^{b9}** **G^bMa^{7#9}** **A^{dim}7^{b9}**
i **ii** **III** **iv** **V** **vi** **vii**

Harmonic minor modes - chord, arpeggio (5-note) and scale in Bb harmonic minor

C_{mi}^{7b5(b9)} **C_{mi}^{7b5(b9)}** (arpeggio: 1,m2,m3,b5,m7) **C half-diminished scale**
(2nd mode of Bb harmonic minor)

ii This arpeggio has the root, minor second (flatted ninth), minor third, flatted fifth and dominant seventh

F^{7b9} **F^{7b9}** (arpeggio: 1,m2,M3,5,m7) **F augmented/phrygian scale**
(5th mode of Bb harmonic minor)

This arpeggio has the root, minor second (flatted ninth), major third, fifth and dominant seventh

B^b_{mi/ma}⁹ **B^b_{mi/ma}⁹** (arpeggio: 1,M2,m3,5,M7) **Bb harmonic minor scale**

i This arpeggio has the root, major second (ninth), minor third, fifth and major seventh

E^b_{mi}^{9b5} **E^b_{mi}^{9b5}** (arpeggio: 1,M2,m3,b5,m7) **Eb minor lydian/mixolydian scale**
(4th mode of Bb harmonic minor)

This arpeggio has the root, major second (ninth), minor third, flatted fifth and minor seventh

G^b_{ma}^{7#9} **G^b_{ma}^{7#9}** (arpeggio: 1,m3,M3,5,M7) **Gb lydian "split third" scale**
(6th mode of Bb harmonic minor)

This arpeggio has the root, minor third (sharp ninth), major third, fifth and major seventh

D^b_{ma}^{9#5} **D^b_{ma}^{9#5}** (arpeggio: 1,M2,M3,#5,M7) **Db major/augmented scale**
(3rd mode of Bb harmonic minor)

III This arpeggio has the root, major second (ninth), major third, raised fifth and major seventh

A_{dim}^{7b9} **A_{dim}^{7b9}** (arpeggio: 1,m2,m3,b5, dim7) **A altered b6 scale**
(7th mode of Bb harmonic minor)

vii This arpeggio has the root, minor second (flatted ninth), minor third, flatted fifth and diminished seventh

Triad Pairs

To further enhance your study of the modes of the major scale, the modes of melodic minor and the modes of harmonic minor in *Around the Horn* it is recommended that the corresponding triad pair for each key be learned and practiced. For example; after practicing arpeggios and scales in the key of F major on page 27; the corresponding triad pair of Bbmaj/Cmaj should be practiced. Some suggested ways to practice triad pairs as are follows⁷:

Triad pair:Fmaj/Gmaj

ascending triads

Melodic minor triad pairs - One major triad and one augmented triad a whole step apart

For any chord derived from the modes of melodic minor, refer to the key and build a major triad on the fourth and an augmented triad on the fifth. For example, Eb7^{#11} is derived from the fourth mode of Bb melodic minor. The triad pair for any chord derived from any mode of melodic minor is a major triad on the fourth and an augmented triad on the fifth of the key. So, the triad pair for Eb7^{#11} (which is the "IV" chord in the key of Bb melodic minor) is Ebmaj/Faug.

Triad Pair	Chord/Mode							Key
	ii	V	i	IV	vi	III	vii	
Ebmaj/Faug	Cmi7 ^{b2}	F7 ^{#5}	Bbmi/ma7	Eb7 ^{#11}	Gmi9 ^{b5}	Dbmaj7 ^{#5}	A7 ^{b9}	Bb mel.min.
Emaj/F#aug	C#mi7 ^{b2}	F#7 ^{#5}	Bmi/ma7	E7 ^{#11}	Abmi9 ^{b5}	Dmaj7 ^{#5}	Bb7 ^{b9}	B mel.min.
Fmaj/Gaug	Dmi7 ^{b2}	G7 ^{#5}	Cmi/ma7	F7 ^{#11}	Ami9 ^{b5}	Ebmaj7 ^{#5}	B7 ^{b9}	C mel.min.
F#maj/G#aug	D#mi7 ^{b2}	G#7 ^{#5}	C#mi/ma7	F#7 ^{#11}	Bbmi9 ^{b5}	Emaj7 ^{#5}	C7 ^{b9}	C# mel.min.
Gmaj/Aaug	Emi7 ^{b2}	A7 ^{#5}	Dmi/ma7	G7 ^{#11}	Bmi9 ^{b5}	Fmaj7 ^{#5}	C#7 ^{b9}	D mel.min.
Abmaj/Bbaug	Fmi7 ^{b2}	Bb7 ^{#5}	Ebmi/ma7	G#7 ^{#11}	Cmi9 ^{b5}	Gbmaj7 ^{#5}	D7 ^{b9}	Eb mel.min.
Amaj/Baug	F#mi7 ^{b2}	B7 ^{#5}	Emi/ma7	A7 ^{#11}	C#mi9 ^{b5}	Gmaj7 ^{#5}	Eb7 ^{b9}	E mel.min.
Bbmaj/Caug	Gmi7 ^{b2}	C7 ^{#5}	Fmi/ma7	Bb7 ^{#11}	Dmi9 ^{b5}	Abmaj7 ^{#5}	E7 ^{b9}	F mel.min.
Bmaj/C#aug	G#mi7 ^{b2}	C#7 ^{#5}	F#mi/ma7	B7 ^{#11}	D#mi9 ^{b5}	Amaj7 ^{#5}	F7 ^{b9}	F# mel.min.
Cmaj/Daug	Ami7 ^{b2}	D7 ^{#5}	Gmi/ma7	C7 ^{#11}	Emi9 ^{b5}	Bbmaj7 ^{#5}	F#7 ^{b9}	G mel.min.
Dbmaj/Ebaug	Bbmi7 ^{b2}	Eb7 ^{#5}	Abmi/ma7	Db7 ^{#11}	Fmi9 ^{b5}	Bmaj7 ^{#5}	G7 ^{b9}	Ab mel.min.
Dmaj/Eaug	Bmi7 ^{b2}	E7 ^{#5}	Ami/ma7	D7 ^{#11}	F#mi9 ^{b5}	Cmaj7 ^{#5}	Ab7 ^{b9}	A mel.min.

Harmonic minor triad pairs - one minor triad and one augmented triad a whole-step apart

For any chord derived from the modes of harmonic minor, refer to the key and build a minor triad on the fourth and an augmented triad on the fifth. For example, Dmi7^{b5(b9)} is derived from the second mode of C harmonic minor. The triad pair for any chord derived from any mode of harmonic minor is a minor triad on the fourth and an augmented triad on the fifth of the key. So, the triad pair for Dmi7^{b5(b9)} (which is the "ii" chord in the key of C harmonic minor) is Fmin/Gaug.

Triad Pair	Chord/Mode							Key
	ii	V	i	iv	VI	III	vii	
Ebmin/Faug	Cmi7 ^{b5(b9)}	F7 ^{b9}	Bbmi/ma7	Ebmi9 ^{b5}	Gbmaj7 ^{#9}	Dbmaj7 ^{#5}	Adim7 ^{b9}	Bb harm.min.
Emin/F#aug	C#mi7 ^{b5(b9)}	F#7 ^{b9}	Bmi/ma7	Emi9 ^{b5}	Gmaj7 ^{#9}	Dmaj7 ^{#5}	Bbdim7 ^{b9}	B harm.min.
Fmin/Gaug	Dmi7 ^{b5(b9)}	G7 ^{b9}	Cmi/ma7	Fmi9 ^{b5}	Abmaj7 ^{#9}	Ebmaj7 ^{#5}	Bdim7 ^{b9}	C harm.min.
F#min/G#aug	D#mi7 ^{b5(b9)}	G#7 ^{b9}	C#mi/ma7	F#mi9 ^{b5}	Amaj7 ^{#9}	Emaj7 ^{#5}	Cdim7 ^{b9}	C# harm.min.
Gmin/Aaug	Emi7 ^{b5(b9)}	A7 ^{b9}	Dmi/ma7	Gmi9 ^{b5}	Bbmaj7 ^{#9}	Fmaj7 ^{#5}	C#dim7 ^{b9}	D harm.min.
Abmin/Bbaug	Fmi7 ^{b5(b9)}	Bb7 ^{b9}	Ebmi/ma7	G#mi9 ^{b5}	Bmaj7 ^{#9}	Gbmaj7 ^{#5}	Ddim7 ^{b9}	Eb harm.min.
Amin/Baug	F#mi7 ^{b5(b9)}	B7 ^{b9}	Emi/ma7	Ami9 ^{b5}	Cmaj7 ^{#9}	Gmaj7 ^{#5}	Ebdim7 ^{b9}	E harm.min.
Bbmin/Caug	Gmi7 ^{b5(b9)}	C7 ^{b9}	Fmi/ma7	Bbmi9 ^{b5}	Dbmaj7 ^{#9}	Abmaj7 ^{#5}	Edim7 ^{b9}	F harm.min.
Bmin/C#aug	G#mi7 ^{b5(b9)}	C#7 ^{b9}	F#mi/ma7	Bmi9 ^{b5}	Dmaj7 ^{#9}	Amaj7 ^{#5}	Fdim7 ^{b9}	F# harm.min.
Cmin/Daug	Ami7 ^{b5(b9)}	D7 ^{b9}	Gmi/ma7	Cmi9 ^{b5}	Ebmaj7 ^{#9}	Bbmaj7 ^{#5}	F#dim7 ^{b9}	G harm.min.
Dbmin/Ebaug	Bbmi7 ^{b5(b9)}	Eb7 ^{b9}	Abmi/ma7	Dbmi9 ^{b5}	Emaj7 ^{#9}	Bmaj7 ^{#5}	Gdim7 ^{b9}	Ab harm.min.
Dmin/Eaug	Bmi7 ^{b5(b9)}	E7 ^{b9}	Ami/ma7	Dmi9 ^{b5}	Fmaj7 ^{#9}	Cmaj7 ^{#5}	G#dim7 ^{b9}	A harm.min.

On the previous pages we have examined the modes of the major scale, melodic minor scale and harmonic minor scale. For each mode of the major scale, melodic minor scale and harmonic minor scale we decided on a specific arpeggio for practice. Also discussed was the benefit of practicing the arpeggios and scales in a specific order. To this end we have chosen to practice arpeggios and scales based on the two-five-one progression. The layout of the exercises on the following pages reflects this idea.

On pages 18-53 are all of the modal arpeggios and scales for the major scale modes, melodic minor modes and harmonic minor modes. The arpeggio is printed with the corresponding chord notated above.¹⁰ To the left of the chord is a roman numeral indicating how the chord relates to the key. In the example below, Cmi7 is the "ii" chord in the key of Bb major. Below each arpeggio is the corresponding modal scale.

The image shows two musical staves in 4/4 time. The first staff is labeled 'ii Cmi7 (arp: 1,m3,5,m7)' and shows an arpeggio starting on C4, moving up to Eb4, F4, G4, and then down to C4. The second staff is labeled 'C dorian scale' and shows the scale starting on C4, moving up to Eb4, F4, G4, Ab4, Bb4, C5, and then down to C4. The scale is written in a 4/4 time signature, with a 3/4 time signature change indicated for the descending part.

At the bottom of pages 18-53 are some ideas about how you might structure your practice. For instance, at the bottom of page 18 (ii-V-I-IV-vi-iii-vii in the key of Bb major) you will see:

practice suggestions: 1. practice the Ebmaj/Fmaj triad pair 2. go to next page or go to page 56

To enhance your understanding of each key, it can be very helpful to practice the corresponding triad pair. In the example above, after practicing the modal arpeggios and scales in Bb major, the suggestion is to then practice the Ebmaj/Fmaj triad pair (see also pages 14-15) which works for any mode of Bb major.

Proceeding to the next page will take you around the circle of fourths (i.e.; ii-V-I-IV-vi-iii-vii in the key of Bb major on page 18, in the key of Eb major on page 19 and so on). If after practicing ii-V-I-IV-vi-iii-vii in the key of Bb major on page 18, you then follow the suggestion and go to page 56, you can practice each mode from the same note. So, on page 18 you play Cmin7, F7, Bbmaj, Ebmaj7#5, Gmin7b6, D phrygian and A locrian. On page 56 you begin again with Cmin7 and then continue with C7, Cmaj, Cmaj7#5, Cmin7b6, C phrygian and C locrian. This is the format that is featured on pages 54-89. The material is organized so that all the modes of the major, melodic minor and harmonic minor scales are practiced from a common note.

The image shows four musical staves in 4/4 time, all starting on Bb4. The first staff is labeled 'ii Bbmi7 (arp: 1,m3,5,m7)' and shows an arpeggio starting on Bb4, moving up to D5, Eb5, F5, and then down to Bb4. The second staff is labeled 'V Bb7 (arp: 1,M3,5,m7)' and shows an arpeggio starting on Bb4, moving up to D5, Eb5, F5, and then down to Bb4. The third staff is labeled 'I BbMa7 (arp: 1,M3,5,M7)' and shows an arpeggio starting on Bb4, moving up to D5, Eb5, F5, and then down to Bb4. The fourth staff is labeled 'IV BbMa7#11 (arp: 1,M3,#4,M7)' and shows an arpeggio starting on Bb4, moving up to D5, Eb5, F5, and then down to Bb4.

¹⁰ Note that frequently, particularly with modes of melodic and harmonic minor; the chord that corresponds to a particular arpeggio is subjective. Every effort has been made to decide on the most practical choices but there are always alternatives. Because each arpeggio is named with a particular chord does not mean that this is the only chord that could

The third section is dedicated to two different comprehensive studies on all of the 21 modal arpeggios. Study #1 is on pages 90-125 and study #2 is on pages 126-161.

C major

ii-V-I-IV-vi-iii-vii arpeggio study #1 in the key of C major

ii D_{mi}^7 (arp:1,m3,5,m7)

V G^7 (arp:1,M3,5,m7)

Gb major

ii-V-I-IV-vi-iii-vii arpeggio study #2 in the key of Gb major

ii $A^b_{mi}^7$ (arp:1,m3,5,m7)

V D^b7 (arp:1,M3,5,m7)

The 21 etudes that follow (on pages 162-203) are each written to concentrate on a specific mode. Above the title of each etude, the arpeggio and scale that apply to the first chord of the etude appear for reference as in the example below:

$C7^{\#11}$ (arpeggio: 1,M3,#4,m7)

C Lydian/mixolydian scale
(4th mode of G melodic minor)

Up-tempo blues ♩ = 120

Lydian Mixolydian Blues

Walt Weiskopf

$C7^{\#11}$

For all of the exercises, studies and etudes that follow; practice with a metronome at a moderate tempo is recommended. Bear in mind that this book is a long term project so take your time -- Good luck!

Bb major

ii-V-I-IV-vi-iii-vii Arpeggios and Scales in the Key of Bb major

ii Cm^7 (arp: 1,m3,5,m7)

C dorian scale

V F^7 (arp: 1,M3,5,m7)

F mixolydian scale

I Bb^7 (arp: 1,M3,5,M7)

Bb ionian (major) scale

IV $Eb^7\#11$ (arp: 1,M3,#4,M7)

Eb lydian scale

vi $Gmin^b6$ (arp: 1,m3,5,m6)

G aeolian scale

iii D phrygian (arp: 1,m2,5,m7)

D phrygian scale

vii A locrian (arp: 1,m2,b5,m7)

A locrian scale

practice suggestions: 1. practice the Ebmaj/Fmaj triad pair 2. go to next page or go to page 56