

Interval-Based Chord Voicing for Reading Lead Sheets on Vibraphone

By Dr. Nicholas Papador

I have always been envious of guitarists when it comes to voicing and comping jazz chords. Using movable fixed hand positions and barre chords based on chord quality, as well as selecting specific strings, the guitarist can navigate through lead sheets without having to read vertical sonorities and can access multiple voicings in a single hand position. This article will describe a means of using select vibraphone voicings that we can plane around the keyboard in a similar fashion, using interval content as a “shortcut” for forming chord qualities quickly.

This article is for percussionists who are interested in exploring chord comping technique on vibraphone but have been intimidated by the process or were impatient with their progress interpreting lead sheets. If you are an experienced jazz vibraphonist, you may find this material helpful for students who are developing the speed of their chord reading. If it is material that does not speak to your established practice, that’s okay. This article is for those of us who need some footholds to build confidence in exploring the language. This article introduces a system of using visual hand intervals to increase speed in reading lead sheet chord changes. However, the “shortcuts” presented here are in no way meant to be a replace-

ment for understanding chord quality, functional root movements, and related theory concepts.

One particularly influential course I took during my undergraduate studies was called Functional Jazz Piano, taught by Gary Versace, where the class developed simple piano arrangements for jazz standards, which happened to be well suited for vibraphone. The chord formations presented were in voicings where the 3rd and 7th of a root-position seventh chord were dropped one octave (see Figure 1). The benefit of this voicing is keeping the guide tones (3rd and 7th) in the bass. This prevents the vibraphone from competing with the bass or piano by playing the root as the lowest tone.

Another inspiration for this article and approach is the pedagogy and performances of marimba virtuoso Gordon Stout. At a clinic I attended in Puerto Rico,

Stout was asked which mallets he watches (or is most aware of) when reading in a four-mallet setting. Stout’s response was that he reads with the inner mallets (presumably as an extension of two-mallet playing) and using interval distances in each hand to help determine the rest of the sonority.

Looking at the open, dropped voicing in Figure 1, one will notice that each hand is now playing a perfect 5th, which is a more idiomatic reach in the four-mallet grip than in the original closed voicing. In this formation, each type of common chord structure is comprised of two fifths, separated by a second. The quality of the intervals in the hands can be used as shortcuts to find the chord quality (see Figure 2).

Minor Seventh chords in this chord formation are comprised of two perfect 5ths in each hand separated by a whole

Figure 1: Converting a root-position 7th chord to open voicing with guide tones in the left hand.

The diagram illustrates the conversion of a C minor 7th chord from root position to an open voicing. On the left, the chord is shown in root position (Cm7) with notes C, Eb, F, and Bb. On the right, the chord is shown in an open voicing (Cm7) with notes C, Eb, F, and Bb. Lines connect the notes between the two voicings: the root (C) and the 7th (Bb) are connected by a line, and the 3rd (Eb) and the 7th (Bb) are connected by a line. The right hand's voicing is described as 'Open Voicing with 3rd and 7th of the chord dropped one octave.'

step. Major Sevenths are comprised of the same two perfect fifths but separated by a half step. Our Dominant Seventh chords have a right-handed 5th and a left-handed tritone separated by a whole step. Reversing the intervals by putting the tritone in the right hand and the perfect 5th in the left (still separated by a whole step) creates minor pre-dominant half-diminished chords. The root of the chord is always in mallet 3. We can use these templates as our first moveable chord shapes on the keyboard, not unlike how a guitarist has go-to moveable hand shapes along the fretboard.

With this very limited set of moveable chord forms, one is able to do some lead-sheet reading. Figure 3 is a visually based reading of chord voicings for Horace Silver's ballad "Peace." The outer voice note-heads have been reduced in size, showing that the player can read the inner voices (noting the root in mallet 3). Rather than creating closed voice stacks or having to think about the placement of four notes, this technique allows the player to place the inner two notes and adjust the intervals within the hands to control the quality of the chord. In measure 9, the two dominant chords are altered so tritones appear in both hands.

This approach is far from complete with regards to smooth voice leading, voicing diversity, and accommodating for various chord alterations/upper partials. However, this was a step I needed that allowed me to engage lead sheets with more confidence.

The next step is to develop inverted versions of these chord forms. These chord forms are detailed with their interval content in Figure 4. In these voicings the root of the chord is now in the soprano voice, and the 7th of the chord is in the bass (instead of the 3rd being in the bass). The inverted forms of the voicings have the hands playing 4ths separated by a 3rd. The combination of the intervals within and between the hands define the chord quality.

By alternating and combining chord forms from Figure 2 and Figure 4, we can

create chording/comping strategies that retain common tones, utilize more step-wise motion, and require fewer register changes. Figure 5 shows an improved set of chord comping voicings for "Peace." Dotted lines indicate where common tones are retained between voices.

The first three chords of Example 5 cre-

ate a ii-V-I progression tonicizing G minor. Measures 5-6 include a ii-V-I progression tonicizing A major. These 2-3 chord units (they don't always resolve to a I chord) are a critical developmental piece for thinking in larger units with respect to chord reading. Method books such as Ron Delp's *Vibraphone Technique* and Thomas Davis'

Figure 2: These four examples show standard functional jazz chords voiced with the guide tones in the left hand (3rd in the bass). These voicings complement the ensemble and do not clash with the bass or piano with roots in the lowest voice.

Figure 3: Chords for Horace Silver's "Peace" using a single open-voicing formation.

Voicing and Comping for Jazz Vibraphone contain pages dedicated to playing ii-V-I progressions in all keys. Delp's text uses a variety of voicings including Drop 2, Drop 4 techniques used in horn arranging. Delp writes that any inversions are acceptable so long as they sound good, are well voiced, and fit the style of the music. Davis's text utilizes open and closed chord voicing, with the open voicings matching the content of this article. However, Davis's exercises use upper partials/tensions at the outset with 9ths replacing the root

and 13ths replacing the 5th in dominant chords.

Figure 6 shows examples similar to Delp and Davis' texts in comparison to those presented here. I've chosen a simpler and more restricted set of voicings for this article to promote a visual interval-based approach to chord formation. I've also used open voicings that contain mostly intervals of 4ths and 5ths between the hands, which are more comfortable for beginning four-mallet players.

Figure 5's realization of "Peace" uses

only two voicing types and with the closest possible motion. These chord choices would benefit from more varied inversions, range choices, and/or color notes (tensions) as detailed in texts such as those by Davis and Delp. However, reading chord roots in mallet 3 or 4 and making the necessary intervals adjustments was a necessary step for me when I was aspiring to develop a more intuitive relationship to playing through lead-sheet changes. Once this method was established, I was able to alter this template to replace roots with 9ths fairly intuitively as well as present more varied voicing choices.

I use the method described in this article as a part of my curriculum for jazz/pop percussion students to improve their harmonic knowledge in their combo and big band settings. They can utilize these skill sets at the drum set while listening, or apply their skills at the vibraphone if the drum set seat is filled. This method of practice will encourage keyboard percussionists to use sources like *The Real Book* for both melodic and harmonic sight reading, even if professional jazz performance is not a primary performance goal.

I can say for myself as a concert percussionist that this exploration has improved my reading, improvising, and overall intuitiveness when approaching the instrument. I hope you and/or your students enjoy similar breakthroughs with this material.

BIBLIOGRAPHY

- Davis, Thomas L. *Voicing and Comping for Jazz Vibraphone*. (Milwaukee: Hal Leonard, 1999).
- Delp, Ron. *Vibraphone Technique*. (Boston: Berklee Press Publications, 1975).
- Hal Leonard Publishing Company. *The Real Book*. (Milwaukee: Hal Leonard, 2004).
- Stout, Gordon. *Marimba Clinic, 13th International Percussion Festival*. San Juan, Puerto Rico (2006).
- Versace, Gary. *Lectures from Functional Jazz Piano Course*. Eugene, Oregon (1996).

Figure 4: The following four examples show standard functional jazz chords voiced with the guide tones in the left hand (7th in the bass). These voicings complement the ensemble and do not clash with the bass or piano by having roots in the lowest voice.

Figure 5: Silver's "Peace" chords in alternating open voicing.

Figure 6: Sample of comparative ii-V-I progressions in open voicings

II-V-I open chord voicings (major and minor) as used by the author in this article.

The voicings use the 3rd and 7th guide tones in the left hand and use all four chord members without tensions/color tones.

II-V-I open chord voicings (major and minor) as used in Thomas Davis' *Voicing and Comping for Jazz Vibraphone*

Davis' open voicings use the 3rd and 7th guide tones in the left hand and use the 9th in place of the root as well as the 13th in place of the 5th on the dominant chord.

II-V-I open chord voicings (major and minor) as used in Ron Delp's *Vibraphone Technique*

Delp's text uses mostly open voicing and demonstrates a number of inversions of II-V-I progressions. This example begins with the inverted formation of the hands. Delp converts the Cmaj7 resolution into a C6 chord to avoid a dissonance in the chords outer voices.

Dr. Nicholas Papador is a percussionist/composer based in Windsor, Ontario. He is a founding member of Noiseborder Ensemble and Marassa Duo. Papador has performed at the Transplanted Roots Percussion Research Symposium, Puerto Rico International Percussion Festivals, the Open Ears Festival of New Music, and has appeared five times at PASIC. Papador can be heard on numerous recordings, including his 2015 solo recording *Points of Departure* and Matthew Barney's film *River of Fundament*. An Associate Composer with the Canadian Music Centre, his compositions are published by Keyboard Percussion Publications, Alfred, Studio 4 Music, House Panther Press, and Bachovich Music. Papador has received prestigious grants from the Ontario Arts Council, Canada Council for the Arts, SSHRC, and Canada Foundation for Innovation. Papador is Associate Professor of Music at the School of Creative Arts at the University of Windsor. **PN**



EASTMAN ONLINE PERCUSSION FESTIVAL
June 27-July 2, 2021

Michael Burritt and Ivan Trevino, directors

A five-day online seminar organized by international performing artists and composers Michael Burritt and Ivan Trevino. Designed for high school and collegiate percussionists, the festival will offer daily masterclasses and seminars on a variety of topics, plus two evening performances by Michael Burritt and Ivan Trevino exclusively for Festival participants.

APPLICATION DEADLINE: JUNE 1

**EASTMAN EXPERIENCE:
SUMMER CLASSICAL STUDIES**

July 11-30, 2021 | **For high school musicians**

Petar Kodzas, director

This internationally acclaimed program is for academically inquisitive performers, conductors and composers currently in grades 9-12 who are seriously considering a career in music. This program is for mature students of advanced performance levels who can work well in a focused collegiate-type environment.

APPLICATION DEADLINE: FEBRUARY 15

summer.esm.rochester.edu
summer@esm.rochester.edu
(585) 274-1074 | Toll-free: 1-844-820-3766



**SUMMER
@EASTMAN**