

CHAPTER 1:

The “Jazz Rule of the Octave”

During the Baroque period the **Rule of the Octave** provided a basis for composition and keyboard instructions. Mastering the Rule was a necessary stepping stone for any aspiring musician and as such, was intimately related to the art of improvisation and composition. In its most basic form, the Rule offered normative harmonizations for the major and minor scales occurring in the bass, just as demonstrated in Example 1.1.*

Example 1.1 – Rule of the Octave**

The musical notation for Example 1.1 shows a C major scale in the bass line, descending from C4 to C3. The treble clef part provides chordal accompaniment for each note of the scale. The chords are: C, B°/D, C/E, F6, G, F/A, G7/B, C, C, F#°/A, G7/B, C. The bass line has fingerings: 6, 6, 6, 5, 6, 4, 6, 6.

By learning this and many other harmonizations, the ascending and descending scales, keyboard players became intimately familiar with the patterns of the scale and voice leading. In addition, they also learned how to recognize the patterns occurring in the bass and how to harmonize the patterns with the chords and successions derived from the Rule. The Rule of the Octave associates each scale degree with a specific harmony, prioritizes scale degrees 1 and 5 by providing them with position triads, and compartmentalizes certain segments of the scale (degrees 2-4 and 5-7) into underlying triads, which in turn, establish a hierarchy among chordal degrees. With the necessary syntactical modifications, the principles of the Rule were gradually adopted and applied to the harmonic idiom of jazz.

Example 1.2 demonstrates a harmonization of the C major scale using root position and inversions of the chords in keyboard style. Compare this harmonization to the one from Example 1.1.

* For additional harmonizations of ascending and descending major and minor scales, see C.P.E. Bach's *Versuch über die wahre Art das Clavier zu spielen*.

** A note about accidentals in musical examples: accidentals only affect the note in the octave in which they occur for the rest of the measure.

Example 1.2 – Jazz Rule of the Octave

Chord sequence: C6, Dm6, C6/E, F6, G7, F6/A, B^b7, C6, C6, B^b7, F6/A, G7, F6, C6/E, Dm6, C6.

Bass line notes: 1, 2, 3, 4, 5, 6, 7, 8, 8, 7, 6, 5.

The most fundamental difference between the two harmonizations is the presence of part chords on each scale degree in the jazz version. The jazz version is entirely different from the baroque version tonicizes 5 on the way down. The baroque version uses different types of chordal structures while the jazz version features predominantly unaltered chord structures in close position. Unlike Example 1.1 where the outer voices move parallelly in contrary motion, the jazz version features a parallel motion. In other situations, the use of parallel octaves in outer voices might be considered a stylized harmonization (Example 1.2) it is highly appropriate. This style was popularized by Nat King Cole and George Shearing in the 1940s and is known as the block style of playing.*

Instead of doubling the notes of the scale in the soprano voice, Example 1.3 shows the outer voices moving in parallel 10ths. From a harmonic standpoint, this is tonally self-contained: i.e., there is no need for additional notes to be present in order to indicate that the framework is implied in the texture.

Example 1.3 – Outer-Voice Counterpoint: Parallel Motion

Bass line notes: 1, 2, 3, 4, 3, 2, 1.

This outer-voice texture can support a number of idiomatic realizations. Examples 1.4a-c show the use of parallel motion known as parallel planing.

Example 1.4a – Parallel Planing – Variation 1

Chord sequence: Em7, F#7, G7, Am7, B^b7, C#7, C#7, B^b7, Am7, G7, F#7, Em7, Dm7, C#7.

Bass line notes: 1, 2, 3, 4, 5, 6, 7, 8, 8, 7, 6, 5, 4, 3, 2, 1.

* Other jazz pianists known for their use of that texture include: Phineas Newborn (on "Cheryl" from his *The World of Phineas*), Bill Evans (on "On Green Dolphin Street" from his *On Green Dolphin Street*), Oscar Peterson (on "Sax No End" from his *Exclusively For My Friends*), among many others.

Example 1.4b – Parallel Planing – Variation 2

Musical notation for Example 1.4b. The treble clef contains chords: C6, F6, G6, C6, G6, F6, C6. The bass clef contains a descending line of notes with fingerings: 1 2 3 4 5 6 7 8, 8 7 6 5, 3.

Example 1.4c – Parallel Planing – Variation 3

Musical notation for Example 1.4c. The treble clef contains a C major 13th chord (C Δ ¹³). The bass clef contains a descending line of notes with fingerings: 1 2 3 4 5 6 7 8, 4 3 2 1.

Each realization in Examples 1.4a-c begins with a four-voice voicing which is diatonically planed through the scale.

The realizations of the parallel planing network shown in Examples 1.4a-c demonstrate compelling harmonizations which prioritize the intervals of the scale on 1, 5 and, to a lesser degree, 4. How are these chords prioritized?

Example 1.5a – Jazz Harmonization of the Scale – Variation 1

Musical notation for Example 1.5a. The treble clef contains chords: C6, G7/D, C6/E, F6, C6, C6, F6/A, G7, F6, C6/E, G7/D, C6. The bass clef contains a descending line of notes with fingerings: 2 3 4 5 6 7 8, 8 7 6 5 4 3 2 1.

Example 1.5b – Jazz Rule of the Octave – Variation 2

Musical notation for Example 1.5b. The treble clef contains chords: C6, C6/E, F \sharp 7, G7, Am7, B \flat 7, Am7/C, Am7/C, B \flat 7, Am7, G7, F \sharp 7, C \sharp 7/E, D \sharp 7, C \sharp 7. The bass clef contains a descending line of notes with fingerings: 1 2 3 4 5 6 7 8, 8 7 6 5 4 3 2 1.

In Example 1.5a, the members of the tonic and dominant chord – 1 \flat 3 and 5 \flat 7 – are harmonized with the same harmony and connected with a passing chord on 2 \flat and 6 \flat , respectively.

The use of passing chords intensifies the importance of structural chords, improves the overall voice leading and, as demonstrated in Example 1.5b, infuses the diatonic progression with a subtle chromaticism. The passing chords in Example 1.5b occur in the form of a diminished 7th chord, which is the most important idiomatic structure in jazz harmony, as far as passing formations are concerned. The two diminished 7th chords in Example 1.5b, Ddim7 and Bdim7, share the same pitch content. As stated in Part 1 of *Jazz Voicings For Piano: The Complete Linear Approach*, the diminished 7th chord is closely related to the dominant function, as the upper four-part structure of dom7(b9) projects the diminished 7th chord built on the major 3rd of the dominant. In Example 1.5b, $\hat{1}$ and $\hat{3}$ are connected with a rootless diminished 7th chord and $\hat{6}$ and $\hat{8}$ with a rootless E7(b9); both structures employ the same diminished 7th chord.

These “seemingly” random associations stem from the fact that the diminished 7th chord is a symmetrical formation capable of capturing the sound of different (b9) chords whose roots are a minor 3rd apart. Example 1.6 illustrates the three diminished 7th chords, Cdim7, C#dim7, Ddim7, and their possible memberships with the structure of dom7(b9) chords.*

Example 1.6 – Three Diminished 7th Chords

The musical notation for Example 1.6 shows three diminished 7th chords: Cdim7, C#dim7, and Ddim7. The piano staff shows the chords with their enharmonic spellings: Cdim7 (Ab7(b9), B7(b9), D7(b9), Eb7(b9)), C#dim7 (A7(b9), Bb7(b9), D7(b9), Eb7(b9)), and Ddim7 (E7(b9), F7(b9), Ab7(b9), G7(b9)). The bass staff shows the root notes for each chord: C, C#, and D.

In the tonal system, the diminished 7th chord comes in three distinct configurations and the number of potential enharmonic spellings of this sonority is only outstanding.

The Rule of the Major and Bebop Scales

Adding the chromatic passing tone (b6) to a major scale in the manner shown in Example 1.7 infuses the diatonic collection with a highly idiomatic chromaticism. The resulting eight-note chromatic passing tone between $\hat{5}$ and $\hat{6}$ is known as the **major bebop** scale.** The inclusion of the chromatic pitch is justified in terms of its intended tonal implications. In both cases, the passing diminished belongs to two dominants: E7(b9) and A7(b9). Furthermore, the voice-leading properties of this particular pitch are controlled both horizontally (i.e. single-line improvisation) and vertically (i.e. harmonic structure). Example 1.7 illustrates the pitch structure of C major bebop.

Example 1.7 – Major Bebop Scale

The musical notation for Example 1.7 shows the Major Bebop Scale in C major. The scale is shown on a single staff with notes numbered 1 through 8. The notes are C, D, E, F, G, Ab, A, B. An arrow points to the Ab note, labeled "Chromatic Passing Tone".

* The enharmonic spelling of the diminished 7th chord reflects the pitch content of the underlying five-part dominant 7th chords.

** The concept of bebop scales was codified and popularized by Barry Harris.

Example 1.8 illustrates the two realizations of C major bebop: (1) with block chords (Example 1.8a), and (2) with parallel 10ths in the outer voices (Example 1.8b).

Example 1.8 – Jazz Rule of the Octave: Major Bebop Scale

Example 1.8 consists of two musical examples, (a) and (b), each showing a realization of the C major bebop scale. Both examples feature a bass line and a treble line. Above the treble line, chord symbols are provided for each measure. In (a), the chords are block chords. In (b), the outer voices (treble and bass) move in parallel 10ths. The scale notes are indicated by numbers 1 through 8 below the bass line.

Example 1.9 illustrates the pitch structure of the minor bebop scale. The passing tone connects $\hat{5}$ and $\hat{6}$ and, just as in the major bebop scale, is realized with the diminished passing chord.

Example 1.9 – Minor Bebop Scale

Example 1.9 shows the pitch structure of the minor bebop scale. It consists of a single treble line with notes and a bass line with numbers 1 through 8. The notes are: 1, 2, 3, 4, 5, 6, #7, 8.

The minor bebop scale resembles the ascending melodic minor scale, which is harmonic. Example 1.10a, the tonic triad, Am6, occupies $\hat{1}$, $\hat{3}$, $\hat{5}$, and $\hat{6}$; these notes are realized with the diminished passing chords: Bdim7 on $\hat{2}$, Ddim7 on $\hat{4}$, and Fdim7 on $\hat{6}$. These three diminished 7th chords share the same pitch content and function as the upper part four-part structures of E7(b9) – the dominant of A minor. In Example 1.10a, the descending line from $\hat{5}$ to $\hat{8}$ features two different diminished passing chords: F#dim7 on $\hat{6}$ and Bdim7 on $\hat{7}$.

Example 1.10a – Jazz Rule of the Octave – Variation 1

Example 1.10a shows the Jazz Rule of the Octave – Variation 1. It consists of a treble line with block chords and a bass line with notes and numbers 1 through 8. The notes are: 1, 2, 3, 4, 5, #6, #7, 8. The chords above the treble line are: Am6, Bdim7, Am6/C, Ddim7, Am6/E, Am6/F#, Gdim7, Am6, Am6, Gdim7, Am6/F#, Am6/E, Ddim7, Am6/C, Bdim7, Am6.