Not so Large a Leap: Introducing Students to the Pitch Organization of Charlie Parker as an Extension of Chopin and Modal Theory

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> > Figures and Examples

Figure 1. G<sup>13</sup> as Mixolydian Mode.
Figure 2. The Modal System.
Figure 3. Basic Jazz Scale-Chords.
Figure 4. Extended Jazz Scale-Chords.
Example 1. Chopin, Op. 28, Prelude 9 in E.
Example 2. Tchaikovsky, "Morning Prayer," Op. 39, No. 1, mm. 9-16.
Example 3. Parker/Gillespie, "Shawnuff," introduction, first chorus and bridge.
APPENDIX: Jazz Scale-Chord Encyclopedia.

Many of the figures in this presentation, along with a number of other resources for teaching music theory in the classroom or studio, are available at www.drfeezell.com.

Photos from http://www.cmgww.com/music/parker/ and http://www.metronimo.com/fr/portraits/

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Understanding the theory of jazz music requires proficiency in three core competencies. First, the student must internalize a vocabulary of scales and chords. Second, the student must learn the grammar of standard harmonic progressions and substitutions. Finally, the student must acquire the rhythmic acumen to knit the scale vocabulary and harmonic grammar together in time, adding his or her unique contribution to jazz.

Rhythmic finesse develops primarily in the context of listening to and interacting with jazz musicians and is difficult to teach effectively in the theory classroom. However, the first two core competencies, jazz scale vocabulary and harmonic grammar, bear striking resemblances to the European theoretical tradition. Utilizing modal theory and Nineteenth-century pitch theory as reference points, the core theory curriculum can incorporate a thorough introduction to jazz pitch theory using the least possible amount of instruction time. A student who intellectually understands common scale types and progressions will develop quickly in future performance situations.

Although many jazz styles and musicians are significant and worthy of study, bebop is a logical starting point for the undergraduate student. Exploring the complexity of bebop pitch organization prepares students to study other jazz styles. As long as students understand that bebop is only one of a number of possible approaches to jazz, bebop provides an excellent opportunity to showcase jazz as an art form worthy of serious study.<sup>1</sup>

The vocabulary of jazz consists of a number of characteristic chords and scales. The diversity of ninth, eleventh, and thirteenth chord types presents a daunting phantasmagoria to the uninitiated student. Fortunately, adding ninths, elevenths, and thirteenths rarely alters the harmonic function of the standard seventh chord types. Therefore, we can reduce the number of chord types dramatically by studying thirteenth chords while focusing on underlying triad and seventh qualities as determinants of harmonic function. After such a course of study, students will have the facility to include or omit ninths, elevenths, and thirteenths as desired.

Mark Levine<sup>2</sup> and Jamey Aebersold<sup>3</sup> have demonstrated that jazz chords function simultaneously as vertical, largely tertian sonorities and horizontal scales. Figure one illustrates two methods of constructing a G dominant thirteenth chord. The first method uses stacked thirds consisting of the root G, the third B, the fifth D, the seventh F, the ninth A, the eleventh C, and the thirteenth E. The second method associates the dominant thirteenth construction with a particular mode, mixolydian, by restating the ninth A as a second above the root, the eleventh C as a fourth above the root, and the thirteenth E as a sixth above the root. Since it is often faster to recall a scale than a very tall tertian sonority, many jazz musicians associate chord types with particular scale

<sup>&</sup>lt;sup>1</sup> For more on this topic, see page 760 of Charles Beale, "Jazz Education," in *The Oxford Companion to Jazz*, ed. Bill Kirchner (New York: Oxford University Press, 2000), 756-765.

<sup>&</sup>lt;sup>2</sup> Mark Levine, *The Jazz Theory Book* (Petaluma, California: Sher Music Company, 1995).

<sup>&</sup>lt;sup>3</sup> Jamey Aebersold, *How to Play Jazz and Improvise*, 6<sup>th</sup> ed. (New Albany, Indiana: Jamey Aebersold Jazz, Inc., 1992).

A  $\mathsf{G}^{13}$  chord can be viewed as a stack of thirds, but rearranging the notes of the 13th chord yields the mixolydian mode.



constructions. In this case, the mixolydian mode is used for a dominant-quality thirteenth chord, and may be played over the chord symbols  $G^7$ ,  $G^9$ ,  $G^{11}$ , or  $G^{13}$ . The term "scale-chord" will be used throughout this presentation to signify the interchangeability of a particular tertian chord and its related mode or modes.

Mixolydian is one of the authentic modes from the medieval-renaissance modal system, shown in figure two. Including only the authentic modes, most undergraduate students will come to their study of jazz scale-chords with a vocabulary of eight scales: Ionian or major, Dorian, Phrygian, Lydian, Mixolydian, Aeolian or natural minor, harmonic minor, and melodic minor.

Figure three lists a set of six basic jazz scale-chords grouped by harmonic function. The three categories of harmonic function are based on a II-V-I paradigm. Tonic function, or I chords, serve as local tonic chords. Predominant function, or II chords, lead to dominant chords. Dominant function, or V chords, function as local dominants to tonic chords. A harmony with a major triad and major seventh, indicated by a triangle, is commonly used as a major tonic. Minor tonics retain the major seventh above a minor triad, indicated by a dash before the triangle. A predominant function chord will vary in quality depending on whether the progression is major or minor, and major-minor dominant seventh chords may be replaced by fully-diminished seventh chords, often in minor keys.

Two points of confusion must be clarified before continuing. First, as in classical music, a II-V-I progression may embellish a chord other than tonic. In other words, secondary supertonics are often used to strengthen secondary dominant chords. Second, the key of a progression is distinct from the modes played over the chords within the

#### Figure 2. The Modal System.

The modes are shown in their most usual arrangement and numbering for the Medieval period. Each mode's *finalis* is shown as an open notehead, and the *reciting tone* is indicated with a square notehead. The *ambitus*, or general range of the mode, can be seen from the lowest and highest pitches.



These 4 were codified by Heinrich Glarean in *Dodecachordon* (1547):



The Locrian mode (ex: B to B with no accidentals) was not used during this period. Copyright © 2005 by Mark Feezell. All Rights Reserved.

# FIGURE 3. BASIC JA22 SCALE-CHORDS.

PRIMARY CHORD TONES ARE SHOWN WITH OPEN NOTEHEADS.

"HANDLE WITH CARE" DISSONANCES ARE SHOWN WITH SQUARE NOTEHEADS.

43, 45. AND 47 REFER TO THE MAJOR SCALE, REGARDLESS OF THE ACTUAL ACCIDENTALS FOR THE PARTICULAR KEY.







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progression. Each chord will have its own associated scale or mode. Often the pitches of the successive scale-chords will fit into an overall key, but this is by no means guaranteed.

Of the scales listed in figure 3, only the Locrian and the whole step-half step diminished scale should be new to the sophomore theory student. These can be introduced easily enough. Locrian is the seventh mode of major in the same way that Dorian is the second mode of major. The whole step-half step diminished scale uses an alternating whole step-half step pattern. Once students gain familiarity with the six basic scales, the bebop scales require only learning where the added notes commonly occur. These are also indicated in figure three.

Figure four lists various possibilities improvisers play for each chord symbol. For comparison, all chords are given with C as the root. Once students are comfortable with the basic scales, these extended jazz scale-chords can be introduced. One logical order would be blues, Lydian, pentatonic, whole tone, altered or diminished whole tone, and Phrygian. It is not necessary to discuss all 31 scale-chord combinations in class; interested students can explore them over time.

If modal theory serves as a familiar connection between traditional theory and the scale vocabulary of jazz, Nineteenth-century music bridges the gap between traditional theory and the grammar of jazz chord progressions. II-V-I progressions are only one type of jazz progression, but they are extremely important and introduce students to fundamental principles of harmonic grammar.

Example one is a harmonic analysis of Chopin's Prelude No. 9 in E major from his Opus 28 Preludes. This piece is an excellent laboratory for practicing the analysis of

## FIGURE 4. JA22 SCALE-CHORDS REFERENCE CHART.

- SCALES ARE LISTED FROM MOST COMMON TO LEAST COMMON CHOICE (APPROX.) FOR EACH CHORD SYMBOL.
- PRIMARY CHORD TONES=OPEN NOTEHEADS. "HANDLE WITH CARE" DISSONANCES=SQUARE NOTEHEADS.
- IMPORTANT: MAJ,3 = MAJOR SCALE, MODE 3 (START ON NOTE 3 OF MAJOR; E.G. EFGABCDE) MIN,2 = MELODIC MINOR ASCENDING, MODE 2 (=START ON NOTE 2).

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CHO2D SYMBOL NOT LISTED?
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REMEMBER: 9=2, 11=4, 13=0; #4=b5=#11, b9=b2, #5=b6=b13
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7th CH02D=9th CH02D=11th CH02D=13th Ch02D.
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STILL CAN'T FIND IT? LOOK FOR THE SCALE WITH THE SAME 2007, TRIAD TYPE, 7TH QUALITY, AND ALTERED NOTES.



COPYRIGHT © 2005 BY MARK FEELELL. ALL RIGHTS RESERVED. VISIT WWW.DRFEELELL.COM FOR MORE SCORES AND REFERENCE SHEETS. FOR BEST RESULTS, USE WITH A RESOURCE SUCH AS *THE JALL THEORY BOOK* BY MARK LEVINE OR JAMEY ARBERSOLD'S PLAY-A-LONG BOOKS. PREDOMINANT FUNCTION (11/1V/VI) CHORDS (LEAD TO DOMINANT FUNCTION CHORDS)



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## FIGURE 4, CONTINUED.



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Example 1. Chopin, Prelude 9 in E (Phrase marks removed).





Example 1, continued.







chromatic harmony. In addition, the E major Prelude introduces students to harmonic principles relevant to jazz. The tall tertian sonorities in measure four incorporate ninths in a way that makes them seem like authentic chord tones. Measure five contains a tonicization of the lowered submediant degree. A frustrated tonicization of the Neapolitan follows in measure six. Longer tonicizations occur in measures seven through eleven.

Tonicizations are not unusual for music of the common practice period, but three aspects of Chopin's harmonic language deserve mention here. First, the tonicizations are often longer than two chords in length, but not long enough to constitute true modulations. Second, tonicizations make up a large proportion of the harmonic fabric. Of the forty-four harmonies in the prelude, nineteen are part of tonicization progressions. Third, the tonicizations may function architectonically. For example, in measure five, the tonicization progression emphasizing flat six, the dominant of the Neapolitan, leads to a tonicization progression emphasizing the Neapolitan. In other words, the progression  $V/N \rightarrow N$  is expanded over the course of two measures.

Example two is an excerpt from Tchaikovsky used by Stefan Kostka and Dorothy Payne in their *Tonal Harmony* Workbook.<sup>4</sup> Measures twelve and thirteen contain a circle of fifths progression. Rather than following the G major key signature, however, the chords are altered chromatically to form a series of secondary dominants. The tonicized chords themselves – mediant, submediant, and supertonic, are omitted from the progression, but their harmonic functions in the global key of G major legitimize the progression.



Example 2. Tchaikovsky, "Morning Prayer," Op. 39, No. 1, mm. 12-16.



**INSTEAD OF:** 



Charlie Parker's harmonic language incorporates and expands these harmonic principles. Example three is a transcription by Jamey Aebersold of the introduction, first chorus and bridge of "Shawnuff." "Shawnuff" uses the chord progression of George Gershwin's "I've Got Rhythm" with a new melody. Since contrafacts of "I've Got Rhythm" are common in the jazz literature, knowledge gained from studying "Shawnuff" will have wide applicability for students.<sup>5</sup>

When introducing jazz theory to students, it is important to emphasize that chord qualities provide vital clues to harmonic function. As mentioned earlier, major-minor seventh chords generally function as local dominants, major triads or major seventh chords are usually local tonic chords, and minor seventh chords are often supertonic chords. For instance, the f minor chord at the beginning of the first ending in example three is a minor seventh chord functioning as the secondary supertonic of Eb, which is, in turn, the subdominant of the primary key Bb.

As in the Chopin example, multi-chord tonicizations connect together in a harmonically logical fashion, creating multiple levels of harmonic progression. The first ending of example three contains one such expanded progression. A tonicization of the subdominant leads to a tonicization of the supertonic followed by the dominant: IV-ii-V over the course of four measures. The rapid tempo makes the expanded progression all the more audible. Also of interest in the harmonic analysis is the series of secondary dominants in the bridge section, a very similar progression to the one in the Tchaikovsky excerpt cited in example two.

<sup>&</sup>lt;sup>4</sup> Stefan Kostka and Dorothy Payne, Workbook for *Tonal Harmony with an Introduction to Twentieth-Century Music*, 5<sup>th</sup> ed. (London: McGraw Hill, 2004), 155.

EXAMPLE 3. PARKER/GILLESPIE, "SHAWNUFF," INTRODUCTION, FIRST CHORUS AND BRIDGE.















Did Chopin and Tchaikovsky influence Parker? Certainly they influenced

Gershwin, whose harmonic progression for "I Got Rhythm" became the basis for so many "rhythm changes" standards. There may have been a more direct link, however, between nineteenth-century classical music and Parker's musicianship. Lawrence Koch points out that Parker often played secondary supertonics over secondary dominant chords even when they weren't written into the changes.<sup>6</sup> Regarding the period when "Shawnuff" was recorded, Carl Woideck has written

Earlier in the 1940's, Parker's sphere of listening had expanded to include western 'classical' music, and by the 1947-49 period, Parker's musical quotations revealed these new listening habits...quoted during this period are: Frédéric Chopin, *Minute Waltz*; Igor Stravinsky, *The Rite of Spring*; Gioacchino Rossini, *William Tell*; Ferde Grofé, *Grand Canyon Suite*; Edvard Grieg, *Peer Gynt*; and Richard Wagner, *Tannhäusser*.<sup>7</sup>

Clearly, part of the genius of Charlie Parker's music is the way it references all of his influences (blues, swing, New Orleans jazz, spirituals, classical music, and so on) while transcending them.

In the spirit of mutual learning and cooperation, a number of free worksheets and handouts I have created for teaching jazz and classical theory are available at my website, www.drfeezell.com, which is listed on the cover of your handout. Many more worksheets are available there than I could reasonably include in the handout. They work equally well in jazz ensemble classes, studio lessons, and theory classes.

<sup>&</sup>lt;sup>5</sup> An extensive linear analysis of the piece is included in Henry Martin, *Charlie Parker and Thematic Improvisation* (Lanham, Maryland: Scarecrow Press, 1996), 48-57.

<sup>&</sup>lt;sup>6</sup> See Lawrence Koch, *Yardbird Suite* (Boston: Northeastern University Press, 1999), 318-319.

<sup>&</sup>lt;sup>7</sup> Carl Woideck, *Charlie Parker: His Music and Life* (Ann Arbor, Michigan: University of Michigan Press, 1996), 162.

The ability to improvise is not a prerequisite to a basic understanding of jazz theory. Of the three core competencies – scalar vocabulary, harmonic grammar, and rhythmic finesse, only the last one demands that students actively improvise to gain a rudimentary understanding. Furthermore, the similarities between the music of Chopin and Tchaikovsky and the music of Charlie Parker smooth the transition from classical theory to jazz theory. In fact, by forcing students to apply their analytical skills in a new context, jazz theory actually strengthens student skills in the analysis of chromatic harmony. Perhaps the gulf between classical music and jazz is not so large a leap after all.

#### BIBLIOGRAPHY

- Aebersold, Jamey. *How to Play Jazz and Improvise*, 6<sup>th</sup> ed. New Albany, Indiana: Jamey Aebersold Jazz, Inc., 1992.
- Beale, Charles. "Jazz Education," in *The Oxford Companion to Jazz*, edited by Bill Kirchner, 756-765. New York: Oxford University Press, 2000.
- Jones-Quartey, Kwatei. "Parker's Mood' Revisited," Annual Review of Jazz Studies 10, (1999): 221-235.

Linear analysis of Parker's solo on "Parker's Mood" illustrating a structural octave descent from Bb-Bb, the key of the piece.

- Koch, Lawrence. Yardbird Suite. Boston: Northeastern University Press, 1999.
- Levine, Mark. The Jazz Theory Book. Petaluma, California: Sher Music Company, 1995.
- Martin, Henry. *Charlie Parker and Thematic Improvisation*. Lanham, Maryland: Scarecrow Press, 1996.

Discussion of the use of voice leading and prolongations in Parker's blues, rhythm changes, and popular songs. Pages 48-57 are a linear analysis of "Shaw 'Nuff."

Owens, Thomas. "Charles Parker: Techniques of Improvisation." PhD diss., University of California at Los Angeles, 1974.

Volume 2 includes identifications of Parker's quotations from classical music.

- Parker, Charlie. *Charlie Parker Omnibook*, transcribed by Jamey Aebersold and Ken Slone. New York: Atlantic Music Corporation, 1978.
- Turek, Ralph. Theory for Today's Musician. New York: McGraw-Hill, forthcoming.

A new textbook that incorporates extensive coverage of jazz and popular music.

Woideck, Carl. *Charlie Parker: His Music and Life*. Ann Arbor, Michigan: University of Michigan Press, 1996.