

Introduction

The Concept

Across genres and across generations, whether Mozart, Western folk music, show tunes, or jazz artists as diverse as Coleman Hawkins and Chris Potter, a fundamental staple of melodic material includes diatonic triads (major and minor) and their inversions. Triads have a clear tonal quality, and lend themselves to making direct and strong melodic statements.

The modern jazz tonal language in particular contains a good deal of triads (including cyclical movement, secondary diatonic triads, triad pairs, and stacked triads) connected by passing tones (leading tones), both *unaltered* (diatonic):



(Major triads ascending in perfect 4ths, connected by lower neighbor diatonic leading tones)

And *altered* (chromatic):



(Major triads ascending in perfect 4ths, connected by upper neighbor chromatic leading tones)

This book's functions primarily as a playable reference (or thesaurus, of sorts) on how diatonic triads can be connected by these two types of leading tones. By combining the tonal directness of the triad with the chromaticism that is an essential component of the bebop language, this book offers a way to seamlessly bridge the gap between bebop, and a more modern sounding jazz language.

By internalizing the sound of triads moving in their various inversions in conjunction with how they most efficiently connect (via half-step leading tones), you can develop a high degree of melodic movement fluency as you improvise. It is this fluency of movement in service to your aural imagination that opens up seemingly endless melodic possibilities as well as a quickly reactive instinct for variations.

In this book, I present both major and minor triads in the following inversions:

1 3 5 1 5 3

3 1 5 3 5 1

5 3 1 5 1 3

In each of these inversions I connect the triads by both upper neighbor and lower neighbor leading tones. These leading tones are either diatonic or chromatic (as was demonstrated in the first example above on the first page of this Introduction).

Each triad (and its inversion) is converted into a four-note melodic cell by adding a passing or leading tone. Converting the triads into these four-note cells makes them most readily available to the movement and subdivision of “four”, which is still the rhythmic staple of the modern jazz melodic language. The triads (and their inversions) are connected either *directly*:

1 - 5 - 3 - #4

(The triad/inversion in sequence followed by a passing tone; in this case, the #4)

Or *indirectly*:

1 - 5 - #4 - 3

(The triad/inversion sequence interrupted by a passing tone; again in this case, the #4)

By design, this “four-note” organization of these triads (whether the triads are connected directly or indirectly; or by diatonic versus chromatic passing/leading tones), will sometimes manifest itself into four-note chords:

5 - 3 - 1 - 7

A musical staff in 4/4 time showing a sequence of four major triads. The first triad is C major (C4, E4, G4). The second is F major (F4, A4, C5). The third is Bb major (Bb4, D5, F5). The fourth is Eb major (Eb4, G4, Bb4). Each triad is connected to the next by a diatonic lower neighbor leading tone: G4 to F4, C5 to B4, F5 to Eb4, and Bb4 to Ab4.

(Major triads moving in ascending perfect 4ths, connected by diatonic lower neighbor leading tones, implying Major 7th chords)

3 - 5 - 1 - b7

A musical staff in 4/4 time showing a sequence of four major triads. The first triad is C major (C4, E4, G4). The second is F major (F4, A4, C5). The third is Bb major (Bb4, D5, F5). The fourth is Eb major (Eb4, G4, Bb4). Each triad is connected to the next by a chromatic upper neighbor leading tone: G4 to Ab4, C5 to Bb4, F5 to Eb4, and Bb4 to Bb4 (which is the same as the previous note).

(Major triads moving in ascending perfect 4ths connected by chromatic upper neighbor leading tones, implying dominant 7th chords)

Using non-chordal passing tones (whether diatonic or chromatic) is sometimes necessary in order to connect the triads by half steps.

The triads are organized to move either major to major:

1 - 3 - 5 - 3

A musical staff in 4/4 time showing a sequence of four major triads. The first triad is C major (C4, E4, G4). The second is F major (F4, A4, C5). The third is Bb major (Bb4, D5, F5). The fourth is Eb major (Eb4, G4, Bb4). The notes are connected by half steps: G4 to F4, C5 to Bb4, F5 to Eb4, and Bb4 to Ab4.

Minor to minor:

1 - 3 - 5 - #3

A musical staff in 4/4 time showing a sequence of four minor triads. The first triad is C minor (C4, Eb4, Gb4). The second is F minor (F4, Ab4, Cb5). The third is Bb minor (Bb4, Db5, Fb5). The fourth is Eb minor (Eb4, Gb4, Bbb4). The notes are connected by half steps: Gb4 to Ab4, Cb5 to Bb4, Fb5 to Eb4, and Bbb4 to Bb4.

Major to minor:

1 - 3 - 5 - 3

A musical staff in 4/4 time showing a sequence of four triads. The first triad is C major (C4, E4, G4). The second is F major (F4, A4, C5). The third is Bb minor (Bb4, Db5, Fb5). The fourth is Eb minor (Eb4, Gb4, Bbb4). The notes are connected by half steps: G4 to F4, C5 to Bb4, F5 to Eb4, and Bbb4 to Bb4.

Or minor to major:



All of these triad combinations and their inversions are organized into specific sequences of tonal movement, as follows:

- Ascending perfect 4ths (as is demonstrated in the examples above)
- Ascending perfect 5ths
- Ascending and descending minor 2nds
- Ascending and descending major 2nds
- Ascending and descending minor 3rds
- Ascending and descending major 3rds
- Tritones

These sequences cover virtually all of the tonal movement possibilities from triad to triad. (Intervals large than a perfect 5th would be redundant to the smaller intervals already presented. For example, Ascending minor 6ths are essentially the same as descending major 3rds in terms of actual tonal differences between intervals.)

By becoming familiar and fluent with all of these tonal movements, you'll be able to find nearly endless applications of triad cells over any harmonic form. You'll also be able to discover and develop new melodic ideas playing within a single key or mode, as well as any kind of thematic or open-ended improvisation.

The aims of this book

I've developed and practiced the material in this book with specific aims in mind. I offer this work to help you:

- To become intimately aware of, and capable of, connecting triads via leading tones
- To bridge the gap between the more traditional bebop language and a more modern, non-stylized tonal language emerging in jazz
- To increase your fluidity in improvising continuously moving melodic lines
- To improve your ears
- To broaden your understanding of harmonic relationships and the application of harmonic substitutions
- To open up more possibilities to yourself in any style of linear improvisation
- To improve your technique

Format

I've organized this book into six chapters covering the above mentioned intervallic movements, plus one Reference chapter that demonstrates ways that the material can be applied to ii-V7 cycles. Chapter Two outlines specifically how major scales can be organized into four-note triad cells by the use of leading tones.

As is shown in the notated examples above, I label each note of the first four-note cell in each exercise to make clear the structure of the pattern. If the pattern changes slightly in the second four-note cell of any exercise (which sometimes happens as the chords move from major to minor, or minor to major, in order to keep them connected by leading tones), I'll label it, as well. **The numbers I use to label (e.g., 1-3-5-2) are relative to the diatonic key from which the triad is formed (either major or melodic minor).**

As mentioned earlier, all of the exercises are organized according to specific tonal movement. The rhythmic language for all the exercises is the eighth note, as the point of each exercise is to connect each cell through continuous movement. Feel free to alter the rhythms once you are familiar with the exercise.

I've chosen very carefully the note placement (and displacement) of each of the inversions for every exercise. My main aim is to keep the entire pattern flowing continuously and melodically. Each pattern is presented as a cycle that moves through all twelve keys (like perfect 4ths), or fits within its division of the octave. So for example:

1 - 3 - 5 - 3

Above we have major triads moving in ascending perfect 4ths. Because it takes all twelve keys to complete its cycle, you'll note that each four-note cell is connected via half-step voice leading. The exercise is presented in such a way that the "B" at the end of the sixth measure effectively can serve as a leading tone back to the "C" (the first note of the first measure) to create a complete cyclical loop. This lends a melodic flow to the entire pattern.

On the other hand:

1 - 3 - 5 - 2

The image shows a musical exercise on a single staff in 4/4 time. It consists of six measures. The first measure starts on C4 and contains the notes C4, E4, G4, B3. The second measure starts on E4 and contains E4, G4, B3, D4. The third measure starts on G4 and contains G4, B3, D4, F4. The fourth measure starts on B3 and contains B3, D4, F4, A3. The fifth measure starts on D4 and contains D4, F4, A3, C4. The sixth measure starts on F4 and contains F4, A3, C4, E4. The exercise concludes with a double bar line. Above the first measure, the numbers '1 - 3 - 5 - 2' are written, indicating the intervallic structure of the triads.

In this example (where we have major triads moving in ascending minor thirds), the pattern is completed within the octave in the first two measures (i.e., if the pattern were to continue, it would just repeat itself starting at “C” again). The “B” at the end of the second measure can function as a leading tone to the “C” in the first measure. (You’d displace either the “C” by raising it up an octave, or displace the “B” by lowering it an octave to have true half-step voice leading.)

The pattern is then transposed up a half step in the third measure (starting on Db), then once again in the fifth measure (starting on D natural), thereby covering all twelve keys. If you look at the last note of the exercise (C#), you can see that it will voice lead back to the “C” at the beginning of the exercise.

So I essentially offer two choices here: Either you can practice cycling each of the two measure cells as a cycle, or you can practice the entire six-measure pattern as a whole.

You’ll also notice in many of the exercises that I’ve transposed the octave at various places. I’ve done this to keep the exercise within a reasonable instrumental range, as well as to help it flow along as seamlessly as possible within itself, and with the following six-measure pattern. My aim was to make the entire three-page exercise to flow along as a playable whole.

Every three-page exercise (e.g., Ascending Perfect 4ths: Major Triads) includes the movement/triad pattern in all of the inversions mentioned above (e.g., 1-3-5, 1-5-3, etc.) Each inversion is presented first with lower neighbor leading tones connecting the triad cells:

1 - 3 - 5 - 3

Immediately followed by the same triad cell pattern connected by upper neighbor leading tones:

1 - 3 - 5 - #4

Double bar lines are used to mark the end of each completed six-measure cycle..

I've chosen accidentals based upon making the distinction between triads most clear. It is not necessarily the "easiest" way to read the notes in some cases (forgive me!), but it will help you to better keep the theoretical component of each exercise in mind (the diatonic triad as a four-note cell). My aim was to be as consistent as possible within each exercise in terms of choosing sharp and flats. I've chosen not to use double flats or double sharps, however, as to make the reading at least a bit more manageable.

The range of all the exercises is the reasonably moderate. The lowest note is Bb (A#) just below middle C, and the highest note is F# (Gb) above the staff. As I've mentioned above, my choices of octave displacement are with respect to the flow of each exercise and the connection of the leading tones. Please feel free to displace notes to best suit the range of your instrument.

How to practice this material

It is **very important** that you read and understand my demonstration and explanation above on how each exercise is organized. Without this understanding you'll not be able to optimize your learning of the patterns.

Spend lots of time working with the material in the first chapter, especially with the ascending perfect 4ths. Because so many song forms in improvisation are organized around the cyclical movement of the circle of keys, internalizing these sounds and movements will help you to fluently connect your melodic ideas when playing over chord changes. And working on ascending perfect 5ths will help you to better understand, hear and connect upper partial harmonic extensions of dominant, major and minor chords.

Then spend lots of time on the second chapter. Learning to hear and connect secondary triads formed from major scales with leading tones is at the heart of the bebop language. It will also give you lots of fuel for your solos, both over ii-V7 cycles and over major keys themselves. (I've omitted secondary triads over minor keys because each minor key contains at least two non-diatonic triads.)

Once you feel that you have deeply absorbed the sound and the movement of these exercises move on to the other chapters in any order you wish. You'll find that as the triads are organized in symmetrical intervals (for example, ascending major 3rds) that the exercises start sounding a bit more angular and "modern".

You should sing each new pattern within every exercise you encounter. Aim to be able to sing at least one iteration of each inversion, for both upper neighbor and lower neighbor leading tones. Doing so will not only improve your technical ability with each exercise, but will also cultivate your aural imagination so that you are best able to access the material when you improvise.

Even though I've notated all the material, strive to play as much as possible without looking at the page. Once you are clear on the structure of the pattern, can sing it, and have played through it several times, see if you can play it by ear/memory. You always have the written material to refer back to if you get stuck or become frustrated.

After you've become familiar with a particular pattern, practice making variations with octave displacement. Aim at becoming intuitive with this, simply following how the lines move in ways that are interesting and pleasing to you. By doing this you'll significantly open up even more possibilities as well as expand your aural imagination.

And of course, take these ideas into your practice of improvisation as soon as possible. The Reference chapter of this book will give you some ideas of how these four-note cells can be applied over ii-V7 cycles, but that's just the beginning. Use your understanding of harmony (particularly substitution and extension) and your imagination to find an entire open field of melodic ideas. Best wishes!