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**AN EXPLORATION OF CULTURAL TRANSMISSION THROUGH THE
APPLICATION OF JAZZ THEORY TO THE MUSIC
OF FREDERIC CHOPIN**

A Master's Thesis

Presented to

The Graduate College of
Missouri State University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Music

By

Aaron Michael King

December 2020

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AN EXPLORATION OF CULTURAL TRANSMISSION THROUGH THE APPLICATION OF JAZZ THEORY TO THE MUSIC OF FREDERIC CHOPIN

Music

Missouri State University, December 2020

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Aaron Michael King

ABSTRACT

Connections between classical music and jazz were observed and detailed, providing an expanded understanding of the cultural underpinnings of Western music. This study featured explanations of concepts found in jazz theory, such as approach tones and $ii^7-V^7-I^7$ progression, and comparisons of stylistic features of both music. These concepts were then applied to describe features in the music of Frederic Chopin, specifically “Nocturne No. 1,” “Berceuse,” and “Prelude No. 4.” Through cross-cultural analysis, this study aims to provide the reader with information and further appreciation of the elements found in jazz music and to delineate the relationship of those elements to Chopin’s oeuvre.

KEYWORDS: jazz, music theory, Frederic Chopin, classical music, improvisation

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December 2020

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In the interest of academic freedom and the principle of free speech, approval of this thesis indicates the format is acceptable and meets the academic criteria for the discipline as determined by the faculty that constitute the thesis committee. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

ACKNOWLEDGEMENTS

I would like to thank all my family, friends, and instructors who have supported me throughout my studies. A special thanks goes to Rex Ybañez for helping me throughout the writing process of this thesis.

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INTRODUCTION

Having only existed for a century, jazz music's complex behavior and rich traditions have been part of university and college curricula worldwide only relatively recently, making jazz an emergent study in the arts and humanities. Jazz music and its subgenres such as dixieland, swing, bebop, fusion, and free form have an influential history in the American songwriting tradition that was the result of the fusions between African American traditional music and the Western art style. Often referred to as America's first original art form, jazz music serves as a melting pot combining work songs, spirituals, ragtimes, marches, and blues.¹ Many artists have indicated that some of their influences stem from Classical and Romantic composers, and some of their styles, molds, and forms have been adopted and revamped to fit the jazz ethic within its time frame. Because jazz and classical music both use the same twelve-tone equal temperament that most of Western music uses, there are bound to be similarities: for instance, the major and minor scales are still the foundation for both genres. Concepts of tonic, predominant, and dominant function are found in both forms of music. Within Western culture these concepts are commonplace, but it is important to note these similarities because other cultures use different tonal systems. The trend for Western music over time was to become more chromatic and accepting of dissonance, especially in the Romantic period.² Jazz is a continuation of the same thought—as the composers of the Romantic period sought to break the previous molds of classical forms established by

¹ Moira E. McLaughlin, "All About Jazz, Uniquely American Music." *The Washington Post*, May 24, 2012, https://www.washingtonpost.com/lifestyle/style/all-about-jazz-a-unique-form-of-american-music/2012/05/24/gJQA4bswnU_story.html.

² Bruce Benward and Gary White, *Music in Theory and Practice*, (Dubuque, IA: Wm. C. Brown Publishers, 1990) 216.

renowned composers like Haydn, Mozart, and Beethoven, jazz seeks to press outside the metaphorical frame of music and songwriting.

Nevertheless, there are differences in how these types of music are approached theoretically. Given that jazz has relied heavily on aural lineage, the language jazz musicians use to describe theoretical concepts differs from traditional Western music theory. A jazz musician would not generally use the term augmented-sixth to describe a chord in her or his music, and a classical music theorist might not use phrases such as the “head” or “turn-around,” supporting the notion that jazz music is a progressive type of music with borrowed concepts that are then expanded and reworked. A trained musician with knowledge in composition and performance should be able to see clear distinctions but semblances of forms and styles found between Romantic-period music and jazz music. Frederic Chopin, one of the greatest pianists and composers of the Romantic era is a prime example of these distinctions and semblances. A man known for revolutionizing composition and methods of playing piano, Chopin and his music emphasize the idea of toying with expectations of the audience. Jazz thrives on accomplishing this same concept. While Chopin has been referred to as the poet of the piano, jazz—through its African American context—is a type of poetry registered in the language of music.³

In this study, the author will provide examples of both Romantic-era and jazz music to find common ground between the two, connecting Chopin’s potential influence in modern and contemporary jazz traditions by providing observations of his intense musicality in works. Musical aspects of Chopin works such as his “Nocturne No. 1” and “Prelude No. 4” will be

³ Janet Lopinski, “Chopin: The Poet of the Piano.” *American Music Teacher* 68, no. 3 (December 2018): 20, <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mah&AN=133152731&site=ehost-live&scope=site>.

compared to some of the musical aspects related to jazz tunes like Charlie Parker's "Billy's Bounce" and John Coltrane's "Mr. PC." More to the point, the author will use concepts normally applied to jazz music and identify them in the music of Chopin to link the noted observations between the two distinctively different genres of music. Because this study combines separate disciplines in the academic world of music, the analytical techniques will be defined in the following section titled Jazz Techniques and Terminology. Throughout the remainder of this thesis, the term "classical" will be used in its casual form to refer to Common Practice Period music. A basic knowledge of classical theory is assumed, while all jazz concepts will be explained for the reader to comprehend the relationship between jazz and classical through the work of Chopin.

JAZZ TECHNIQUES AND TERMINOLOGY

Much of the terminology differs between classical and jazz music, especially regarding aspects of performance and analyses. For instance, due to the longer-standing traditions, classical theorists and musicians tend to utilize vocabulary in a stricter fashion. An example of this rigidity is the difference between dominant seventh chords in classical and jazz music. To classical theorists, the dominant seventh chord refers to a seventh chord that is built upon the dominant scale degree, which acts as the V chord to a particular tonic. Yet jazz musicians understand most terms more loosely than their classical counterparts, and they may refer to any major-minor seventh chord as a dominant seventh chord, regardless of its function.⁴

Another instance in which jazz shows more leniency than classical music is in the acceptance of dissonance. This acceptance of dissonance lends jazz musicians to treat dissonant intervals more like consonances. By the late 16th century, the understanding of consonance and dissonance stated that the consonant intervals are the unison, octave, perfect fifth, major third, minor third, major sixth, and minor sixth while the dissonant intervals are the perfect fourth, major second, minor second, major seventh, minor seventh, and all diminished and augmented intervals.⁵ A basic example of the difference in acceptance of dissonance is in the expected use of tertian chords. In classical music, triads are the primary chord type. A tonic chord would be expected to consist of only the root, third, and fifth. Chords in jazz music almost always include four or more pitches. This practice usually occurs through extended tertian chords or chords with an added sixth. A tonic chord in a jazz piece, which would include the major seventh scale

⁴ This looser definition of dominant seventh chord will be used for the remainder of this thesis.

⁵ Benward and White, *Music in Theory and Practice*, 6.

degree, would look dissonant in a classical work. In jazz, classically dissonant intervals tend to be treated more as consonance because of the common use of seventh chords (and their extensions into ninths, elevenths, and thirteenth) in every position of the progression (predominant, dominant, and tonic), which broadens the scope of dissonance as every degree of a scale or mode could be considered a chord tone.⁶

The remainder of this section will clarify the distinctions by which jazz theorists understand and use music pedagogically. These distinctions are important in the jazz world since, as stated in the introduction, this type of music is still an emergent study in academia, which calls for a basic understanding of its terminology and how that differs from the terminology of the composition, performance, and analysis of classical music. As these distinctions become clear to the reader, the relationship between Chopin's music and his influence on jazz will be easier to outline throughout the entirety of this paper.

Improvisation and Vertical Structures

While most of classical music is fully written out and prepared before performance, most of jazz music is improvised at performance. Mutually agreed upon vertical structures (i.e. chord changes) allow jazz musicians to cohesively improvise with one another. Because jazz performers make melodic and harmonic decisions based upon these pre-established chord changes, analyses of jazz performances require an increased emphasis on how pitches relate vertically. Further evidence of the importance of vertical structures in jazz is in the existence of contrafacts—new melodies written over pre-existing chord progressions. Jazz musicians will create contrafacts to play over the chord changes of tunes they like, often in attempt to avoid

⁶ Mark Levine, *The Jazz Theory Book* (Petaluma, CA: Sher Music Co., 1995) 31-32.

copyright claims. For instance, Charlie Parker's "Donna Lee" is an original melody composed over the chord changes of "(Back Home in) Indiana." The existence of contrafacts is supporting evidence of the importance of vertical structures in jazz, for the pre-written melody is only stated at the beginning and end of the piece.⁷

In jazz, the commonplace use of upper chordal extensions beyond the seventh allow most melodic pitches to be analyzed as chord tones. For this reason, jazz musicians often use the terms ninth, eleventh, and thirteenth to refer to scale degrees two, four, and six. The leniency of improvisation also means that while most chords will be assumed to appear in root position, the instrumentalist with the lowest sounding instrument can affect the chord's inversion at her or his discretion. For example, a jazz bassist may choose to play the fifth of the chord instead of the root, changing the harmonic implication. In performance, musicians are expected to listen to and react to any such unexpected chord inversion. Sometimes jazz chord changes require specific inversions or bass notes that are not the root. Chords such as these are notated as slash chords. Slash chords are written with the chord's name followed by a slash and the desired bass pitch. Figure 1 provides an example.



Figure 1. Slash chord

⁷ This pre-written melody is called the head. This will be explored further in the Comparison of Classical and Jazz Forms section beginning on page 20.

Guide Tones

With agreed-upon vertical structures in place, it is the duty of the improvisers to be able to play within or “outside” of the changes based on their discretion.⁸ To do this action, the improvisers know several tools based on the theoretical implications of the chord changes to determine what to play. Due to the exploration of harmonic richness, the jazz lexicon relies on the emphasis of the thirds and sevenths of the chord changes. While a bassist is expected to play the root, the other instrumentalists are expected to provide the rest of the harmonic information. Of the four pitches in a seventh chord, the thirds and sevenths determine the quality of the chord, such as major, minor, or dominant (See Figure 2).⁹

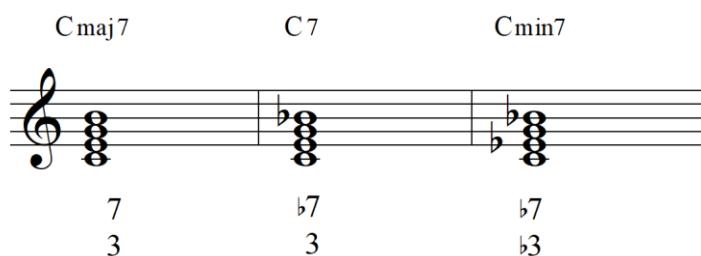


Figure 2. Guide tones

Because of this, these tones must be sounded for the chord changes to be properly communicated. These are the pitches that guide the performer and listener through the piece, and as such, are referred to as the guide tones.

⁸ Levine, *The Jazz Theory Book*, 183. Levine defines playing “outside” the changes as “playing notes that aren’t in the chord... playing something recognizable but in a different key... [and] playing ‘free,’ or atonal with no chord structure at all.” This phrase will be used throughout the remainder of this thesis.

⁹ Levine, *The Jazz Theory Book*, 19.

It is expected for the harmonic support instruments (also called “comping” instruments) such as the piano and guitar to provide the guide tones at bare minimum. To allow space for the bass instrumentalist to make harmonic and melodic decisions, comping instrumentalists are encouraged to use rootless voicings. Rootless voicings allow for harmonic ambiguity, while still implying the chord changes through guide tones. For a soloist, the knowledge of guide tones is useful because the ability to utilize those pitches as they arrive in the chord changes displays a deep knowledge of the harmonic content of the piece. This deep knowledge of guides tone in combination with bass functionality allow advanced improvisers and composers to transform standard chord progressions into unexpected territories.¹⁰

ii⁷-V⁷-I⁷ and Harmonic Analysis

The ii⁷-V⁷-I⁷ sequence is the most common chord progression in jazz music. Its importance is comparable to that of the I-IV-V-I progression in classical music. Both progressions provide predominant-dominant-tonic function and include every scale degree. The ii⁷-V⁷-I⁷ is prominent because of the consistency of root movement and the chromatic movement of the guide tones (see Figure 3). The root moves up a perfect fourth (or down a perfect fifth) for both chord movements. From ii⁷ to V⁷, the seventh is lowered a half-step to become the third of the new chord while the third stays stationary to become the new seventh. From V⁷ to I⁷, the third stays stationary to become the seventh while the seventh is lowered a half-step to become the new third. This sequence serves as a building block for jazz chord progressions and helps tonicize key centers. It is also common within jazz standards to use the abbreviated ii⁷-V⁷ motion

¹⁰ Levine, *The Jazz Theory Book*, 297.

without resolving to I in order to suggest a tonality, or lead into a new tonality, such as how one would use a secondary dominant or deceptive cadence in the classical style.

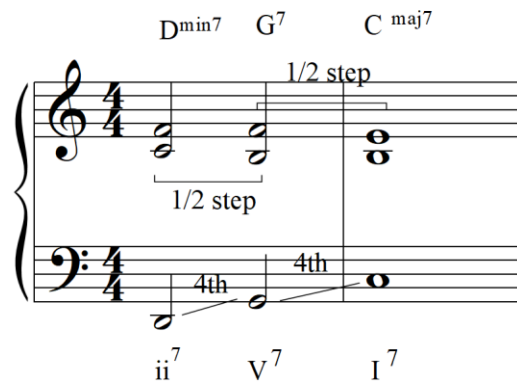


Figure 3. Movement of bass and guide tones and in a $ii^7-V^7-I^7$

In performance, through a deep understanding of the established and accepted sonorities, improvisers can use techniques to alter the harmonies to add more variety. For example, a bass player may play a dominant pedal under an entire $ii^7-V^7-I^7$, changing the harmonic implications and adding dominant tension. Alternatively, a piano player may increase the harmonic rhythm by adding ii^7-V^7 progressions to a more static section of a piece. Figure 4 demonstrates this practice.

Tritone Substitution

Sometimes, improvisers will play different chords from the original agreed-upon changes to provide more harmonic interest. The tritone substitution is one of the most common ways to achieve this. In performance, jazz improvisers occasionally substitute a V^7 chord with the dominant seventh chord a tritone away. Because the guide tones of the two chords are the same enharmonically, the two chords retain the same function (see Figure 5). This is commonly used

by bassists to provide chromatic voice leading between the ii^7 and the tonic, and improvisers can use this tool to play “outside” of the changes.¹¹

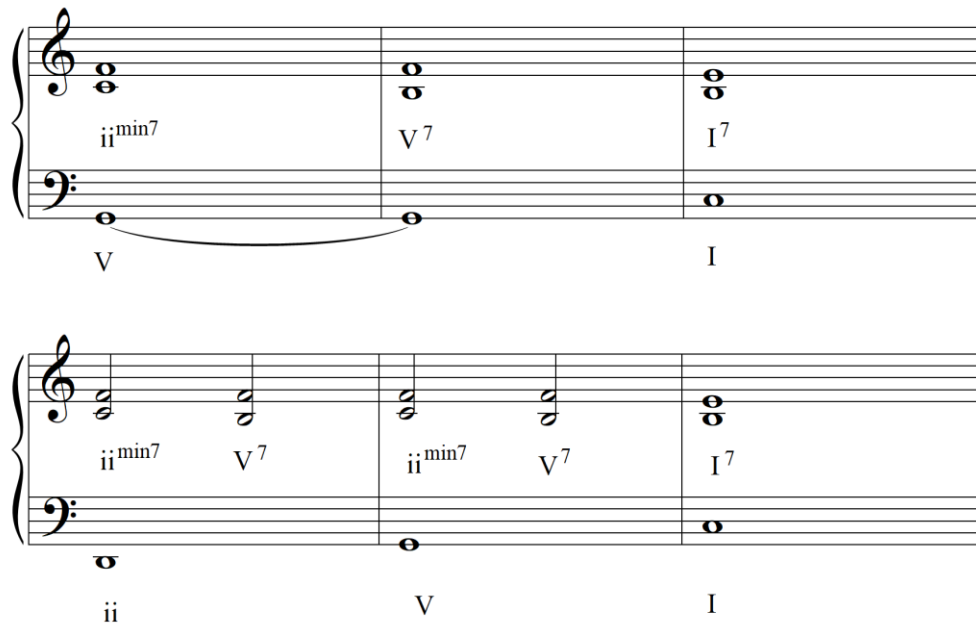


Figure 4. $ii^7-V^7-I^7$ substitutions

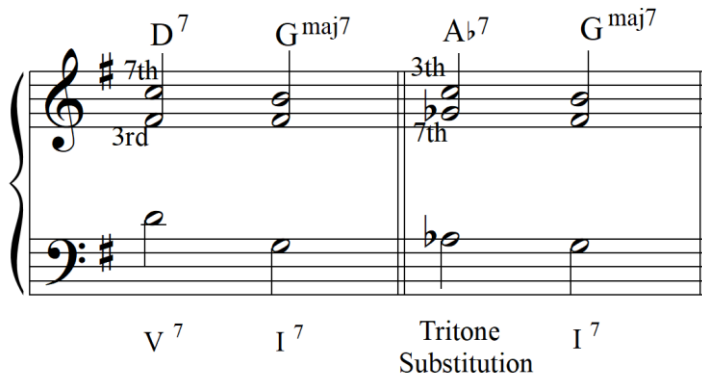


Figure 5. Tritone substitution

¹¹ Levine, *The Jazz Theory Book* 183-184, 264.

Approach Tones and Bracketing

Because of the improvisational nature of jazz, performers must determine their melodic choices in relation to the pitches of the chords over which they are soloing. This is oftentimes accomplished using target and approach tones. Joe Riposo defines these two terms.

A **target tone** is a specific note in a chord which gives the melodic line focus and direction... Approach tones are notes used to arrive at the target tones. These tones are sometimes a scale tone away from the target tone and sometimes one half step away from the target tone. One can expand the approach tones to include a part of a scale using the target tone as the “peak” tone to aim for. Approach tones lead to the target tones in the new chord. This is what gives the improvised line direction and forward motion. One may have many target tones in a line that can be approached in different ways.¹²

The opening measure of Charlie Parker’s “Billie’s Bounce” provides examples of target tones and chromatic approach tones.¹³ The B and G-sharp chromatically approach the chord tones C and A in the F⁷ chord (see Figure 6).



Figure 6. Approach tones in “Billie’s Bounce”

¹² Joe Riposo, *Target & Approach Tones: Shaping Bebop Lines* (New Albany, IN: Jamey Aebersold Jazz, 2009), https://kupdf.net/download/195381934-target-and-approach-tones-shaping-bebop-lines-joe-riposo-aebersold-jazz_58e94623dc0d606e08da97fb_pdfp, iii.

¹³ Charlie Parker, “Billie’s Bounce,” November 26, 1945, *Bird/The Savoy Recordings (Master Takes)*, (Savoy SJL 2201)

The term bracketing is used to describe an extension of approach tones where the target tone is approached both from above and below. In its basic form, bracketing is the same as the classical concept of incomplete upper and lower neighbor tones. Measure 8 of “Billie’s Bounce” provides two examples of bracketing (See Figure 7).



Figure 7. Bracketing in “Billie’s Bounce”

The F-sharp of the D⁷ chord is bracketed by the G and E of the A^{min7} chord and the D of the G^{min7} is bracketed chromatically by E-flat from above and C and C-sharp from below. This jazz concept appears in Chopin’s music, which will be explored in the Approach Tones in Chopin’s “Nocturne No. 1” section on page 32.

Modes

Jazz musicians often utilize the modes of the major scale to determine note choice for an improvised solo. This is an instance of evidence for the increased importance of vertical structures, and melody reacting to harmony. Modes prove to be an effective way to understanding what notes would fit over an underlying chord. In traditional theory, it is taught that the function of chords is derived through the tertian extensions of the notes in the scale, which is a horizontal way of viewing the chord-scale relationship as the chords are created as a result of the scale (see Figure 8).

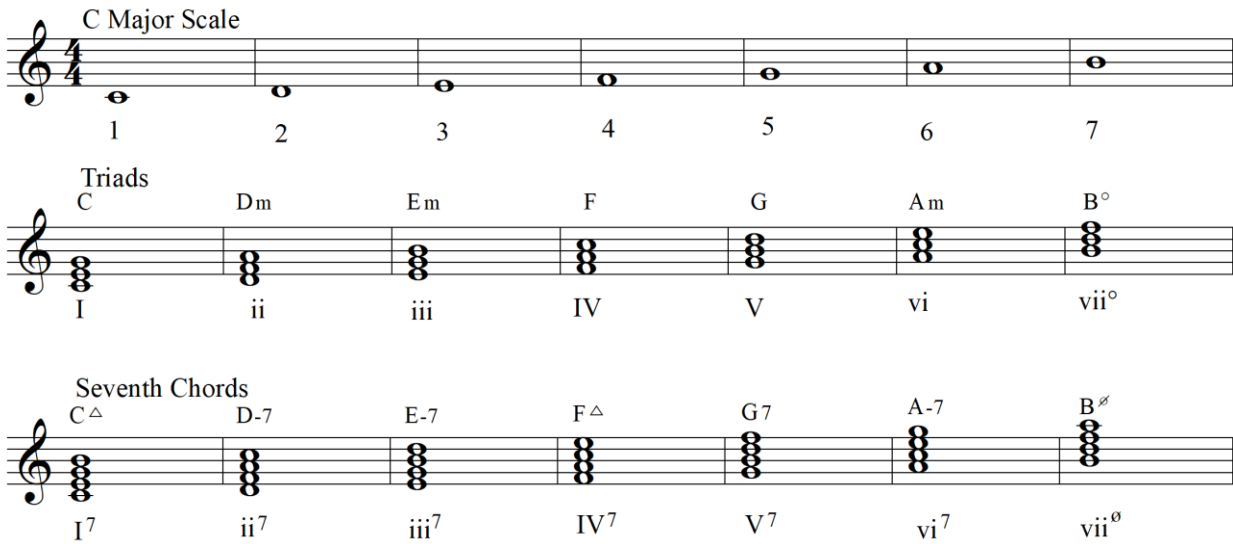


Figure 8. Major scale-chord relationships

If a piece is written in C-major and a V chord appears, the pitches would be analyzed by their function within C-major. It would be unlikely for a classical theorist to describe the V portion as utilizing the mixolydian mode. The use of modes allows for an understanding in the opposite direction, which is necessary for improvisation. For example, if an improviser were to see a $D^{\min 7}$ chord, the improviser would have to consider the possible functions of this chord. A few possible options include functioning as the i chord in D-minor, functioning as the ii chord in a C-major, or functioning as the vi chord in F-major. While different chords serve certain functions in relation to a scale, different modes imply certain functions in relation to specific chords. If the $D^{\min 7}$ chord moves to a G^7 chord, that is evidence of the two chords functioning as a ii^7 - V^7 in the key of C-major. Thus, in order to emphasize C-major over a ii^7 chord, the improviser would likely play the pitches of a D dorian mode, as the dorian mode is built off of the second degree of the major scale. Figure 9 provides common chord to mode relationships that a jazz musician may utilize.

Scales with Chromatic Passing Tones

Several scales are derived through adding a chromatic pitch between two tones a whole step apart in a pre-existing scale or mode. For example, the minor blues scale is derived by adding a chromatic tone between the fourth and fifth scale degrees of the minor pentatonic scale. The major blues scale adds a pitch between the second and third scale degrees of the major pentatonic scale (see Figure 10).

Bebop scales continue the trend of adding a chromatic pitch to a pre-existing scale. There are four common bebop scales: major, dorian, dominant, and melodic minor.¹⁴ The first three of these scales are derived from modes that would relate to the chords of a $ii^7-V^7-I^7$ progression. Both the bebop major scale and bebop melodic minor scale add a pitch between scale degrees five and six. The bebop dorian scale adds a pitch between scale degrees three and four. The bebop dominant scale adds a pitch between scale degrees seven and eight (See Figure 11). Scales with chromatic pitches inserted are often seen in Chopin's music. A few examples of these scales will be seen in the analysis of "Berceuse," which begins on page 34.

Whole-Tone Scale, Diminished Scale, and Altered Mode

Although the use of non-diatonic tones can be found in relation to any chord, composers and improvisers particularly use dominant chords to create chromatic tension. Various scales and modes are used to describe these occurrences and provide a logical method for improvisers to play "outside" the changes. Some examples that are familiar in classical music include the whole-tone scale and the two types of diminished scales.¹⁵ These scales provide a more

¹⁴ Levine, *The Jazz Theory Book*, 171.

¹⁵ Also called octatonic scales.

ambiguous tonality than more traditional scales and modes would. When played over a dominant seventh chord, both the whole-tone scale and the half-whole version of the diminished scale include the correct guide tones while providing notes outside of the expected mixolydian tonality (See Figure 12).



Figure 9. Chord-mode relationships

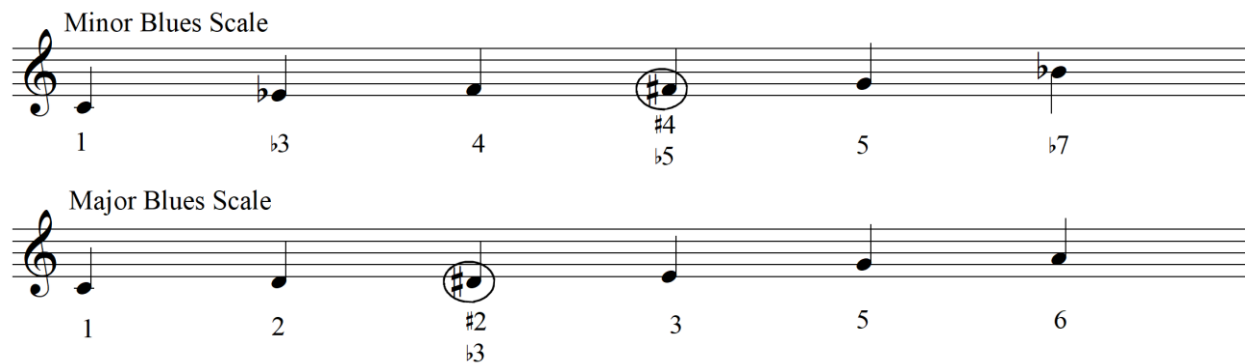


Figure 10. Minor and major blues scale



Figure 11. Bebop scales

Perhaps more foreign to the classical world is the use of the modes of the melodic minor scale.¹⁶ When played over a dominant seventh chord, the seventh mode of the melodic minor

¹⁶ This refers to the ascending version of the melodic minor scale.

scale provides the correct guide tones, as well as the altered version of every other scale degree, and thus has been dubbed the “altered mode” among jazz musicians.¹⁷ Figure 13 demonstrates this concept.



Figure 12. Half-whole diminished scale and whole-tone scale



Figure 13. Altered mode

This scale is also deemed the “diminished whole-tone scale” by many musicians because the first half of the scale resembles the diminished scale while the second half resembles the whole tone scale. Through these scales the improviser has the means to logically utilize nearly every

¹⁷ Levine, *The Jazz Theory Book*, 70-71.

chromatic pitch over a dominant seventh chord. An example of how the altered mode is utilized is seen in what jazz musicians call the “Cry Me A River” lick (See Figure 14).¹⁸



Figure 14. “Cry Me A River” lick

Chromatic Sequencing

Another tool that jazz musicians use to create melodic and harmonic interest is sequencing. This tool is a common link to the classical world. By the 20th century, composers of the Western art tradition were utilizing chromaticism to its fullest potential, with chromatic sequencing being one of their ways to achieve atonality. As jazz music was developing at the same time, jazz musicians also began using chromatic sequencing to expand their sonic possibilities. The opening measures of Herbie Hancock’s solo in the tune “Witch Hunt” from Wayne Shorter’s album *Speak No Evil* provide examples of chromatic sequencing in a jazz context (See Figure 15).¹⁹ The sequence Hancock uses in his solo is a simple motive of down a perfect fifth and up a whole step. The first instance of this sequence begins on G in the third measure of the form. In the following measure, the sequence is played a perfect fourth lower,

¹⁸ Jerry Coker, *Elements of the Jazz Language for the Developing Improvisor* (N.p.: Alfred Publishing Co., Inc., 1991)
<https://books.google.com/books?id=iQNVERQnTVUC&lpg=PA74&ots=JCrKuKbzbb&dq=cry%20me%20a%20river%20lick&pg=PP3#v=onepage&q=cry%20me%20a%20river%20lick&f=false>, 74.

¹⁹ Wayne Shorter, “Witch Hunt,” December 24, 1964, *Speak No Evil*, (Blue Note BLP 4194)

starting on D. Hancock returns to the original position of the sequence in the fifth measure and raises it by a minor third in the sixth measure.



Figure 15. Sequencing in Hancock's solo from "Witch Hunt"

He then proceeds to move the sequence upward chromatically by minor third, causing the starting pitches outline a fully diminished arpeggio. This type of chromatic sequencing allows jazz musicians to play "outside" the changes while retaining semblance of structure. Similar use of chromatic sequencing over a static harmony will be seen in the analysis of Chopin's "Berceuse" which begins on page 34.

COMPARISON OF CLASSICAL AND JAZZ FORMS

Grove Music Online defines form as “The constructive or organizing element in music.”²⁰ The term is often used to describe the arrangement and patterns of harmonic and melodic function over time in a piece. With both classical and jazz, form can be analyzed at the macro and micro levels. For example, most scholars can observe that pieces in sonata-allegro form generally move from introduction to exposition to development to recapitulation. Within that structure, the exposition of the piece may then be further analyzed to have a binary form with an A section and a B section.

The same understanding can be used to analyze a complete jazz work. Jazz compositions generally consist of an introduction, statement of the head, improvised solos, restatement of the head with an ending, often using a tag. In the looser vocabulary of the jazz musician, the term form would be more likely to refer to the structure of the chord changes over which the solos take place. Many of these forms are derived from the classical world. Two of the most common forms that jazz musicians use are 12-measure and 32-measure.²¹ A few of the common forms imply specific chord changes, such as blues and rhythm changes. This section will explore these similarities in concepts.

²⁰ Arnold Whittall, “Form” *Grove Music Online*, accessed 19 Sep. 2020, <https://www-oxfordmusiconline-com.proxy.missouristate.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000009981>.

²¹ Thirty-two-measure forms are generally constructed from smaller, eight-measure sections in formations such as AABA.

Classical Form and Jazz Structure

Jazz compositions tend to follow a format that is similar to a *chaconne* or a theme and variations in classical music. In a *chaconne*, a basic harmonic progression is repeated through the piece.²² In theme and variations, a theme is provided, and the composer replicates that theme in differing styles. In a typical jazz piece, the original theme is known as the head. The head consists of a given melody and a set of chord changes. After the head plays out, individuals take turns improvising over those chord changes in relation to the original melody. The repeating of the harmonic progression is like the repeated harmonic progression of a *chaconne*, while the improvised solos act like the variations of a theme and variation work. The performance of a jazz piece ends with a recapitulation of the head to provide a sense of closure.

In another sense, a jazz work is like that of a sonata-allegro work or an aria structure. The head-solos-head structure reflects the A-B-A structure of a da capo aria. It could also be compared to the Exposition-Development-Recapitulation structure of sonata form in the sense that the development is an exploration of the possibilities in which the theme can be transformed, often modulating through keys. With extreme skill through the understanding of harmonic function, jazz musicians can explore the possibilities throughout tonal centers—playing “outside” the changes. In both forms, the original theme is restated.

The chord changes that persist through the head and solo sections act like common classical small forms. Perhaps the most common jazz form is the 32-measure A-A-B-A structure, with eight measures per phrase. The A-A-B-A form appears to be a variation of rounded binary without the repeat on the second section. Other common 32-measure jazz forms include A-B-A-

²² Mark Evan Bonds, *A History of Music in Western Culture* (Upper Saddle River, NJ: Prentice Hall, 2010), 284.

C, A-B-C-D, and A-A-B-C. Some tunes use a shorter, 16-measure or 12-measure forms with structures such as A-B, A-B-C, A-B-A, A-A-B.

Blues Form

The blues form has become one of the most far-reaching musical phenomena over the past 150 years. While blues exists as its own genre, the term is also used to denote a particular form in other parts of the musical world. This form consists of 12 measures approximating the movement of I-IV-V-I chords in four measure segments. Figure 16 provides an example of a basic blues form.

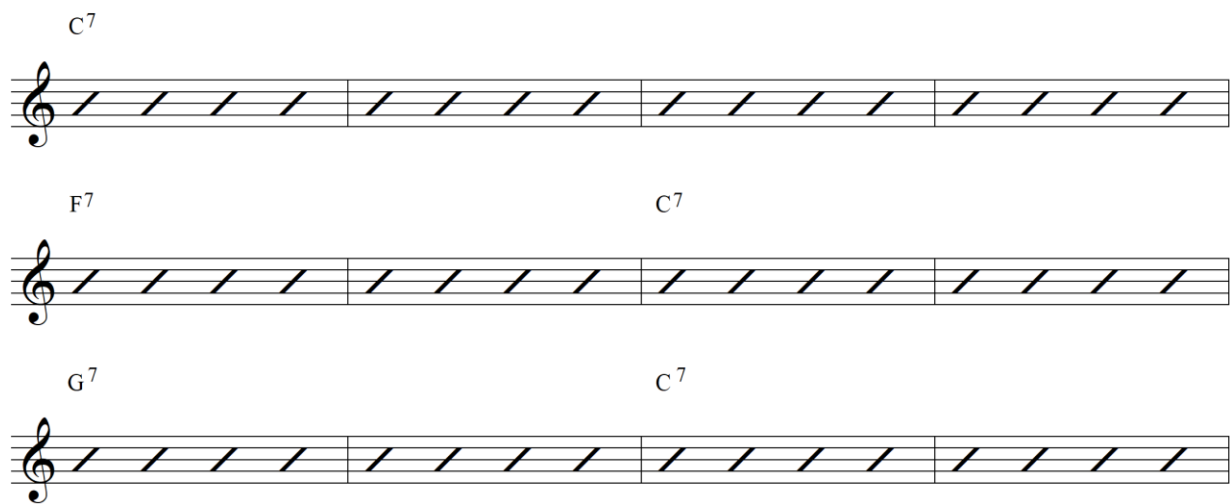


Figure 16. Basic blues form

From this basis, there are countless variations that are used while still fitting under the umbrella term of blues. As previously discussed, jazz musicians improvise substitutions while performing. It should be noted that in the blues, the I, IV, and V are all played as dominant seventh chords. Treating a dominant seventh chord as a tonic is rare in classical music, but it is often seen in

jazz.²³ The open and harmonically-stable structure of the blues form provides musicians with plenty of opportunity to insert substitutions within the pre-established chord progression. For instance, it is standard within the jazz vernacular to place a ii-V in measures 9 and 10 of jazz blues (see Figure 17).

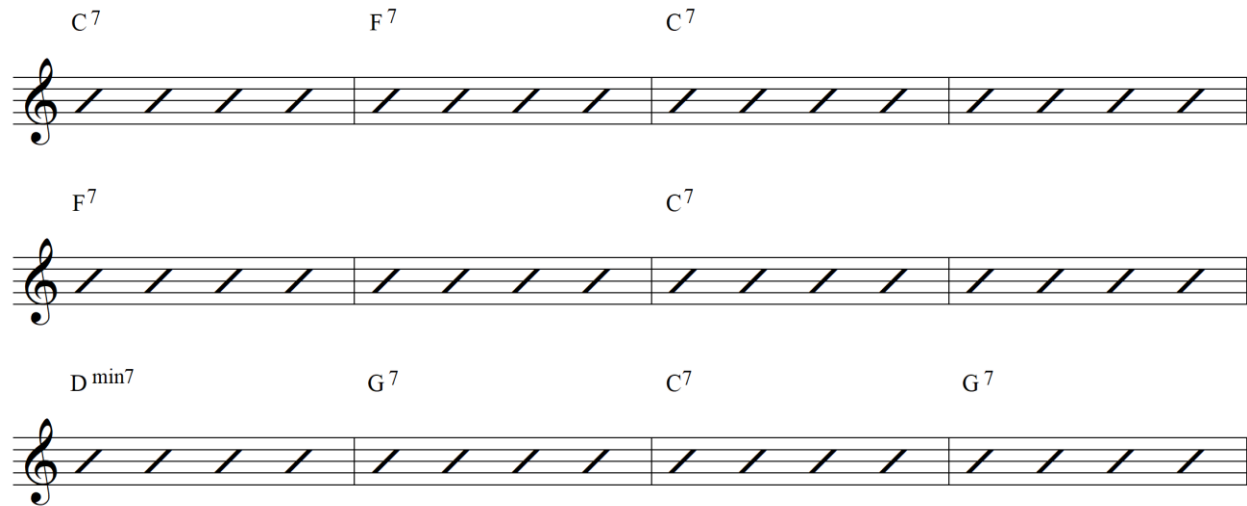


Figure 17. Jazz blues form

The Appendix of this thesis will provide a more in-depth explanation of common transformations of the blues progression from simple to more complex.

Inserting ii-V substitutions to emphasize the next tonal center is a common tool used by jazz musicians in improvisation and composition, both in blues forms and other standard chord progression. An extreme example of this concept is seen in Charlie Parker’s “Blues for Alice,”

²³ Chopin’s *Prelude No. 23 in F-Major* ends with an unresolved E-flat, thus it also treats the dominant seventh as a I chord.

whose chord progression became commonly referred to as a *Bird's Blues*.²⁴ In a *Bird's Blues*, a string of ii-V progressions are used as secondary dominants to tonicize each other until the next key center is reached (see Figure 18).



Figure 18. “Blues for Alice,” head

Another variation of blues is the minor jazz blues. In this form it uses the progression $i^7-iv^7-VI^7-V^7-i^7$. John Coltrane’s “Mr. PC” provides an example of a minor blues (see Figure 19).²⁵ A comparison between the minor blues form and Chopin’s “Prelude No. 4” will be detailed in the analysis beginning on page 41.

²⁴ Jamey Aebersold, *Nothin' But Blues: Jazz and Rock* (New Albany, IN: Jamey Aebersold, 1981) https://duhoviki.ru/jazz_improvisation/Vol%2002%20-%20Nothin'%20But%20Blues/Nothin'%20But%20Blues.pdf, 40; Charlie Parker, “Blues for Alice,” August 8, 1951, *Swedish Schnapps*, (Verve MG V-8010)

²⁵ John Coltrane, “Mr. PC,” May 4, 1959, *Giant Steps*, (Atlantic SD 1311)

C^{min7}

5 F^{min7}

9 A^{b7} G⁷ C^{min7}

Detailed description: The image shows a musical score for a piece titled "Mr. PC," head. The score is written in 4/4 time and consists of nine measures. The key signature has two flats (B-flat and E-flat). The first measure (measure 1) is marked with a C^{min7} chord. The second measure (measure 2) is marked with an F^{min7} chord. The third measure (measure 3) is marked with an A^{b7} chord. The fourth measure (measure 4) is marked with a G⁷ chord. The fifth measure (measure 5) is marked with a C^{min7} chord. The sixth measure (measure 6) is marked with a C^{min7} chord. The seventh measure (measure 7) is marked with a C^{min7} chord. The eighth measure (measure 8) is marked with a C^{min7} chord. The ninth measure (measure 9) is marked with a C^{min7} chord. The score is written on a single staff with a treble clef. The notes are as follows: Measure 1: C4, D4, E4, F4, G4, A4, B4, C5. Measure 2: C4, D4, E4, F4, G4, A4, B4, C5. Measure 3: C4, D4, E4, F4, G4, A4, B4, C5. Measure 4: C4, D4, E4, F4, G4, A4, B4, C5. Measure 5: C4, D4, E4, F4, G4, A4, B4, C5. Measure 6: C4, D4, E4, F4, G4, A4, B4, C5. Measure 7: C4, D4, E4, F4, G4, A4, B4, C5. Measure 8: C4, D4, E4, F4, G4, A4, B4, C5. Measure 9: C4, D4, E4, F4, G4, A4, B4, C5.

Figure 19. “Mr. PC,” head

CONCEPTUAL CONNECTIONS BETWEEN CLASSICAL AND JAZZ

Interpretation and Improvisation

The concept of interpretation has been an important part of music tradition. Even with its boundaries, a written piece of music still has room for interpretation per the performer's consideration. The improvisation aspect of jazz is interpretation taken to the extreme. Over time, written music has become more didactically specific, and improvisation has essentially fallen out of the teaching tradition of classical music. Improvisation does have history in the Western music tradition though. In the Baroque period, for example, musicians allowed themselves freedom to add ornamentation when themes were repeated. In the early classical period, the cadenzas of concertos were expected to be improvised. Jazz shares the use of individual interpretation, ornamentation upon original melodies, and virtuosic improvised cadenzas with the classical tradition.

Concerto and the Improvised Cadenza

The Concerto is a staple of classical music in which a soloist is featured with orchestral accompaniment.²⁶ The opening movement of concertos is typically in double exposition form, a variant of sonata form that ends with a cadenza for the soloist. The sounding of the second-inversion tonic harmony marks the beginning of the cadenza section. In the earlier periods of the concerto's existence, the cadenza was expected to be improvised by the instrumentalist. As time passed, composers began writing out the cadenzas for the performers. The use of the tonic six-four is notable because of its relationship to the dominant tonality. The fifth in the bass provides

²⁶ Bonds, *A History of Music in Western Culture*, 333.

basis for tonal instability in preparation for the dominant chord. A similarity can be noted with the way a jazz bassist could use a dominant pedal tone as previously described on page 9. It is the duty of the performer to lead to the dominant chord, and the tonic six-four provides the soloist with an open sonic platform in which to do so. This is more evidence of the importance of the dominant sonority and its relationship to improvisation. Within this dominant sonority, the soloist is free to explore the upper limits of theme and virtuosity. While Chopin's concertos do not utilize them, cadenzas provide an important connection between classical and jazz music.

Rubato

Rubato is a concept which Chopin is particularly known for utilizing. While written music became more specific over time, *rubato* is a concept that allows the performer interpretive ability outside of what is written. *Rubato*, meaning robbed time in Italian, generally refers to the manipulation of tempo within a piece. Due to the reliance on a rhythm section, the tempo manipulation definition of rubato is not particularly common in jazz and would likely be limited to cadenzas. Scott Dirks argues that Chopin's understanding of the concept of rubato may differ from the current common interpretation.²⁷ Instead of tempo fluctuation, Dirks suggests that Chopin may have performed *rubato* with the melody fluctuating in time over steady accompaniment in the left hand. This interpretation of rubato is extremely pertinent to jazz music, as the concept of beat placement is a common conversation in the jazz community.

²⁷ Scott Dirks, "Demystifying Chopin's Rubato," *American Music Teacher* 62, no. 6 (June 2013): 28, <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mah&AN=87965285&site=ehost-live&scope=site>.

Richard Ashley explored this idea in a study comparing different recordings of jazz standards.²⁸ Ashley studied the attack displacements of the performances of Chet Baker, Art Farmer, and Miles Davis on the jazz standard “My Funny Valentine” to note the similarities and differences between each performer’s interpretation of the tune. Ashley used the same study to compare two different performances of John Coltrane performing his original tune, “Naima.”²⁹ Through these studies, Ashley was able to observe how *rubato* increases the interpretive ability of different musicians as well as a single musician over different performances.

Augmented-Sixth Chord

The augmented-sixth chord is a device found in classical music that can provide added chromatic tension. There are three versions of the chord: Italian, French, and German. Through voice leading, augmented-sixth chords prepare the dominant. Within the context of the key, each of the augmented-sixth chords are generally comprised of the lowered sixth scale degree in the bass, the tonic, and the raised fourth. In other words, augmented-sixth chords are built with a major third and an augmented-sixth above the bass. While the Italian version doubles the third above bass, the French version adds a diminished fifth and the German version adds a perfect fifth (see Figure 20).³⁰ Similarity between the pitch movement of the augmented-sixth and the tritone substitution as described on page 9 can be observed (see Figure 21). With both the augmented-sixth chord and the tritone substitution, resolution occurs to a major sonority one half-step below the bass. The interval distances from the bass are also the same in the two types

²⁸ Richard Ashley, "Do[n't] Change a Hair for Me: The Art of Jazz Rubato." *Music Perception: An Interdisciplinary Journal* 19, no. 3 (2002): 313, doi:10.1525/mp.2002.19.3.311.

²⁹ Ashley, "Do[n't] Change a Hair for Me," 323

³⁰ Michael Murray, *Music Theory III* (N.p.: McGraw-Hill Companies, Inc., 2011), 17

of chords, although the augmented-sixth interval is spelled enharmonically as a minor seventh in the tritone substitution chord.

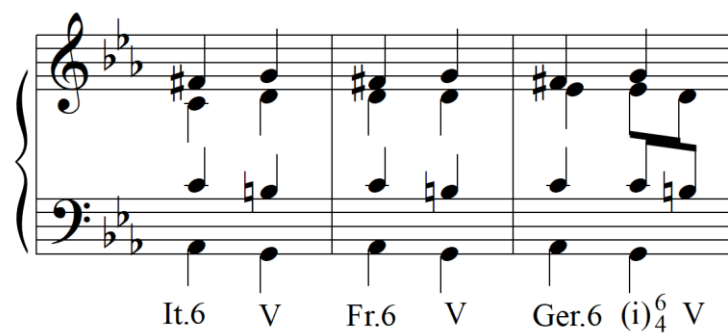


Figure 20. Augmented-sixth chords

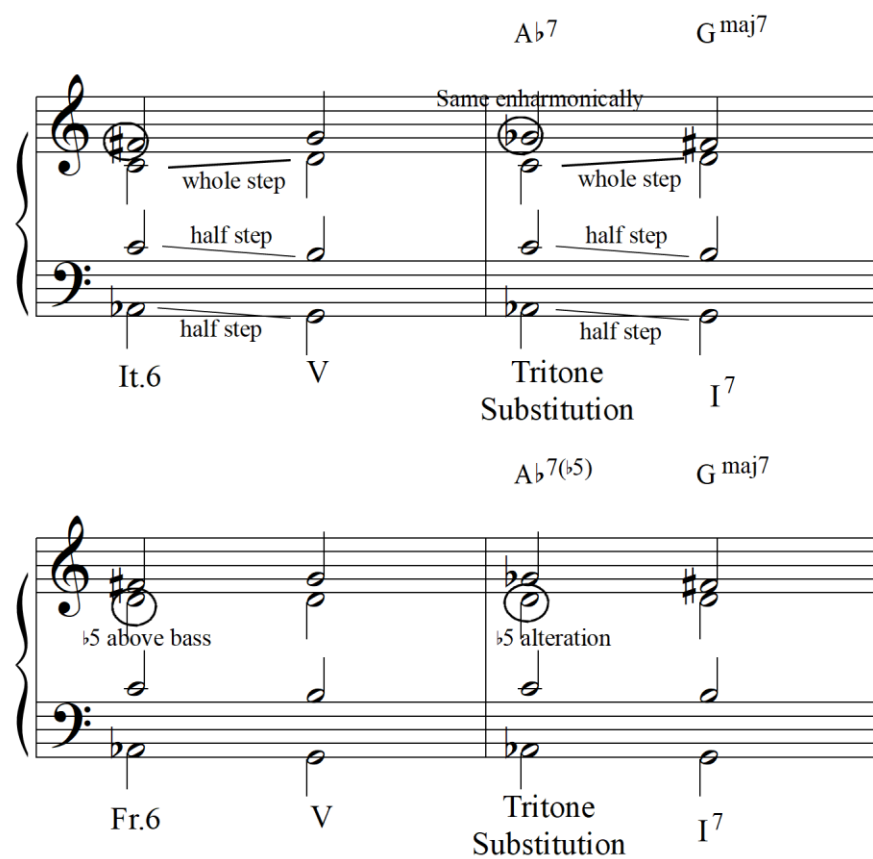


Figure 21. Pitch similarities between augmented-sixth and tritone substitution

The diminished fifth interval in the French augmented-sixth chord could even be related to a flat-five alteration in a tritone substitution. The only difference in pitch between the two isolated chord progressions is that the augmented-sixth chord resolves to a triad while the tritone substitution resolves to seventh chord, as is the norm in jazz music.

A more direct connection between the augmented-sixth chord and standard jazz progressions can be found in the minor blues, which can be seen in Figure 19 on page 25. The standard progression for the minor blues is $i^7-iv^7-VI^7-V^7-i^7$. The VI^7-V^7 progression within the minor blues has the same pitch similarities as described in Figure 21 on the previous page while retaining the dominant preparation functionality of the traditional augmented-sixth chord (See Figure 22).

The diagram illustrates the functional equivalence between an augmented-sixth chord and a tritone substitution in a minor key. It shows two measures of music. The first measure contains an augmented-sixth chord (labeled It.6) and a dominant seventh chord (labeled V). The second measure contains a dominant seventh chord (labeled VI⁷) and a dominant seventh chord (labeled V⁷). The chords are labeled as 'dominant preparation' and 'dominant'. The intervals between the chords are marked as 'whole step' and 'half step'. The chords are labeled as 'Same enharmonically'.

Figure 22. Augmented-sixth compared to VI^7-V^7 in a minor key

As can be observed in the above example, movement from a dominant seventh chord to another dominant seventh chord a half-step below can result in pitch movement similar to that of an augmented-sixth chord to the V chord. While the minor blues provides the clearest functional

example, it should also be noted that descending dominant seventh chords by half-note is a common occurrence in jazz. The bridge section of “Bye Bye Blackbird” provides examples of descending dominant seventh chords (See Figure 23).³¹ The F⁷ chord in measure 17 is chromatically planed downward to a D⁷ in 20, which serves as a secondary dominant to the G^{min7} in measure 21.

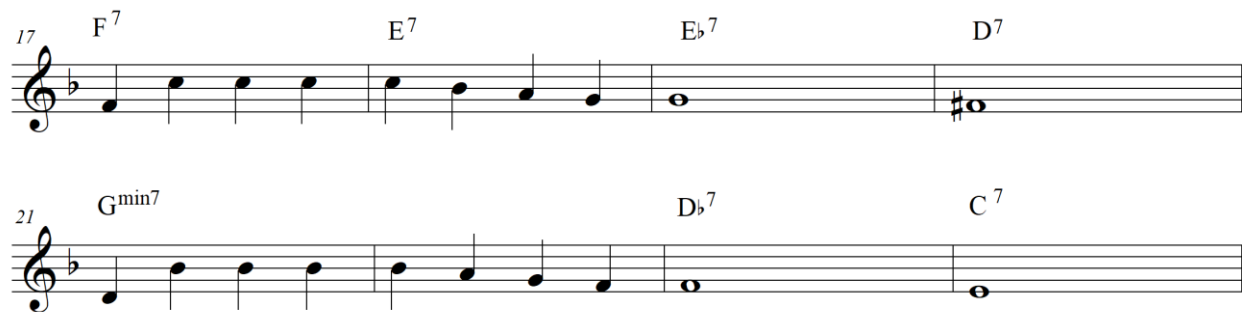


Figure 23. “Bye Bye Blackbird,” measures 17-24

In measure 22, a D-flat⁷ acts as a dominant preparation to C⁷, which resolves to the tonic F^{maj7} in the following measure (not shown). The D-flat⁷ in measure 23 retains the same function as the augmented-sixth and VI⁷-V⁷ movement described on the previous page. In this instance, it is borrowed from the minor key. Furthermore, the E-flat⁷ in measure 19 also functions similarly, as it is preparation for the secondary dominant in measure 21. The concepts explored in this section will be seen in the analysis of Chopin’s “Prelude No. 4,” which begins on page 41.

³¹ Ray Henderson and Mort Dixon, “Bye Bye Blackbird,” in *The Real Book - Volume II Bass Clef Edition*. (Milwaukee: Hal Leonard, 2006), 73

APPLICATION OF JAZZ THEORY CONCEPTS TO THE MUSIC OF CHOPIN

Approach Tones in Chopin's "Nocturne No. 1"

The concepts of approach tones and bracketing were explained on pages 11 and 12. This section will explore how those concepts can be applied to classical music through Chopin. A simple example of target and approach tones can be found in the opening statement of Chopin's "Nocturne No. 1." The tonic triad is targeted in the first measure. All the pitches are within the B-flat harmonic minor scale, but each of the notes in the triad is approached by half-step. The D-flat on the first beat of the second measure is then diatonically approached from the G-flat on beat five of measure 1 and bracketed through the G-flat on beat five and the C on beat six (See Figure 24).

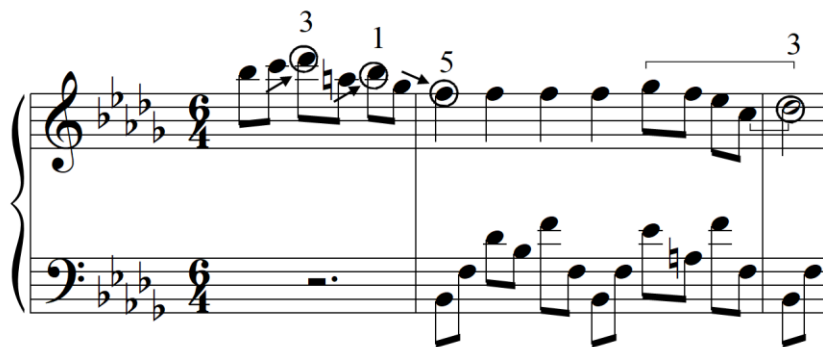


Figure 24. Approach tones in "Nocturne No. 1," measure 1

Throughout Chopin's repertory, extended versions of approach tones and bracketing are often used as a means to elaborate upon the melody. For example, the second and third measures of Chopin's "Nocturne No. 1" elaborate the preceding material. The figure on the last three beats of the second measure repeats the anacrusis of the first measure, but inserts a G-sharp (an enharmonic spelling of the seventh of the chord) as an additional target tone (See Figure 25).

While Chopin may not have intended suggesting a seventh chord, a listener versed in jazz may hear it as such.



Figure 25. Approach tones and bracketing in “Nocturne No. 1,” measures 1-4

The chromatic approach from the tonic to the enharmonic seventh also suggests a scalar pattern that is similar to the bebop dominant scale as described on page 14. Ultimately this motive is used to target the tonic on the downbeat of measure 4 through bracketing.

A G-flat at the end of the second measure approaches the F on the downbeat of the third measure, which continues the embellishment of the original theme. Chopin reemphasizes the F by chromatically bracketing it with G-flat and E. A leap to the tonic begins an extended chromatic approach downward to D-flat, the third of the chord, which is then reemphasized with a lower neighbor tone. From this D-flat is a motive like the movement used to emphasize the tonic in the previous measure. The D-flat is lowered by two chromatic pitches which leads to bracketing of the same pitch on the downbeat of measure four.

“Berceuse” and Chromatic Sequencing

Chopin’s “Berceuse” provides a noteworthy example in the exploration of chromaticism. Nearly the entirety of this piece occurs over a repeated single-measure I-V bass pattern in D-flat (See Figure 26). As presented on page 21, music composed over a repeated harmonic pattern is stylistic of both classical and jazz music. A comparison can be made between “Berceuse” and Bill Evans’ “Peace Piece,” which also is composed over a single-measure repeated bass pattern with a tonic to dominant movement (See Figure 27).³² In “Peace Piece” a suspended ninth chord is used as the dominant, which creates a more open sonic landscape over which to improvise. Both pieces start simple, explore chromaticism, then return to the original theme.

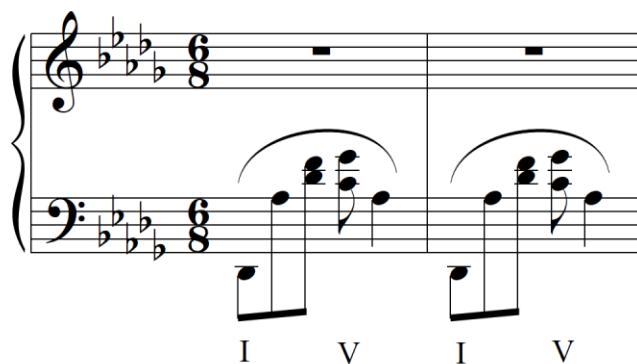


Figure 26. Repeated harmonic pattern of “Berceuse,” measures 1-2

With such a strong foundation in place, Chopin was able to explore chromaticism in very forward-thinking ways. While measures 3 through 18 establish the main melody, measure 19 begins this exploration of chromaticism through sequencing. The first sequence begins on the

³² Bill Evans, “Peace Piece,” December 15, 1958, *Everybody Digs Bill Evans*, (Riverside RLP 12-291)

third beat with a G chromatically approaching A-flat as an accented neighbor tone, followed by a perfect fourth up to a D-flat and down a minor third to B-flat.

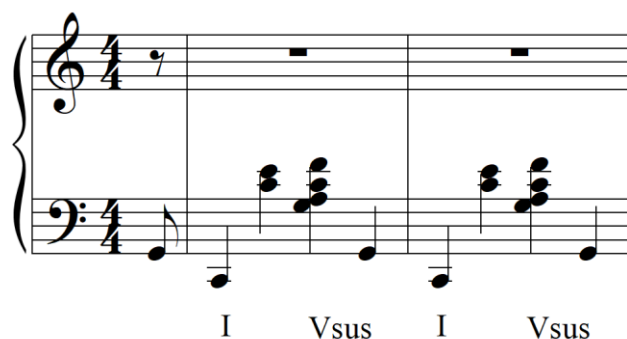


Figure 27. Repeated harmonic pattern of “Peace Piece,” measures 1-2

This pattern of up a half step, up a perfect fourth and down a diatonic third is sequenced down the D-flat major scale through the rest of the measure and the first half of measure twenty (see Figure 28).

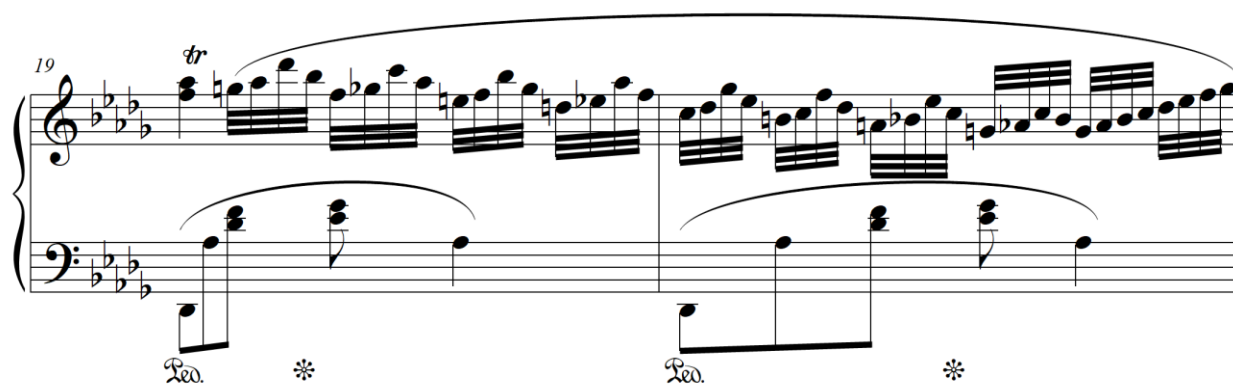


Figure 28. “Berceuse,” measures 19-20

On beat four of measure 20, the sequence is adjusted so the expected D-flat becomes a C, delaying the arrival of the tonic pitch. A rising scale starting on B-flat concludes the measure,

and the melody ascends back to the G to A-flat which started the sequence in measure 19. This time, these notes chromatically approach an A which begins a new sequence of the interval of a minor third ascending the chromatic scale (see Figure 29). This type of chromatic sequencing was ahead of its time and would be more likely to be seen in music of the 20th century. The way the chromaticism is superimposed over the harmonically stable accompaniment in the left hand resembles a jazz musician playing “outside” of the changes. Sequencing as seen in measure 21 becomes a theme throughout the rest of “Berceuse.” In measures 25 and 26, Chopin expands upon the minor third motive seen in measure 21 by planing the interval up the chromatic scale (see Figure 30). This theme is visited again in measures 31 and 32, though this time as a descending figure where every other planed interval is repeated (see Figure 31).

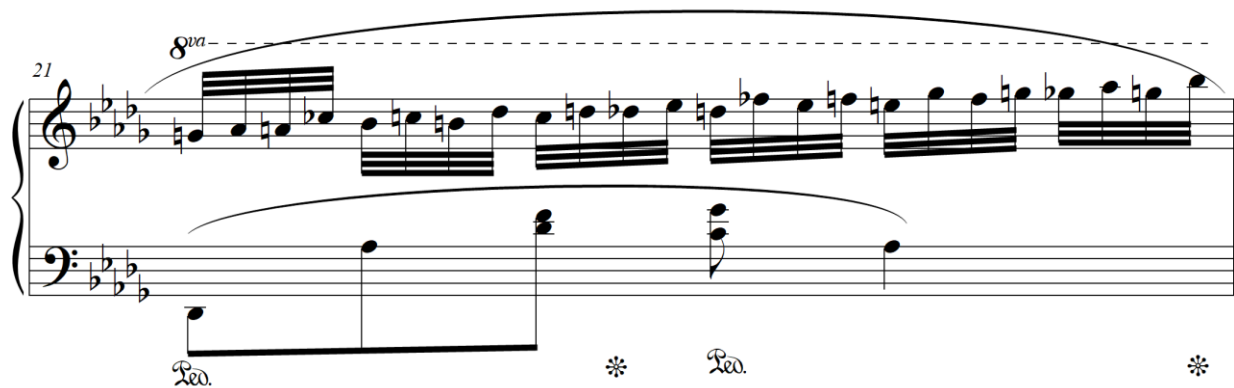


Figure 29. “Berceuse,” measure 21

In measure 38, Chopin takes sequencing a step further by moving a four-note pattern upward while retaining the pattern chromatically rather than diatonically. The sequence starts on D-flat, ascends a minor sixth, then descends a fourth, using two chromatic pitches to target the next sequences. A discrepancy exists between the first sequence and the remaining sequences due to the intervallic difference between the first and second sequence (major second) differing

from the rest of the sequences, which ascend by minor second. Because of this, the interval between the second and third notes of the sequence is a perfect fourth the first time, while it is an augmented fourth the rest of the measure (see Figure 32). In measure 39, Chopin establishes a diatonic sequence that he transforms into another chromatic sequence in measure 41.

The image displays two staves of musical notation for measures 25 and 26 of Chopin's "Berceuse". Measure 25 features a treble staff with a series of chords, each marked with a '3' indicating a triplet. A large slur encompasses the entire measure. The bass staff shows a single note, a half rest, and another single note. Below the bass staff, the word "Red." is written, followed by an asterisk. Measure 26 continues the triplet pattern in the treble staff, with a dashed line labeled "8va" indicating an octave transposition. The bass staff again shows a single note, a half rest, and another single note. Below the bass staff, the word "Red." is written, preceded and followed by asterisks.

Figure 30. "Berceuse," measures 25-26

The diatonic sequence is simply ascending a sixth and descending a sixth to the original pitch. Chopin moves this small sequence through a larger diatonic sequence moving down a step, up a step, down a fourth, up a third. This melodic sequence creates a hemiola as it is a four-sequence pattern that occurs over a measure of six beats (see Figure 33). In measure 41, an ascending-

descending sixth pattern is sequenced up the chromatic scale, reminiscent of the previous rising chromatic sequences (see Figure 34).

The image displays two systems of musical notation for measures 31 and 32 of a piece titled "Berceuse". Each system consists of a grand staff with a treble and bass clef. In measure 31, the treble staff features a series of five triplet chords, each marked with a '3' below it, moving chromatically upwards. A dashed line above the staff is labeled '8va'. The bass staff has a single note, a whole rest, and another single note, with a 'Ped.' marking and an asterisk below. Measure 32 continues the triplet pattern in the treble staff. The bass staff again has a single note, a whole rest, and another single note, with a 'Ped.' marking and an asterisk below.

Figure 31. "Berceuse," measures 31-32

Most of this analysis of "Berceuse" has focused on chromatic sequencing, but in measure 43, another jazz-like figure can be seen. In the right hand there are three octaves of a descending D-flat major scale with chromatic pitches inserted between some of the notes. The insertion of chromatic pitches within a scale is reminiscent of the bebop scales that were presented on page 14. In each instance, the chromatic pitch is in between the F and the E-flat, the third and second degrees of the scale. While this does not directly relate to any of the bebop scales mentioned, it is still a noteworthy use of a chromatic passing tone (see Figure 35).

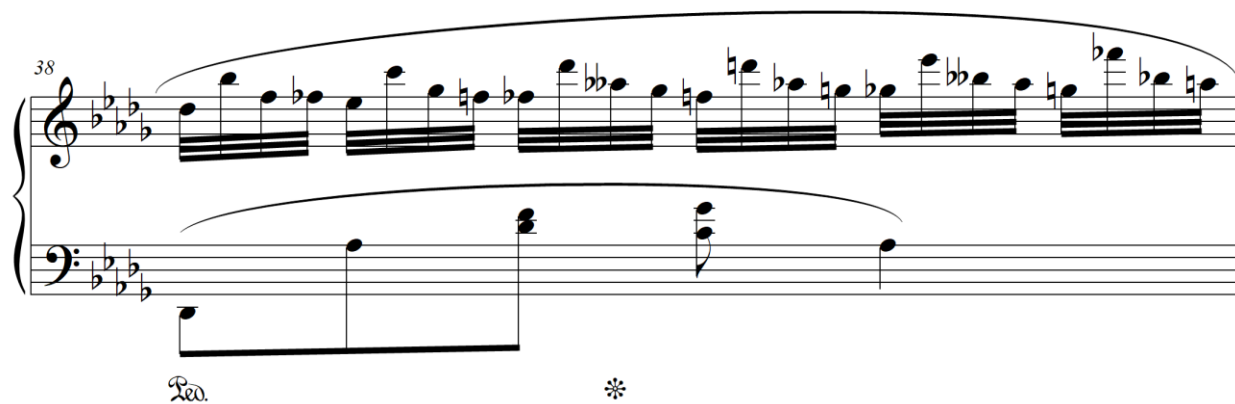


Figure 32. “Berceuse,” measure 38

Figure 33. “Berceuse,” measure 39-40

Figure 34 displays measures 41 and 42 of the piece "Berceuse." The score is written for piano, featuring a treble and bass staff. Measure 41 shows a continuous stream of eighth notes in the treble staff, with a large slur encompassing the entire measure. The bass staff contains a few notes, including a half note and a quarter note. Measure 42 continues the eighth-note pattern in the treble staff, also with a large slur. The bass staff has a few notes, including a half note and a quarter note. Both measures are marked with a "Ped." (pedal) symbol and a "*" (asterisk) symbol. The key signature is B-flat major (two flats).

Figure 34. "Berceuse," measures 41-42

Figure 35 displays measure 43 of the piece "Berceuse." The score is written for piano, featuring a treble and bass staff. Measure 43 shows a continuous stream of eighth notes in the treble staff, with a large slur encompassing the entire measure. The bass staff contains a few notes, including a half note and a quarter note. The treble staff has a circled note (B-flat) and a circled note (B). The measure is marked with a "Ped." (pedal) symbol and a "*" (asterisk) symbol. The key signature is B-flat major (two flats).

Figure 35. Chromatic passing tones in "Berceuse," measure 43

Harmonic Analysis of “Prelude No. 4”

With the extended understanding of harmony that jazz theory provides, musicians can interpret previously ambiguous music in a new frame of understanding. The harmonic underpinning of Chopin’s “Prelude No. 4” is a debated topic in the world of music theory.³³ This section will utilize jazz theory to provide a new perspective of opening section of the “Prelude.” As the importance of vertical analysis was formerly mentioned, the first step in this analysis is labeling the chords that appear. Labeling the chord changes reveals that most of the chords extend vertically beyond the triad (see Figure 36). This opening section lasts 12 measures and has a harmonic progression which resembles the minor variation of the blues. Melodically, it follows the standard blues form by having three four-measure phrases of equal length. The first two phrases are similar while the third is contrasting. The harmonies that occur at structurally important moments resemble the minor blues in the following ways (See Table 1). These moments include the E-minor in measure one acting as the i chord, the A-minor in measure five acting as the iv chord, the C-major chords in measure nine functioning as the VI (note the major seventh chord with a raised fifth as an alteration from the dominant seventh that would be expected in the minor blues), and the rest of the phrase occurring over the V chord. Within these structurally important tonalities are various substitutions which provide more chromatic movement.

³³ Justin London and Ronald Rodman. "Musical Genre and Schenkerian Analysis." *Journal of Music Theory* 42, no. 1 (1998): 101-24, <http://www.jstor.org/stable/843854>.

The image displays a musical score for 'Prelude No. 4' in G major, 4/4 time, measures 1 through 12. The score is written for piano, with a treble and bass staff. The left hand accompaniment is characterized by rootless voicings, where the bass notes remain as pedal tones. The right hand features a melodic line with various intervals and rests. Above the staff, chord changes are indicated for each measure. The chords are: Measure 1: E^{min}; Measure 2: F[#]min11; Measure 3: B⁷/F[#]; Measure 4: F⁷(^b5); Measure 5: o⁷; Measure 6: E⁷; Measure 7: E^{min}7 A⁷(^b9)/E; Measure 8: A^{min}7/E; Measure 9: A^{min}6/E; Measure 10: o⁷; Measure 11: D⁷; Measure 12: D^{min}7 G⁷(^b9)/D. The score includes a measure rest in measure 12.

Figure 36. Chord changes of “Prelude No. 4,” measures 1-12

Throughout the “Prelude,” each voice of the left-hand accompaniment moves down only by half-step.³⁴ This results in a harmonic structure that acts like the guide tones in jazz music, causing the ii⁷-V⁷ progression to occur throughout (see Figure 37). In these ii⁷-V⁷ progression, it should be observed that because the left-hand does not move intervals further than a step, the bass notes remain as pedal tones through the progressions. These pedal tones are designated as slash chords in this analysis. It should also be noted that the accompaniment in the left hand utilizes rootless voicings for the V⁷ chords.

³⁴ Exceptions to this motive are found between measures one and two and in measure four. In both instances the movement is from B to A.

Table 1. Comparison of chord changes between “Prelude No. 4” and a standard E-Minor Blues

“Prelude No. 4”								
Measures 1-4	E ^{min}	F ^{#min11}	B ⁷ /F [#]	F ^{7(b5)}	o ⁷	E ⁷	E ^{min7}	A ^{7(b9)} /E
Measures 5-8	A ^{min7} /E	A ^{min6} /E		o ⁷	D ⁷		D ^{min7}	G ^{7(b9)} /D
Measures 9-12	C ^{maj7(#5)}	C ^{6/9}	B ⁷				B ^{7alt}	

E-Minor Blues	
Measures 1-4	E ^{min7}
Measures 5-8	A ^{min7}
Measures 9-12	C ⁷

measure 2
F^{#min11} B⁷/F[#]

measure 8
D^{min7} G^{7(b9)}/D

C^{maj7(#5)}

1/2 step
7th 3rd (enharmonic)

3rd 7th

1/2 step
7th 3rd 3rd 7th

3rd 7th 7th 3rd 1/2 step

ii¹¹ V⁷ ii⁷ V^{7(b9)} I^{7(#5)}

Figure 37. ii⁷-V⁷ Progressions in “Prelude No. 4”

Although the root does not appear, the movement of the guide tones is strong enough to imply the dominant function.

As mentioned on page 23, jazz musicians and composers often alter chord progressions through the insertion of ii^7-V^7 progressions, particularly in the blues. While the basic structure of “Prelude No. 4” matches the basic structure of a minor blues, appearance of ii^7-V^7 progressions in the “Prelude” correlates with the use of ii^7-V^7 progressions to alter standard chord changes. The first deviation from a standard minor blues occurs in the second measure as a ii^7-V^7 reinforces the tonic. In measure 8, another ii^7-V^7 prepares the VI chord in measure 9. Furthermore, the subdominant A-minor chords which precede the D^7 in measure 7 also serve as the supertonic for a brief tonicization of G. Consecutive ii^7-V^7 progressions with a rising fourth relationship as seen between measures 5 through 8 are commonly found at the ends of phases in jazz standards. Measures 13 through 16 of “It Could Happen to You” provide an example of this type of chord progression (see Figure 38).³⁵



Figure 38. “It Could Happen to You,” measures 13-16

Some chords that appear serve a lower level of functionality due to the strictness of the falling half-step motive that Chopin adheres to. Fully diminished-seventh chords that appear at the ends of measures three and six serve as passing chords due to the main motive. A ii^7-V^7 progression can be seen in measure 4, though it is functionally subservient to the preceding E^7 , as the E^7 serves as a secondary dominant to the subdominant A-minor in measure 5.

³⁵ James Van Heusen and Johnny Burke, “It Could Happen to You,” in *The Real Book - Volume II Bass Clef Edition*. (Milwaukee: Hal Leonard, 2006), 204

With the ambiguity that upper chord extensions provide, certain decisions must be made in the labeling of chords. For example, the chord beginning in the latter half of measure 5 could be interpreted as an F-sharp half-diminished seventh chord in third inversion. Likewise, the chords starting on the second beat of measure 9 could be interpreted as A-minor chords in first inversion. Despite these possible interpretations, functionality is the key indicator of a chord's label. Within the context of blues functionality, these chords serve as add-six chords. Additionally, with this context the movement from a seventh chord to an added-sixth chord becomes a small motive shared between measures five and nine (see Figure 39).

measure 5
A^{min7} /E A^{min6} /E

measure 9
C^{maj7}(#5) C^{6/9}

7th 6th 7th 6th

Figure 39. Seventh to added-sixth motive

The chord that appears in measure 3 is another instance of harmonic ambiguity due to the falling half-step motive. As written, the intervals from the bass are a major third, a minor seventh, and an augmented fourth. Through a classical understanding, the chord resembles an enharmonic French augmented-sixth chord with an unconventional resolution. The chord ultimately resolves to the secondary dominant-functioning E⁷ chord in measure 4. A logical reason for the enharmonic spelling and unconventional resolution is due to the falling motive.

While an augmented-sixth interval is expected to resolve upward, a minor seventh interval is expected to resolve downward.

As established in the Augmented-Sixth Chords section beginning on page 28, augmented-sixth chords and their resolutions resemble several chord relationships that appear in jazz. The use of the augmented-sixth chord in measure 3 of the “Prelude” provides an example of this comparison. Within this context, the chord can be labeled as an F^7 with a lowered fifth alteration. This F^7 chord is preceded by a ii^7-V^7 progression in the key of E. The F^7 shares the tritone relationship with the preceding B^7 that tritone substitutions are based upon. Between the two chords, the fifth in the bass of the B^7 is lowered a half-step to become the new tonic while the guide tones remain. This relationship suggests that the F^7 functions as a tritone substitution and an extension of the dominant established in measure two. While expected to resolve to the tonic, the tritone substitution deceptively resolves to V^7/iv . By resolving to a dominant-functioning seventh chord a half-step below, the appearance of the augmented-sixth chord in measure 3 resembles the chord relationships described on page 30.

While this analysis of “Prelude No. 4” has focused primarily on the harmonic implications of the piece, the melodic line of measure 12 should be observed for its similarities to the jazz lexicon. The melodic line begins with two accented neighbor tones, acting as chromatic approach tones. On beat one, the lowered sixth from the bass resolves to the fifth while on beat two the lowered second from the bass (or lowered ninth as a jazz musician may call it) resolves to the root. Following a brief arpeggio of the chord is a descending line of D-C-B. With a firm B^7 in the left hand, this D-C-B movement matches the raised-nine to lowered-nine movement found in the altered scale and at the end of the *Cry Me A River* line as seen on page

18. Given the amount of mode alterations in the melody compared to the chord in the bass, the chord in measure 12 has been labeled as an altered B⁷ chord in this analysis.

A functional analysis of the chord progression in “Prelude No. 4” is provided in Figure 40.

Figure 40 displays the functional analysis of the chord progression in “Prelude No. 4,” measures 1-12. The analysis is presented across three systems of musical notation, each showing the treble and bass staves with corresponding chord labels below the bass staff.

System 1 (Measures 1-4):

- Measure 1: i
- Measure 2: ii^{11}
- Measure 3: V^7
- Measure 4: Tritone Substitution
- Measure 5: V^7/iv

System 2 (Measures 5-8):

- Measure 5: iv^7
- Measure 6: $G: ii^7$
- Measure 7: ii^{add6}
- Measure 8: V^7
- Measure 9: $C: ii^7$
- Measure 10: $V^7(^9)$

System 3 (Measures 9-12):

- Measure 9: $I^{7(\#5)}$
- Measure 10: $e:VI^{7(\#5)}$
- Measure 11: $VI^{add6/9}$
- Measure 12: V^7
- Measure 13: V^{7alt}
- Measure 14: i

Figure 40. Functional analysis of “Prelude No. 4,” measures 1-12

CONCLUSION

While classical music and jazz are vastly different styles of music with their own approaches, there is overlap between the functional elements of the two. Jazz is a genre which utilizes a melodic and harmonic language that is thoroughly understood by its composers and performers. Much of this language has been transmitted from the classical tradition, as examples of such language can be found throughout the classical repertoire. Key elements of Western music, such as individual interpretation and rubato, are found in both genres. Furthermore, with the expanded understanding of melody and harmony that jazz musicians employ, music from previous eras can be examined under a new scope. Knowledge of the cultural connections between the two styles of music allows for a further appreciation of both styles for listeners and performers alike.

BIBLIOGRAPHY

- Aebersold, Jamey. *Nothin' But Blues: Jazz and Rock*. 2nd ed. New Albany, IN: Jamey Aebersold, 1981. https://duhoviki.ru/jazz_improvisation/Vol%2002%20-%20Nothin'%20But%20Blues/Nothin'%20But%20Blues.pdf.
- Ashley, Richard. "Do[n't] Change a Hair for Me: The Art of Jazz Rubato." *Music Perception: An Interdisciplinary Journal* 19, no. 3 (2002): 311-32. Accessed August 2, 2020. doi:10.1525/mp.2002.19.3.311.
- Benward, Bruce, and Gary White. *Music in Theory and Practice*. 4th ed. Vol. 2. Dubuque, IA: Wm. C. Brown Publishers, 1990.
- Bonds, Mark Evan. *A History of Music in Western Culture*. 3rd ed. Upper Saddle River, NJ: Prentice Hall, 2010.
- Coker, Jerry. *Elements of the Jazz Language for the Developing Improvisor*. N.p.: Alfred Publishing Co., Inc., 1991. <https://books.google.com/books?id=iQNVERQnTVUC&lpg=PA74&ots=JCrKuKbzbb&q=cry%20me%20a%20river%20lick&pg=PP3#v=onepage&q=cry%20me%20a%20river%20lick&f=false>.
- Dirkse, Scott. "Demystifying Chopin's Rubato." *American Music Teacher* 62, no. 6 (June 2013): 27-29. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mah&AN=87965285&site=ehost-live&scope=site>.
- Henderson, Ray, and Mort Dixon. "Bye Bye Blackbird." In *The Real Book - Volume II Bass Clef Edition*, 73. Milwaukee: Hal Leonard, 2006.
- Heusen, James Van, and Johnny Burke. "It Could Happen to You." In *The Real Book - Volume II Bass Clef Edition*, 204. Milwaukee: Hal Leonard, 2006.
- Levine, Mark. *The Jazz Theory Book*. Petaluma, CA: Sher Music Co., 1995.
- London, Justin, and Ronald Rodman. "Musical Genre and Schenkerian Analysis." *Journal of Music Theory* 42, no. 1 (1998): 101-24. Accessed October 19, 2020. <http://www.jstor.org/stable/843854>.
- Lopinski, Janet. "Chopin: The Poet of the Piano." *American Music Teacher* 68, no. 3 (December 2018): 20-22. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mah&AN=133152731&site=ehost-live&scope=site>.

McLaughlin, Moira E. "All About Jazz, Uniquely American Music." *The Washington Post*, May 24, 2012. https://www.washingtonpost.com/lifestyle/style/all-about-jazz-a-unique-form-of-american-music/2012/05/24/gJQA4bswnU_story.html.

Murray, Michael. *Music Theory III*. N.p.: McGraw-Hill Companies, Inc., 2011.

Riposo, Joe. *Target & Approach Tones: Shaping Bebop Lines*. New Albany, IN: Jamey Aebersold Jazz, 2009. Accessed Sep. 4, 2020 https://kupdf.net/download/195381934-target-and-approach-tones-shaping-bebop-lines-joe-riposo-aebersold-jazz_58e94623dc0d606e08da97fb_pdf.

Whittall, Arnold. "Form." *Grove Music Online*. 2001; Accessed October 27, 2020. <https://www-oxfordmusiconline-com.proxy.missouristate.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000009981>.

DISCOGRAPHY

“Billie’s Bounce.” November 26, 1945. *Bird/The Savoy Recordings (Master Takes)*. Savoy SJL 2201.

“Blues for Alice.” August 8, 1951. *Swedish Schnapps*. Verve MG V-8010.

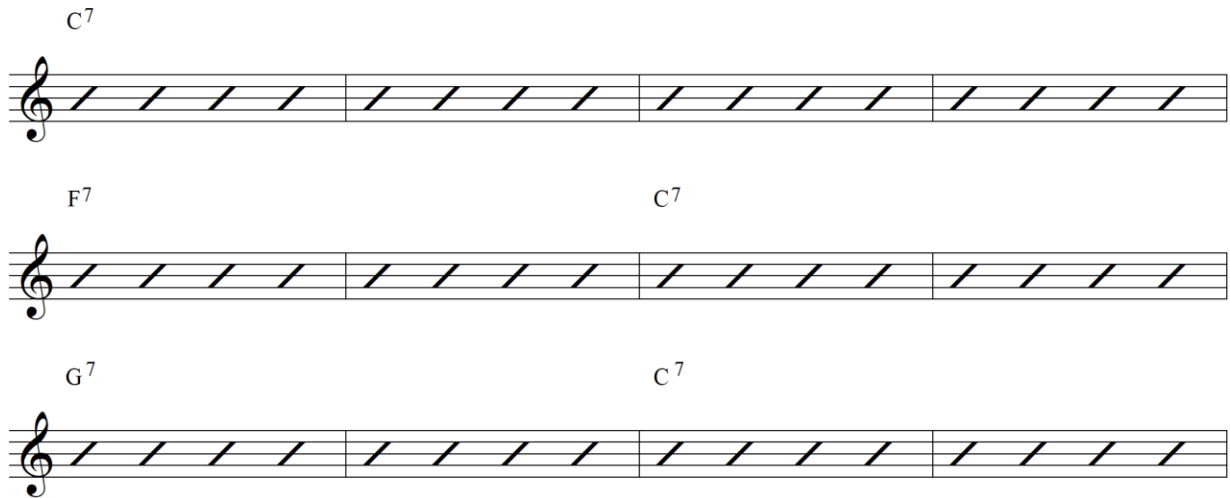
“Mr. PC.” May 4, 1959. *Giant Steps*. Atlantic SD 1311.

“Peace Piece.” December 15, 1958. *Everybody Digs Bill Evans*. Riverside RLP 12-291.

“Witch Hunt.” December 24, 1964. *Speak No Evil*. Blue Note BLP 4194.

APPENDIX

Through chord substitutions, the blues progression can transform from simple to complex. This appendix will detail some of the possible chord substitutions jazz composers or performers may use in a blues. Any form of these chord changes is a viable option even within a single performance of a blues.



Appendix A-1. Basic Blues.

Appendix A-2 shows three staves of music, each with four measures. The first staff has chords C⁷ (measures 1-2), F⁷ (measures 3-4), and C⁷ (measures 5-6). The second staff has chords F⁷ (measures 1-2) and C⁷ (measures 3-4). The third staff has chords G⁷ (measures 1-2), F⁷ (measures 3-4), and C⁷ (measures 5-6). Each measure contains a single eighth note, represented by a diagonal slash.

Appendix A-2. Insertion of the IV⁷ chord on measures 2 and 10.

Appendix A-3 shows three staves of music, each with four measures. The first staff has chords C⁷ (measures 1-2), F⁷ (measures 3-4), and C⁷ (measures 5-6). The second staff has chords F⁷ (measures 1-2) and C⁷ (measures 3-4). The third staff has chords D^{min7} (measures 1-2), G⁷ (measures 3-4), C⁷ (measures 5-6), and G⁷ (measures 7-8). Each measure contains a single eighth note, represented by a diagonal slash.

Appendix A-3. The V⁷-IV⁷ movement in measures 9 and 10 is substituted with a ii⁷-V⁷ progression. A half-cadence is included in the last measure to lead into the next chorus.

Chord progression 1 (Staff 1):

- Measure 1: C⁷
- Measure 2: F⁷
- Measure 3: C⁷
- Measure 4: G^{min7} C⁷

Chord progression 2 (Staff 2):

- Measure 1: F⁷
- Measure 2: F^{#0}
- Measure 3: C⁷
- Measure 4: E^{min7} A⁷

Chord progression 3 (Staff 3):

- Measure 1: D^{min7}
- Measure 2: G⁷
- Measure 3: C⁷ A⁷
- Measure 4: D^{min7} G⁷

Appendix A-4. Measures 4, 8, and 12 are substituted with ii⁷-V⁷ progressions to tonicize the IV⁷, ii⁷, and I⁷ in measures 5, 9, and 1. A fully diminished chord is inserted in measure 6 to chromatically approach the I⁷ chord in measure 7. A secondary dominant on beats three and four of measure 11 leads to a ii⁷-V⁷ on measure 12.