

WORKS MODELED ON THE IMPROVISATIONAL STYLE OF  
TWO JAZZ GUITARISTS

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# Chapter 1: Introductory Remarks on Borrowing in Jazz

I undertook this project to accomplish two simple goals: create new music for solo guitar and help myself learn to improvise jazz on the instrument. To that end, I have studied the improvisational language of two seminal jazz guitarists, Charlie Christian and Wes Montgomery. Using that knowledge, I have composed three short pieces in Christian's style and one longer work in Montgomery's, all appropriate for performance on either classical or jazz instruments. These compositions all necessarily involve two main types of borrowing: modeling and quotation.

The purpose of modeling, in my case, is specifically to learn and compose in a style of music by imitating two of its most important performers on my instrument. The quotation I use largely facilitates the modeling: by practicing arranging in compositions the improvisational material of my models, I gain a greater understanding and appreciation for how they improvised jazz on the guitar. As I will describe below, both of these types of borrowing are important tools for pedagogy, and further, borrowing is an integral part of the jazz music tradition.

Of the pieces in Christian's style, one arranges his riffs (which I describe in detail in Chapter 2) over rhythm changes. The second imagines how he might have performed a solo blues and makes sparser use of riffs he actually played. The last treats the jazz standard "Cherokee," by Ray Noble, with a small set of Christian's riffs, which I develop and vary more extensively than the riffs that appear in the piece on rhythm changes. The work in Montgomery's style is roughly a theme and variations using the standard "Israel," by John Carisi. Here the "variations" are in fact meant to demonstrate various aspects of Montgomery's style. The final

portion of the work employs the typical textural structure of his solos, thickening from a single line through octave melodies into chord melodies.

Learning to compose by modeling one's work on an older piece of music is a long-established practice in the Western European art music tradition. Howard Mayer Brown suggests that in the sixteenth century, students of composition learned to compose in part by writing works based on those of acknowledged masters. This involved several types of borrowing: sometimes student-composers borrowed actual pitch and rhythmic material, but they also often modeled their works' structures on that of venerated composers' works, aping the disposition of text over musical phrases, the placement of cadences, and more. Brown admits that no Renaissance treatises on composition actually mention this technique, but that kind of instructional text is uncommon for any period of Western European art music under consideration.<sup>1</sup> Nonetheless, this sort of borrowing was critical to other forms of artistic expression during the same period. It was suggested that those who sought to become great authors, for example, should read classical literature to soak up its style not just "by osmosis," as it were, but by literally copying down phrases, imagery, and ideas that the reader could then incorporate into their own works. Since composers did not have classical Greek and Roman models to rely on in the same way that authors of literature did, they resolved that the most excellent examples of musical composition from the recent past would have to suffice as their models.<sup>2</sup> Charles Ives' early music is a more recent American example of this variety of compositional self-instruction. His first compositions were written in prevailing popular and classical genres, including a march, a polonaise, and a fantasia on a hymn tune. J. Peter

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<sup>1</sup> Howard Mayer Brown, "Emulation, Competition, and Homage: Imitation and Theories of Imitation in the Renaissance," *Journal of the American Musicological Society* 35, no. 1 (Spring 1982): 6-10.

<sup>2</sup> *Ibid.*, 38-41.

Burkholder notes that each of these early works “conforms closely to its type, and there is not a radical experiment among them.”<sup>3</sup> They do not all directly quote the works on which they are modeled, but in general Ives preserves at least roughly the melodic and rhythmic contour of his source.<sup>4</sup> This indicates that he looked to examples of each genre in order to grasp the genre’s characteristics. As he matured, his quotations and modeling became less obvious for two reasons. Having been exposed to many examples of each of the genres in which he worked, he did not need to depend so much on individual instances. Furthermore, Burkholder believes Ives intentionally avoided direct quotation to have more creative freedom when writing melodies and to satisfy an overarching late Romantic notion of originality.<sup>5</sup> Nonetheless it was an integral part of his education, as his instructor in composition at Yale specifically gave Ives and the other students assignments to reset poems for which famous European composers had already composed music. These assignments were meant to give the students the opportunity to learn to write music properly in the style of such composers.<sup>6</sup> These are just two examples of how composers in the Western European art music tradition have employed modeling in order to learn their craft.

Charlie Christian and Wes Montgomery did not write out their solos in notation as musical compositions before playing them. The solos only exist in musical notation as transcriptions that others have written down. Therefore, they are not texts in the same way that a Beethoven symphony or Brahms sonata are, represented first on the page and then in performance. However, the recordings of performances by Christian and Montgomery are texts

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<sup>3</sup> J. Peter Burkholder, *All Made of Tunes: Charles Ives and the Uses of Musical Borrowing* (New Haven: Yale University Press, 1995), 14.

<sup>4</sup> *Ibid.*, 14-20.

<sup>5</sup> *Ibid.*, 21.

<sup>6</sup> *Ibid.*, 27.

in the way that Ingrid Monson suggests, specifically because they have been recorded.<sup>7</sup> That is, they serve the same function as a musical score in the Western European tradition: both the score and the recording represent the piece of music. Therefore, whether or not either guitarist ever intended or expected it, I am using their solos in the same way Renaissance composers used older contrapuntal works, or Ives used earlier marches (and songs, and more), which is as models for my own compositions. My borrowing also reflects a common pedagogical practice in jazz.

Students of jazz often learn to improvise in part by listening to and transcribing the solos of their favorite jazz musicians, in the process sometimes memorizing entire solos. These students will then often incorporate licks from those solos into their own improvisations. In an article about saxophonist Joe Henderson's borrowings in his improvisations, John P. Murphy references an interview in which Henderson explicitly acknowledged that he learned to improvise by transcribing recorded solos, eventually consciously incorporating some of the ideas he transcribed into his solos early on in his career. As he matured he did so more subconsciously. He also made clear he often sought to respond to other musicians in the ensemble by quoting and developing improvisational material they played in their solos.<sup>8</sup> Wes Montgomery learned to play guitar, and to improvise jazz in part, by memorizing Charlie Christian solos, as he told many interviewers. In fact, early in his career, these solos were exactly what Montgomery performed for audiences. These are just two examples of learning by borrowing in jazz; jazz pedagogues regularly exhort their students to learn to play the music by engaging in the activities Henderson and Montgomery did, among other things.

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<sup>7</sup> Ingrid T. Monson, *Saying Something: Jazz Improvisation and Interaction* (Chicago, University of Chicago Press, 1996), 126.

<sup>8</sup> John P. Murphy, "Jazz Improvisation: The Joy of Influence," *The Black Perspective in Music* 18, no. 1/2 (1990): 15.

The process of borrowing and reworking existing material is not simply a learning method, however. It is a prevalent feature of many musical traditions and often involves composers emulating or commenting on the material they borrow. Because my project aims to create music that is essentially written-out jazz, below I will focus on borrowing in that musical tradition. Jazz music draws on many influences from both the Western European and African American musical traditions, including itself. Jazz musicians borrow material for many reasons, including to pay homage, parody, and revise certain material that, unrevised, would be unavailable to them on account of copyright restrictions.

Jazz musicians constantly reuse and borrow from within their own tradition. This may take the form of various approaches to a standard tune, composing contrafacts<sup>9</sup> on well-known chord progressions, altering such progressions by inserting substitute chords and progressions, and more. Philip Carver explores several recordings by jazz musicians of the Cole Porter song “What is This Thing Called Love?” While listening to the various recordings he cites demonstrates a broad subset of possible jazz adaptations of this show tune, the James P. Johnson version is especially illustrative of jazz’s connections with other styles of music. Johnson’s 1930 recording evokes march music, the stride piano style, and boogie-woogie music. Johnson was well-known as a boogie-woogie pianist. Boogie-woogie music, and specifically how it is performed on the piano, helped define early rock and roll. The stride piano texture is the quintessential ragtime and early jazz keyboard approach to the left hand, where the pianist would play lower bass notes in strong metrical positions before playing higher voicings of the implied harmonies in weak metrical positions. Carver also observes how, towards the end of the recording, Johnson uses his two hands to mimic how the high and low instruments trade off

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<sup>9</sup> A contrafact is a new tune composed over a harmonic progression that supports an existing tune. Oftentimes the new tune is literally one chorus of a jazz musician’s solo on the existing tune.

material in marches by John Philip Sousa.<sup>10</sup> This one recording, then, shows a small network of influences around a jazz standard.

Literal quotation and paraphrase serve multiple purposes in jazz. Louis Armstrong was open about the influence of operatic music in his upbringing and development as a trumpeter and singer. Joshua Berrett, in *The Musical Quarterly*, details how Armstrong quoted several operas in his recorded solos and compares his more florid and aggressive passages to the *bravura* embellishments that opera singers indulged in when performing arias. In this case, the borrowing is clearly indicative of genuine respect for a certain style of music. Berrett notes that the trumpeter “gravitated toward [recordings of] ... opera singers as well as the Original Dixieland Jazz Band.” Two of Armstrong’s favorite singers were Luisa Tetrazzini and Amelia Galli-Curci.<sup>11</sup> Playing in both Erskine Tate’s and Fletcher Henderson’s orchestras also gave him experience with operatic repertoire. Berrett demonstrates the similarity of the Henderson tune “Araby” to the aria “Avant de quitter ces lieux” from Guonod’s *Faust*. Tate’s shows, according to Armstrong himself, required exceptional versatility on account of the broad range of repertoire they performed, which included arrangements of operatic music.<sup>12</sup> A less direct operatic influence came to Armstrong through New Orleans jazz clarinetists, including Sidney Bechet. The musicians in the pit orchestra of the French Opera House in New Orleans gave lessons to many musicians in the city, including young clarinetists. These young wind players became the rag and early jazz musicians floridly decorating around the melody of tunes in whatever musical ensemble in which they played. As he grew up in New Orleans, Bechet attended shows at the opera house with his mother and “developed a lasting love for the tenor voice.”<sup>13</sup> Armstrong

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<sup>10</sup> Philip Carver, “The Metamorphosis of a Jazz Standard,” *Jazz Research Papers* (1996): 19.

<sup>11</sup> Joshua Berrett, “Louis Armstrong and Opera,” *The Musical Quarterly* 76, no. 2 (Summer 1992): 218.

<sup>12</sup> *Ibid.*, 220-221.

<sup>13</sup> *Ibid.*, 228.

compared his style of playing in the early 1920s exactly to that of these clarinetists,<sup>14</sup> additionally saying he would “go wild” at the end of his solos with the Tate band, using up the last of his “chops” for the night on Cs high up in the range of his horn. Berrett compares this Tetrizzini’s and Galli-Curci’s *bravura* style, who used to end their cadenzas similarly, with repeated pitches at the extreme upper end of their range.<sup>15</sup>

In the Armstrong recordings Berrett has transcribed and examined, he highlights passages that either literally quote or paraphrase arias from four different operas. In recordings of “New Orleans Stomp” and “Dinah,” Armstrong quotes from *Rigoletto*, by Verdi. He also quotes the famous aria “Vesti la giubba” from *Pagliacci*, by Leoncavallo, in “Tiger Rag” and “New Tiger Rag.” The “Dinah” and “Tiger Rag” solos also quote other popular tunes.<sup>16</sup> Additionally, Berrett suggests that Armstrong’s famous introductory statement on “West End Blues” is really an amalgamation of quotes, paraphrases, and cells from three operas and his own library of improvisatory riffs.<sup>17</sup>

Jazz musicians frequently use quotation and paraphrase to make jokes or ironic commentary. For example, Krin Gabbard proposes bebop musicians sometimes quoted popular American songs he judges “bourgeois” relative to jazz in order to create irony: that “of a black artist dipping into the sedate repertoire” of music preferred by white middle-class Americans. This type of quotation also divided the bebop audience into three groups: those who outright missed the reference, those that understood it as a signal of an artist’s influences or a light joke (as with Armstrong’s use of opera), and those who appreciated the irony Gabbard perceives.<sup>18</sup>

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<sup>14</sup> Ibid., 226-227.

<sup>15</sup> Ibid., 221.

<sup>16</sup> Ibid., 222-224.

<sup>17</sup> Ibid., 230-235.

<sup>18</sup> Krin Gabbard, “The Quoter and His Culture,” in *Jazz in Mind: Essays on the History and Meanings of Jazz*, ed. Reginald T. Buckner and Steven Weiland (Detroit: Wayne State University Press, 1991), 95-96.



Ironic commentary need not skewer the source the way Gabbard suggests some bebop artists meant to. Monson perceives ironic “inversions” in John Coltrane’s recording of “My Favorite Things” compared to the original song as it was composed for *The Sound of Music*. Because the lengthy improvisations on the Coltrane album take place over the interlude sections of the original song (which are greatly expanded in that version), the focus of the song moves from the verses to the interludes. Monson also contrasts the simple waltz rhythms of the original tune to the complex rhythmic interactions between the members of the quartet on the Coltrane album, in part due to the syncopated rhythms they each play individually. Furthermore, the mood of the two versions differ: the original song is “optimistic,” whereas Coltrane’s version is “brooding.”<sup>19</sup> On a higher level, Monson suggests that Coltrane’s “black” version is more complex in some ways than the original tune. Therefore it meets criteria for what makes “good music” in the Western European tradition better than the original “white” version. According to Monson, this is ironic.<sup>20</sup> At the same time, Coltrane’s version of the tune need not be interpreted as a critique of, or attempt to outdo, the original. More important, the differences the ironies emphasize “create associations for the listener, and those associations help define a musical culture to which the listener belongs”; in this case, the musical culture is jazz.<sup>21</sup>

That sense of culture or musical community is critical to jazz, underlying perhaps all borrowing in the style. The borrowing may help define what that community is (perhaps by referring to well-worn forms) or is not (inserting quotes from “bourgeois” pop music, as Gabbard discusses). Or, it may be conversational, interacting with recorded examples of jazz or the other musicians in the room. Monson considers the track “Princess” from drummer Ralph Peterson’s

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<sup>19</sup> Monson, *Saying Something*, 117-118.

<sup>20</sup> *Ibid.*, 118-120.

<sup>21</sup> *Ibid.*, 127.

album *Triangular* in this light. In an interview with Peterson, Monson and he discuss one passage where Geri Allen, the pianist on the track, played a rhythmic figure that reminded Peterson of another that drummer Art Blakey used to play. Because what Allen played reminded Peterson of the first half of the four-measure Blakey figure, Peterson responded with the second half. Here, two jazz musicians have an exchange based on a paraphrase of another jazz musician's material.<sup>22</sup> Monson states that this sort of conversation is a prerequisite element for a meaningful jazz performance.<sup>23</sup> Murphy also deals with conversational borrowing. In his "Joy of Influence" article, he examines two blues solos (recorded sixteen years apart) by Joe Henderson. In one of these solos, Henderson converses with trumpeter Freddie Hubbard and drummer Steve Houghton in an exchange similar to Allen's and Peterson's. Henderson adapts one passage of Hubbard's solo, subjecting it to rhythmic diminution, and playing it over a different part of the blues form. Henderson also uses a drum fill that Houghton plays at the end of one his choruses to create the rhythmic content in his following chorus.<sup>24</sup> This sort of conversation, between members of a band, establishes an immediate sense of community for the performers and the audience that does not necessarily rely on reference to a shared lineage. Both of these instances are similar to the example Monson considers between Peterson and Allen, in that the members of a jazz band are responding to one another's ideas in the midst of the performance. In both solos that Murphy considers, Henderson also quotes the Charlie Parker tune "Buzzy" at the end of one chorus one of his solo, and then develops the next chorus out of that motive.<sup>25</sup> Murphy asserts Henderson means for this borrowing to be obvious, to "celebrate [his] debt to [his] precursors"

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<sup>22</sup> Ibid., 77-80.

<sup>23</sup> Ibid., 80-85.

<sup>24</sup> Murphy, "Joy of Influence," 13.

<sup>25</sup> Ibid., 10.

and “involve the audience” by referencing a well-known source.<sup>26</sup> This is akin to how Allen’s playing reminds Peterson of Blakey.

As I mentioned above, Monson remarks that recording technology has an important role in the “transmission of style in jazz,” rendering performances into “texts.” These form part of the shared culture of jazz; they also provide developing jazz musicians with a pedagogical resource to understand the pitch and rhythmic language of jazz, how to phrase, and more. Therefore conversation does not happen simply within individual performances, but also across time.<sup>27</sup> Peterson responds to Allen specifically because her playing reminds him of Art Blakey’s; Henderson not only quotes Parker but develops the quote in unique ways in each of the two recordings.

We have seen that borrowing serves a fundamental role in the jazz tradition, at the most foundational level by providing a sense of community and musical heritage. More specifically, this borrowing can serve multiple purposes: it can help jazz musicians learn to play, facilitate exchanges between bandmates, pay homage to a musician’s influences, or create irony. This is not a complete list.

I remain a student of jazz. Therefore, I borrow in order to pay tribute to two of the greatest jazz guitarists of all time and facilitate my jazz pedagogy. As I have shown, this is an integral part of the two musical traditions that are most significant to me. Western European and American composers have modeled their works on those of earlier artists for centuries. Jazz musicians have learned from the recordings and live performances of other jazz musicians for generations. In composing in the style of Christian and Montgomery, I seek to learn their

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<sup>26</sup> Ibid., 9.

<sup>27</sup> Monson, *Saying Something*, 126.

approaches to jazz improvisation on the guitar. In the following chapters, I detail their individual improvisational styles and show how my compositions reflect those styles.

## Chapter 2: Charlie Christian's Life and Improvisational Style

### A Brief Biography of Charlie Christian

Charlie Christian was *the* American swing guitarist. Between 1939 and his death in 1942, he rocketed to stardom with the Benny Goodman sextet, and secured the guitar's place in jazz as a lead instrument, beyond its initial role as a quiet, unnoticed rhythm instrument. Along the way he defined the original clean, clear sound of electric jazz guitar. Other guitarists such as Django Reinhardt, Eddie Lang, and Mary Osborne were also active and successful jazz musicians around the time of Christian's fame, but in America none of them were as widely-known and loved as Christian. This Texas-born, Oklahoma-grown player inspired and influenced many guitarists of his generation and the following generations. Among his acolytes and devotees are Wes Montgomery, Herb Ellis, Jim Hall, and George Benson.<sup>1</sup>

Christian was born in Bonham, Texas, on July 29<sup>th</sup>, 1916 into a musical family. His father played guitar, his mother was a pianist who played at a local theater, and his older brothers played fiddle and mandolin.<sup>2</sup> The family moved north to Oklahoma City in 1918, where Christian would spend the entirety of his childhood. In order to earn supplemental income, the family would busk around town on a nightly basis. Given his young age, Charlie was initially a "board beater" and tap dancer.<sup>3</sup>

In Oklahoma City, he began to learn guitar from Ralph Hamilton, a local guitarist who was well-known for being able to play chord-accompanied melodies. It is possible Christian

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<sup>1</sup> Wayne E. Goins and Craig R. McKinney, *A Biography of Charlie Christian, Jazz Guitar's King of Swing* (Lewiston, New York: Edwin Mellen Press, 2005), 387-389.

<sup>2</sup> *Ibid.*, 1.

<sup>3</sup> *Ibid.*, 6.

picked up some music-reading and theory skills from Hamilton as well.<sup>4</sup> Christian became obsessed with the guitar, and by the early 1930s he had dropped out of school to focus entirely on performing music to earn money.<sup>5</sup>

Many authors discuss how Christian's first influences would have been the touring bands and guitarists he heard perform in Oklahoma City and on the radio as he grew up. These bands would have included western swing bands led by Bob Wills and Milton Brown. Goins and McKinney describe "western swing" as something of a hybrid between country and western music, and the swing music that largely defined popular music in the 1930s. These bands used fiddles and steel string guitars like a country band, but they performed the country tunes in their repertoire in arrangements akin to those of contemporaneous swing groups. In duple time songs they also emphasized beats 2 and 4 heavily, exactly as jazz musicians did.<sup>6</sup> The guitarists would have included players such as Eldon Shamblin and Leon McAuliffe.<sup>7</sup> Shamblin was in fact born the same year as Christian, and performing in Oklahoma City at the same time that Christian was beginning to play, so it is quite likely they were at least aware of each other's playing.<sup>8</sup> Gunther Schuller compares Christian's eighth-note swing feel to that of McAuliffe's, noting that it was more even than that of other swing-era jazz musicians and forecasted the way bebop players would swing their eighths.<sup>9</sup> Christian also would have heard jazz bands such as the Count Basie big band, with players such as Walter Page, Ben Webster, and Lester Young. Christian's bandmates in the Benny Goodman sextet related he used to sing along to Young's saxophone solos on bus trips. Christian was also aware of and listened to Django Reinhardt: the guitarist

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<sup>4</sup> Ibid, 15-16.

<sup>5</sup> Ibid., 20-21.

<sup>6</sup> Ibid., 104-106, 110, 113.

<sup>7</sup> Ibid., 123.

<sup>8</sup> Ibid., 95.

<sup>9</sup> Gunther Schuller, *The Swing Era: The Development of Jazz, 1930-1945* (Oxford University Press, 1989), 577.

Mary Osborne recounts she heard Christian perform a Reinhardt solo once in 1938 that she was also learning at the time.<sup>10</sup>

Slowly, Christian gained the respect of other jazz musicians in Oklahoma City, and by March 1935 was performing with Leonard Chadwick's Rhythmaires in their weekly Sunday night performances at the Ritz Ballroom. In fact, he probably began performing with them as much as a year prior to that on the radio. Christian's older brother, who was also an active musician in the city and a columnist for *The Black Dispatch*, a local newspaper, made a habit of singing his praises in his columns, and therefore increased the Oklahoma City public's awareness of the young guitarist.<sup>11</sup> Pianist Leslie Sheffield took over leadership of the Rhythmaires in June of 1935. In an interview with Craig McKinney, Sheffield stated: "[Christian's] ideas were very modern. We had something going [that] the general run of the musicians weren't quite hip to. A new thing and [new] sound, new ideas, new riffs..."<sup>12</sup> Even at this point, then, four years before he began playing with Benny Goodman and around five years before the beginning of the bebop movement, musicians were giving Christian credit for musical innovation. Throughout this early period of public and professional performance, Christian played an acoustic instrument that he amplified with a microphone, sometimes held between his legs.<sup>13</sup>

Unfortunately, in 1936 the Rhythmaires lost their regular gig at the Ritz, nor were they performing regularly on the radio. Generally speaking, the jazz scene across the Midwest and Southwest seems to have dried up due to the continuing effects of the Depression.<sup>14</sup> Nonetheless, Christian toured for a time with Alphonso Trent and his band from late 1936 into early 1937,

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<sup>10</sup> Shawn Salmon, "Imitation, Assimilation, and Innovation: Charlie Christian's Influence on Wes Montgomery's Improvisational Style in His Early Recordings (1957-1960)" (DMA diss., Ball State University, 2011), 26, 28.

<sup>11</sup> Goins and McKinney, *Charlie*, 66-68.

<sup>12</sup> *Ibid.*, 69.

<sup>13</sup> *Ibid.*, 75.

<sup>14</sup> *Ibid.*, 72-74.

spent time backing up a singer named Anna Mae Winburn, and then briefly returned to the Trent outfit from 1938 to 1939.<sup>15</sup> This work took him around the Midwest; it also provided him enough money to buy his first electric guitar, a Gibson ES-150.<sup>16</sup> After returning home from his second stint with Trent, Christian resumed performing regularly in Oklahoma City.<sup>17</sup>

Christian's career spanned a critical period in the history of the guitar, during which inventors successfully developed the technology to amplify the instrument. In the years prior to Christian's rapid ascent to fame, other jazz guitarists experimented with various means to increase the instrument's volume. Eddie Durham doubled on the guitar in addition to his main pursuit as a trombonist in Jimmie Lunceford's big band. Leonard Feather guesses his 1935 recording of "Hittin' the Bottle" with the Lunceford group is the first recording of amplified jazz guitar. At this point, Durham was playing a resonator guitar (one variety of the acoustic, steel-string guitar) with a microphone placed close to its soundhole.<sup>18</sup> Rickenbacker, an instrument manufacturer, had in fact already been producing a guitar with an electric pickup incorporated in its tiny metal body since 1931.<sup>19</sup> It was not until 1938, however, that Floyd Smith put this so-called "Frying Pan" electric guitar to work in the recording "Floyd's Guitar Blues" with the Andy Kirk Orchestra.<sup>20</sup> The Gibson ES-150 was first produced and sold in 1936. This was a hollow-body instrument with a single pickup,<sup>21</sup> and unlike the Frying Pan with its saucer-sized body appended to its neck, the Gibson's body took its form from the acoustic guitar. Steve Waksman surmises that Durham was playing this instrument when he met Christian briefly in

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<sup>15</sup> Ibid., 77-88.

<sup>16</sup> Ibid., 79.

<sup>17</sup> Ibid., 131.

<sup>18</sup> Leonard Feather, "The Guitar in Jazz," in *The Guitar in Jazz*, ed. James Sallis (Lincoln: University of Nebraska Press, 1996), 4-5.

<sup>19</sup> Steve Waksman, "Playing with Sound," in *Instruments of Desire* (Cambridge: Harvard University Press, 1999), 18.

<sup>20</sup> Feather, "Guitar in Jazz," 5.

<sup>21</sup> Waksman, "Playing with Sound," 18-19.



Oklahoma City in 1937, inspiring Christian to purchase one for himself as soon as he had the means.<sup>22</sup> Nonetheless, in the hands of these other players, the electric guitar had yet to make a lasting impression in the world of jazz.

It was only a few months later, in the summer of 1939, that he came to the attention of pianist Mary Lou Williams – this was the critical connection that ended up bringing him to the attention of producer and impresario John Hammond. Williams performed in the Andy Kirk band, one of a few Midwest territory bands to come to national attention in the 1930s. She was one of the band’s most-touted members, and none other than Count Basie sang her praises.<sup>23</sup> John Hammond aggressively promoted African-American music and the musicians who played it. He is well-known for working with Benny Goodman’s orchestra and helping to drive the integration of Goodman’s small groups.<sup>24</sup> According to Goins and McKinney, Williams heard Christian outplay the guitarist from the Kirk band in a jam session after the band performed in Oklahoma City in July of 1939. Later, during a chance encounter with Hammond at a recording session back in New York, Williams recommended Christian to Hammond.<sup>25</sup> Subsequently, Hammond traveled to Oklahoma City, heard Christian play, and convinced Goodman to hear Christian himself.<sup>26</sup> In August, Hammond brought Christian out to Los Angeles to join the Goodman group as it was on tour. An initial audition with Goodman during a recording session went poorly, with Christian nervous and unable to play well. However, later the same day as the session, Hammond and bassist Artie Bernstein surreptitiously set up Christian’s equipment on stage during the intermission of the Goodman orchestra’s performance at Victor Hugo’s

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<sup>22</sup> Ibid., 22.

<sup>23</sup> Goins and McKinney, *Charlie*, 131-135.

<sup>24</sup> Ibid., 141.

<sup>25</sup> Ibid., 136-138.

<sup>26</sup> Ibid., 147-152.

restaurant. Although Goodman was reportedly furious about this, he allowed Christian to join the performance, and upon hearing him begin to improvise, requested he continue playing for chorus after chorus.<sup>27</sup> From this point on Christian recorded and performed constantly with the Goodman sextet.

Unfortunately, Christian's output on record is nonetheless limited. In October of 1939, as part of the Goodman sextet, he recorded "Stardust", "Rose Room", and "Flying Home". In November, they recorded "Memories of You", "Soft Winds", and "Seven Come Eleven". These tracks contain some of Christian's best-known solos. In between these two sessions, he participated in a recording session with Lionel Hampton, Benny Carter, and others (separate from the Goodman group), and with blues singer Ida Cox (this work also featured the celebrated boogie-woogie pianist James P. Johnson).<sup>28</sup> His solos on the Hampton tracks are not as long as those with the Goodman sextet. He mostly functions in support of Cox, either simply comping or playing short fills behind her lyrics – nonetheless his playing is instantly recognizable to the aficionado. In February of 1940, the Goodman sextet had two more recording sessions, the latter of which produced "Till Tom Special" and "Gone With What Wind".<sup>29</sup> Throughout the spring of that year, sporadic sessions produced the tracks "The Sheik of Araby", "I Surrender, Dear", "Grand Slam", "Six Appeal", and "Good Enough to Keep (Air Mail Special)".<sup>30</sup> By the summer of 1940, Goodman was unable to play because of back pain, and had to undergo surgery. He was forced to temporarily disband his orchestra and kept only a few critical members on salary, including Christian.<sup>31</sup>

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<sup>27</sup> Ibid., 174-176.

<sup>28</sup> Ibid., 191-193.

<sup>29</sup> Ibid., 213-214.

<sup>30</sup> Ibid., 219-220.

<sup>31</sup> Ibid., 221.

Christian did not only perform with Goodman's group. Starting in the fall of 1940 and continuing through the first half of 1941, he would jam on an almost nightly basis at Minton's Playhouse, a club in Harlem. By her own account, he also spent a considerable amount of time with Mary Lou Williams. Williams is now recognized as one of the leading figures of the bebop movement, working with Thelonious Monk, Bud Powell, Billy Strayhorn, and others throughout the late 1930s and early 1940s to develop a new approach to jazz improvisation.<sup>32</sup> Minton's was set up by the owner of the hotel next door, Henry Minton, who was a former saxophonist. He wanted to create a venue in New York City where black jazz musicians could create their art without having to worry about prejudicial treatment. Minton brought on another saxophonist, Teddy Hill, as his club manager. Hill had formerly led bands that included trumpeters Dizzy Gillespie and Roy Eldridge.<sup>33</sup> Minton's became a critical meeting ground for the members of the bebop movement.

Christian quickly became a regular performer at Minton's, and according to Williams, was one of the few players who could keep up with other habitués such as Monk, Gillespie, and drummer Kenny Clarke.<sup>34</sup> He is sometimes cited as being instrumental in the development of bebop style, perhaps even more so than Parker or Gillespie, who are commonly named as two of its first innovators. Frustratingly, no one ever seems to be able to explain exactly why or how this was true – statements to this effect are only ever broad claims that something about the rhythmic and harmonic content of his solos signal the transition from swing to bebop style, or are nascent bebop. Even the seemingly omniscient jazz historian Gunther Schuller can only muster this: "His rhythms are more sharply delineated, more incisive, driven by a new, cleaner kind of

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<sup>32</sup> Ibid., 226-227.

<sup>33</sup> Ibid., 227-228.

<sup>34</sup> Ibid., 229-232.

propulsive swing energy... Melodically, too, Christian offers a more modern streamlined conception, almost completely linear, i.e. less chained to the underlying chords, and filled out with more chromatic passing tones".<sup>35</sup> While this is certainly evocative writing, and not *wrong*, it does not clarify how Christian's playing was *more* advanced than other progenitors of the bebop movement by comparing their solos and specifically showing differences in their improvisational styles. Below I will discuss Christian's pitch language in detail, but because my knowledge of the pitch language of Parker and others is general and therefore limited, I myself cannot demonstrate that Christian was somehow "ahead" of other bebop players. I remain skeptical of this idea, especially given what I cover below about Christian's approach.

Dizzy Gillespie was skeptical of it as well.<sup>36</sup> Collins himself recounted that he and Christian had different approaches to improvisation on guitar while maintaining ample mutual respect for one another.<sup>37</sup> Fortunately, from a historical perspective, a student at Columbia University named Jerry Newman made a habit of recording the jam sessions at Minton's and they give us a crucial glimpse into Christian's playing at the time.<sup>38</sup> Christian also frequented another after-hours club named Monroe's, where Newman followed at least a few times.<sup>39</sup> These recordings were made between the fall of 1940 and the summer of 1941. Howard Spring, in his master's thesis on Christian's improvisational style, transcribed his solos on these recordings. The Goins and McKinney biography provides quotes from several musicians who were active at Minton's that back up Spring's assertion that Christian often played more active lines on off-tonic sections of tunes; specifically, the quotes relate that his solos were most intense over tunes'

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<sup>35</sup> Schuller, *Swing Era*, 577.

<sup>36</sup> Goins and McKinney, *Charlie*, 236-237.

<sup>37</sup> *Ibid.*, 239-240.

<sup>38</sup> *Ibid.*, 242.

<sup>39</sup> *Ibid.*, 247.

harmonically active bridges.<sup>40</sup> Curiously, as far as I am aware, no one has relied on Newman's recordings, or Spring's transcriptions of them, to compare Christian to Parker, Gillespie, or other early bebop players. While I would personally find this inquiry interesting, it is outside the scope of this paper and so I will not undertake it here.

Christian continued recording with the Goodman sextet into the beginning of 1941. This included the star-vehicle track "Solo Flight", which was created specifically for Christian to solo over with the support of the Goodman orchestra.<sup>41</sup> He also continued to perform with the small group and at Minton's into the early summer.

At this point, however, Christian suddenly fell ill and he was admitted to Bellevue Hospital in New York City. The doctors there initially expected him to recover in a few months. Members of his family, and his friends in music, were surprised by the quick negative trajectory of his health. It is not even clear if Christian himself knew that he was sick.<sup>42</sup> Either in the summer of 2004 or 2005,<sup>43</sup> Goins and McKinney interviewed a doctor, Gravelly E. Finley, who worked in Oklahoma City. Finley said he treated Christian as early as 1937 and at that point it was already clear to him that Christian had tuberculosis. Based on this, Goins and McKinney assert Christian would have known all along that he had the disease.<sup>44</sup> I am personally slightly wary that Finley's recollection could be so clear, decades after the fact. Whatever Christian's awareness of his condition was prior to 1941, it was obvious by July of that year that he had tuberculosis and he was moved to Sea View Hospital on Staten Island. Goins and McKinney suppose that possibly as early as his childhood, Christian contracted a strain of tuberculosis from

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<sup>40</sup> Ibid., 245-246.

<sup>41</sup> Ibid., 303-304.

<sup>42</sup> Ibid., 308-309.

<sup>43</sup> The year is unclear because the authors name one in Chapter 15 of their biography and another in that chapter's endnotes.

<sup>44</sup> Ibid., 342-345.

someone else, and that his constant activity as a musician, both with the Goodman band and at late-night and after-hours venues, exacerbated his condition.<sup>45</sup> He remained ill through the fall of 1941, and while his condition was reported to have improved in December, it worsened again in the winter of 1942. He passed away on March 2<sup>nd</sup>, 1942.<sup>46</sup>

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<sup>45</sup> Ibid., 313-314.

<sup>46</sup> Ibid., 325-329.

## Charlie Christian's Improvisational Style

The most notable characteristic of Charlie Christian's improvisations is the overwhelming prevalence of a relatively small set of motives. These motives make up the bulk of his solos. He plays them at different pitch levels, and rhythmically and metrically modifies them. This is the core element of his style. Shawn Salmon reasonably proposes that when Christian played arpeggios, he relied on one left-hand shape (or pattern) for each individual arpeggio.<sup>47</sup> Howard Spring goes further, stating that all the motives he played originate from a small set of left-hand patterns that Christian shifted up and down the neck of the guitar.<sup>48</sup> This is not unique to Christian's guitar-playing. But it is precisely because of it that his solos were so replete with a diverse but small set of riffs.

Additionally, while it was not exceptionally beyond the mainstream of jazz pitch or rhythmic language at the time he was active, his manner of improvisation played a role in the definition of bebop, according to a slew of musicians who both played with him and learned to play by listening to him. The tertian extension he played most was the 9<sup>th</sup>; he would also play the 13<sup>th</sup> of dominant harmonies and the 6<sup>th</sup> of both major and minor tonic harmonies.<sup>49</sup> When he played chromatic pitches they were very often notes better interpreted as members of the blues or bebop scales, or chromatic neighbor or passing tones, as opposed to altered tertian extensions. Perhaps for this reason the jazz critic and historian Gunther Schuller gives Christian credit not

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<sup>47</sup> Salmon, "Imitation", 46-47.

<sup>48</sup> Howard Spring, "The Improvisational Style of Charlie Christian" (MFA thesis, York University, 1980), 52-53.

<sup>49</sup> In both major and minor-mode tonic harmonies that would otherwise include a 7<sup>th</sup>/b7<sup>th</sup>, the 6<sup>th</sup> serves the same function as a color tone beyond the triad. In dominant seventh harmonies, the b7<sup>th</sup> serves a crucial voice-leading function and therefore cannot be replaced; by representing the 6<sup>th</sup> as the 13<sup>th</sup>, the jazz musician acknowledges that the b7<sup>th</sup> must be present beneath.

for breaking new ground in pitch language, but mostly for defining the sound of the electrified jazz guitar, and delivering coherent solos (because they were created from a small set of riffs).<sup>50</sup>

Finally, and importantly, Christian almost definitely would not have thought of his improvisations using chord-scale theory, because jazz musicians of his generation did not learn to think about improvisation this way. They tended to think about improvisation as paraphrasing or embellishing a tune's melody, or playing arpeggios based off of its harmonic progression. The "chord-scale" theory of analyzing harmonic progressions and its application to jazz education did not exist until the 1960s, following George Russell's book, *The Lydian Chromatic Concept*, and the work of jazz educators such as Jamie Aebersold and David Baker.<sup>51</sup> Given the reliance of Christian's solos on riffs, it's not unreasonable to conjecture that he developed a repertoire of riffs that he, by ear, found worked over the harmonic structures of the types of songs he played, and that he came up with these riffs based on what he heard others in his musical milieu playing. Nonetheless below I will discuss his improvisatory material using the language of chord-scale theory because it is the method by which modern jazz musicians analyze and conceive of the music they play.

My discussion of Christian's style below relies on Shawn Salmon's doctoral dissertation, Howard Spring's master's thesis, and my own analysis of Christian's solos. Salmon's dissertation in fact looks to understand Christian's influence on Wes Montgomery. Salmon studies how both players treated dominant harmonies in order to understand how they "created melodies and tension".<sup>52</sup> Salmon is actually referring to a broad set of harmonies and harmonic progressions when he uses the term "dominant harmonies", including all of the following:

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<sup>50</sup> Schuller, *Swing Era*, 571-572.

<sup>51</sup> David M. Mooney, "Joe Pass's *Catch Me!*, *Joy Spring*, and *For Django*: Transcription and Analysis" (PhD diss., New York University, 2015), 89-91.

<sup>52</sup> Salmon, "Imitation", 2.



regular dominant and dominant seventh chords, ii-V and V-IV progressions, secondary dominants, fully-diminished seventh chords, and tritone substitutions.<sup>53</sup> Spring's thesis describes many of the riffs Christian used, and how he deployed them harmonically, rhythmically, and formally. Salmon's dissertation is useful because it fairly clearly helps us understand the pitch language Christian used, and Spring's thesis is the only scholarly work I know besides my own that specifically identifies and categorizes what riffs Christian used (many people – including seasoned jazz guitarists – tend to say Christian “played the guitar like a horn” and was “riffy” without being able to go into any more detail, which is frustrating for a student of jazz guitar). Salmon's paper is limited in scope, however, and Spring's categorizations are too broad for my taste, not to mention that he seems to have overlooked a few riffs that I have noticed in my own study of Christian's solos. In my discussion below I will attempt to combine their analyses and fill in the gaps they left.

#### Broad rhythmic characteristics of Christian's style

Christian almost exclusively improvises single-note lines that are predominantly composed of quarter notes and swung eighth notes. He did occasionally employ even eighths and triplet eighths. He also played in double time, essentially exclusively on slow ballads. Spring contrasts this with Django Reinhardt, who employed these rhythmic features much more widely in his solos, contributing to their rhythmically busier (“notier”) sound. Spring feels Reinhardt played more notes because, playing an unamplified instrument for the majority of his career, he had to play more notes to be heard and overcome the guitar's natural lack of sustain.<sup>54</sup>

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<sup>53</sup> Ibid., 13-14.

<sup>54</sup> Spring, “Style”, 25-26.

Spring also highlights how Christian phrases across bar lines and larger formal boundaries. He demonstrates this by examining Christian's solo on the tune "Benny's Bugle", from a recording made in November 1940 and included on the album *Solo Flight – The Genius of Charlie Christian*. In this solo, which lasts two choruses of a twelve-bar blues form, Christian's statements begin on the downbeat of a measure in just one case out of nine (on the first downbeat in the second chorus). Seven of these statements cross bar lines; of those seven, one crosses the formal boundary between the first and second thirds of the form (the second statement in the first chorus). Spring feels that several, stretching from the third measure of the second chorus to its final measure, effectively combine into a larger phrase that crosses the two boundaries within the chorus (at m. 5 and m. 9).<sup>55</sup>

Spring contrasts this with a solo by the guitarist, trombonist, and arranger Eddie Durham on another 12-bar blues. Durham worked with Count Basie and was therefore active throughout the Midwest (including Oklahoma City) during the 1930s. Durham begins his first five statements literally on downbeats, and while one appears to cross a formal boundary (from m. 8 into m. 9), the note he plays on the final eighth note in m. 8 is a classic jazz syncopation that "belongs" to the final four-bar chunk of the form.<sup>56</sup>

Salmon suggests that Christian's drive comes in part from his use of anticipation.<sup>57</sup> Spring says it comes from the fact that he often repeats a short cell several times before the final repetition continues into a longer melodic statement. Furthermore, the longer lines these repeated cells introduce are often part of Christian's "library" of riffs. Christian tends to do this at the beginning of formal sections of a piece (the beginning of an 32-bar ballad's A section, for

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<sup>55</sup> Ibid., 26-28.

<sup>56</sup> Ibid., 26-27.

<sup>57</sup> Salmon, "Imitation", 43.

example). This is in contrast to Reinhardt, for example, who does not use short repeated cells to introduce longer formulas, and does not use them overwhelmingly at the outset of formal units like Christian does.<sup>58</sup>

At last, Spring notes that Christian creates tension by repeating notes, augmenting them, and placing them in metrically important spots.<sup>59</sup>

### Pitch language of stepwise passages

Christian tended to play either fairly static or arpeggiated lines over tonic harmonies in his solos, as Spring notes in his thesis. In tonic major sections, he either employed tonic riffs (as categorized by Spring and myself), improvised freely around the tonic triad and scale, or played an essentially static line. I discuss his treatment of tonic minor chords below because he usually plays arpeggios over them. Generally, Christian's tonic riffs and improvisations imply the major scale, but some include **b3** or **b7**, rendering bluesy or Mixolydian sounds over tonic harmonies and formal segments.

Unsurprisingly, Christian often uses the Mixolydian mode when creating scalar lines over dominant harmonies. He also occasionally used the chromatic scale to imply a dominant harmony. Salmon provides several examples of both of these scales in Christian's playing.<sup>60</sup> In mm. 18-19 of his solo on Breakfast Feud, for example, Christian states the G Mixolydian scale in full from **b7** (F) down to **1** (G). As Salmon states, the way Christian uses this scale is not distinctive compared to other jazz musicians of the time.<sup>61</sup> However, as I will discuss below,

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<sup>58</sup> Spring, "Style", 32-34.

<sup>59</sup> Ibid., 90.

<sup>60</sup> Salmon, "Imitation", 39-46.

<sup>61</sup> Ibid., 46.

Christian often uses three chromatic fragments in scalar lines over dominant harmonies, two of which are not typical.

Christian almost exclusively used chromatic pitches within scalar contexts in his solos. These instances of chromaticism amount to various versions of the bebop scale and the blue 3<sup>rd</sup>. Any other chromaticism is so rare that it does not warrant being considered a fundamental element of Christian's improvisational style. Christian was not alone in using these devices, nor is it clear that he was the first to use what are now classified as bebop scales; he certainly did not innovate the use of the blue 3<sup>rd</sup>. David Baker asserts that saxophonists Coleman Hawkins and Lester Young used chromaticism in an unsystematic fashion, whereas Charlie Parker and Dizzy Gillespie applied it more systematically.<sup>62</sup> From Parker's and Gillespie's usage, Baker classified bebop scales as they are now understood. Salmon believes that Christian's style helped solidify the playing conventions that led to Baker's classifications.<sup>63</sup> Whatever Christian, Parker, and Gillespie were doing in the early 1940s, it is important to note that Mark Levine believes some chromaticism in Louis Armstrong solos from as early as 1927 can be classified as bebop scale material.<sup>64</sup>

At its core, a bebop scale is a diatonic scale that has one chromatic passing tone added to it so that chord tones will land in metrically strong positions. The prototypical example is of a one-octave major scale that begins on beat 1 of a measure of 4/4 (Example 2.1 shows the C



Example 2.1. The C major bebop scale.

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<sup>62</sup> David Baker, *How to Play Bebop Vol. 1, The Bebop Scales and Other Scales in Common Use* (Bloomington, Indiana: Frangipani Press, 1985), 1.

<sup>63</sup> Salmon, "Imitation", 55-56.

<sup>64</sup> Mark Levine, *The Jazz Theory Book* (Petaluma, California: Sher Music, 1995), 172.

major bebop scale). With a chromatic passing tone added between scale degrees **5** and **6** of a major scale, scale degrees **1, 3, 5, 6,** and **1** will land on all the beats in the measure and the following downbeat. Without the chromatic passing tone, scale degree **6** and the final scale degree **1** would land on the second eighth note of beats 3 and 4, respectively. According to Salmon, between them Mark Levine and David Baker defined four bebop scales: dominant bebop, Dorian bebop, major bebop, and melodic minor bebop. Salmon found evidence of the first three (shown in Figure 2.1) in Christian’s solos. The major bebop scale adds a passing tone



Figure 2.1. Bebop scales Shawn Salmon identified in Christian’s solos.

between scale degrees **5** and **6** of the major scale. The dominant bebop scale adds a passing tone between scale degrees **1** and **b7** of the Mixolydian scale (the 5<sup>th</sup> mode of the major scale). The Dorian bebop adds a passing tone between scale degrees **b3** and **4** of the Dorian scale (the 2<sup>nd</sup> mode of the major scale).<sup>65</sup> I will emphasize, though, that analyzing the pitch content of Christian’s solos as portions of these scales does not always make sense because he is so reliant on riffs.

Despite the common understanding that bebop scales are meant to align chord tones with metrically strong positions, Salmon shows Christian seems fairly unconcerned with this issue. Christian actually often places the chromatic note in all of these scales on a strong beat of a measure in duple time (beats 1 or 3). In addition, the way he uses chromaticism does not fit neatly into Baker’s definitions of bebop scales, because he not only chromatically connects **b7**

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<sup>65</sup> Salmon, “Imitation”, 56-57.

and **1**, but also very often chromatically connects **4** and **5**, and **2** and **1**, when descending the dominant bebop scale.<sup>66</sup>

In summary, Christian used chromatic pitches almost exclusively in scalar contexts. The chromatic pitches he used, defined as scale degrees, include **b2**, **b3**, **3**, **#4/b5**, and **7**. Any instance of **b3** was as a lower neighbor to **3**, functioning as a blue third. **3** functioned as part of the Dorian bebop scale. **b2**, **#4/b5**, and **7** all appeared as members of a dominant bebop scale. The use of **3** and **7** was consistent with the nascent practice of bebop scales. The way Christian used **b2** and **#4/b5** was unique, and like **7**, these chromatic scale members appeared in descending fragments only.

#### Pitch language of arpeggiated passages

When arpeggiating harmonies, Christian rarely strayed outside the members of the harmony he elaborated. The most “unconventional” he gets when he applies the unaltered 9<sup>th</sup> and 13<sup>th</sup>. These always occur over dominant harmonies. Any other pitch that seems “outside” the harmony is either anticipating the following harmony or part of a scalar riff or blues line.

Spring’s Second Tonic Formula, discussed below as **2T**, was his standard tactic for opening tonic sections with arpeggios. This “formula” is simply a major arpeggio that ascended one octave, moving from root to root. The one unique element was that the 3<sup>rd</sup> was always decorated from below with the blue 3<sup>rd</sup>. Christian implied tonic minor chords with minor 6<sup>th</sup> arpeggios – that is, arpeggios that outlined the tonic minor 6<sup>th</sup> chord, which is just a minor triad with the 6<sup>th</sup> added on top.<sup>67</sup> This is in line with harmonic practice of the time, as tonic chords

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<sup>66</sup> Ibid., 57.

<sup>67</sup> Spring, “Style”, 91.

were commonly the triad plus an added 6<sup>th</sup>. Occasionally these may appear to be root-position half-diminished 7<sup>th</sup> arpeggios built on 6<sup>th</sup> degree of the scale (6).

Christian implied diminished harmonies with diminished arpeggios. Dominant harmonies he often implied with half-diminished seventh arpeggios or diminished triad arpeggios. In these cases, he started from the 3<sup>rd</sup> of the underlying harmony. The diminished triads would thus spell out the 3<sup>rd</sup>, 5<sup>th</sup>, and b7<sup>th</sup>, while the half-diminished seventh arpeggios would spell out the same three chord members and the 9<sup>th</sup> as well. These arpeggios both ascended and descended. When the half-diminished seventh arpeggios ascended, Christian would regularly follow the 9<sup>th</sup> with a step up to the 3<sup>rd</sup>, or a leap up to the 5<sup>th</sup> or 13<sup>th</sup>.<sup>68</sup> In these cases, the 9<sup>th</sup> and the 13<sup>th</sup> were never altered. When he descended half-diminished seventh arpeggios, at the outset of the gesture he almost invariably stepped down from the 3<sup>rd</sup> into the 9<sup>th</sup> of the underlying harmony, and very often stepped down from the 3<sup>rd</sup> to the root at the bottom of the gesture.

### Harmonic anticipation

Christian employed harmonic anticipation constantly in his solos. Harmonic anticipation is when the soloist plays pitch material that implies the harmony after the one the rhythm section is currently playing. It is critical to acknowledge this aspect of his style because otherwise, certain pitch material in his solos would appear to be strange chromaticism that did not conventionally imply the underlying harmony.

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<sup>68</sup> Salmon, "Imitation", 48-49.

One excellent example of anticipation in occurs in his solo on “Air Mail Special”

recorded on June 20, 1940 (Example 2.2). In the last four measures of the bridge (from the

*Example 2.2. Measures 21-24 of one of Christian’s solos on “Air Mail Special”, by Benny Goodman, Jimmy Mundy, and Charlie Christian, as transcribed by Spring, with minor corrections by the author.*

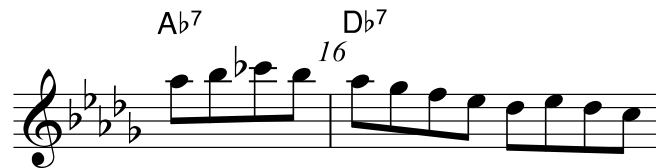
pickup to m. 21 to the downbeat of m. 25), he is consistently nearly two beats “ahead” of the rhythm section and the changes. From the pickup to m. 21 to the downbeat of m. 22, he plays three ascending diminished 7<sup>th</sup> arpeggios in root position, each starting three eighth notes early. On beat 3 of m. 22, he is already implying the Ab<sup>7</sup> chord in m. 23: the figure he begins to play is just a descending half-diminished 7<sup>th</sup> arpeggio based on the 3<sup>rd</sup> of the Ab<sup>7</sup>, introduced by a chromatic move from the 3<sup>rd</sup> of the harmony down into the 9<sup>th</sup>. Once he reaches the 3<sup>rd</sup> at the bottom of the arpeggio he ascends back to the 9<sup>th</sup> (Bb) by beat 3 of m. 23. Starting from the following A, he is implying the G<sup>7</sup> in m. 24, arpeggiating down through F and D, the 7<sup>th</sup> and 5<sup>th</sup> of the G<sup>7</sup>, to B on the downbeat of m. 24. The first two beats clear the major third at the bottom of G<sup>7</sup>. The leaping figure in beats 3 and 4 of m. 24 are already implying the C<sup>maj</sup> chord of the final A section of the tune. My transcription below is taken from Howard Spring’s thesis,<sup>69</sup> although I have re-written the final note of m. 22 and the fourth eighth note of m. 23 as Gbs instead of F#s so that it is more clear what harmony Christian is elaborating, and that the note on beat 4 of m. 23 is in fact F and not F#. Also, Spring incorrectly transcribed the first note of m. 24 as C. It is in fact a B.

Another pair of clear examples, perhaps slightly less evocative, occur in his solo on “Honeysuckle Rose” (included as “Honeysuckle Rose (II)” in Ayeroff’s collection), released on

<sup>69</sup> Spring, “Style”, 122.

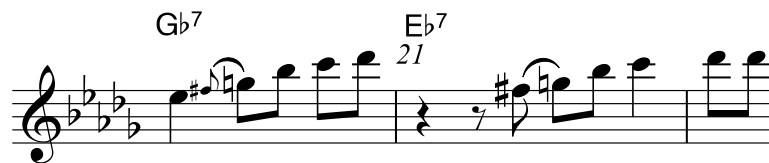


the Jazz Anthology album *Charlie Christian Live 1939/1941*.<sup>70</sup> The pickup to m. 16 implies the upcoming  $\text{Db}^7$  harmony, moving up from the 5<sup>th</sup> (Ab) stepwise to the  $\text{b}7^{\text{th}}$  (Cb) before descending stepwise back to the 5<sup>th</sup> on the downbeat of m. 17, right at the start of the bridge (Example 2.3). A bit later in the bridge, in the second half of m. 20, Christian implies the  $\text{Eb}^7$  in



*Example 2.3. Christian anticipates the  $\text{Db}^7$  in m. 16 in the last two beats of m. 15, in a solo on “Honeysuckle Rose”, by Fats Waller.*

mm. 21-22 with the figure G-Bb-C-Db (the G is introduced by what is effectively a blue 3<sup>rd</sup> – F#) (Example 2.4). Just to confirm he played what he meant and it implied  $\text{Eb}^7$ , he reiterates the same set of pitches once that harmony arrives.



*Example 2.4. Christian anticipates an upcoming  $\text{Eb}^7$  in mm. 21-22 in the same solo on “Honeysuckle Rose”, by Fats Waller.*

### Charlie Christian’s riffs

Much of the improvised solos Christian plays are in fact constructed from a collection of riffs that he had learned to apply over the harmonic progressions of the music he performed. Spring organized the riffs he found into two groups: one that typically occurred over tonic chords, and another that typically occurred over non-tonic chords. I will not rely on this organization alone because it prescribes certain roles to the elements of each group that I do not

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<sup>70</sup> This album is not readily available. The reader can listen to this solo on YouTube at this URL: <https://www.youtube.com/watch?v=rPQHnSKtsic>

believe hold in all cases, and because the two groups he spells out do not in fact include all of the riffs Christian employs. I have identified two riffs that he does not deal with in his analysis.

Spring is correct in acknowledging that these riffs are malleable rhythmically and melodically.<sup>71</sup>

Christian sometimes adds or subtracts notes, or increases or decreases the length of individual note values in individual instances of various riffs.

Christian's riffs are mechanically quite apt for the capable guitarist's left hand, which is tasked with depressing the strings on the instrument's neck. Colloquially, his riffs lie well under the fingers. This is undoubtedly the primary reason they are so prevalent in his playing. In Figures 2.2 and 2.3, I show how two patterns on the neck each contain multiple riffs (these are not comprehensive lists of riffs that fit into each pattern). These patterns both exist in one position, meaning a span of four frets not requiring the guitarist to shift his hand, or stretch his fingers, along the neck. The first set of diagrams illustrates how one pattern includes the pitches for the riffs **1T**, **2T**, **HA<sub>6</sub>**, and **D**. The second set illustrates how another pattern includes the

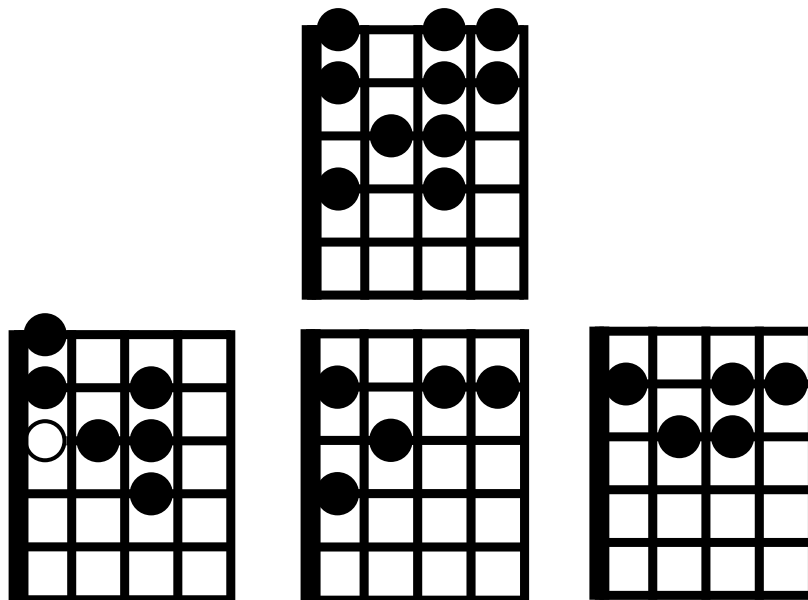


Figure 2.2. The left-hand pattern at the top allows the performer to play the notes in: **1T/2T**, shown on the left; the notes in **HA<sub>6</sub>**, shown in the middle; the notes in **D**, shown on the right.

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<sup>71</sup> Ibid., 35.

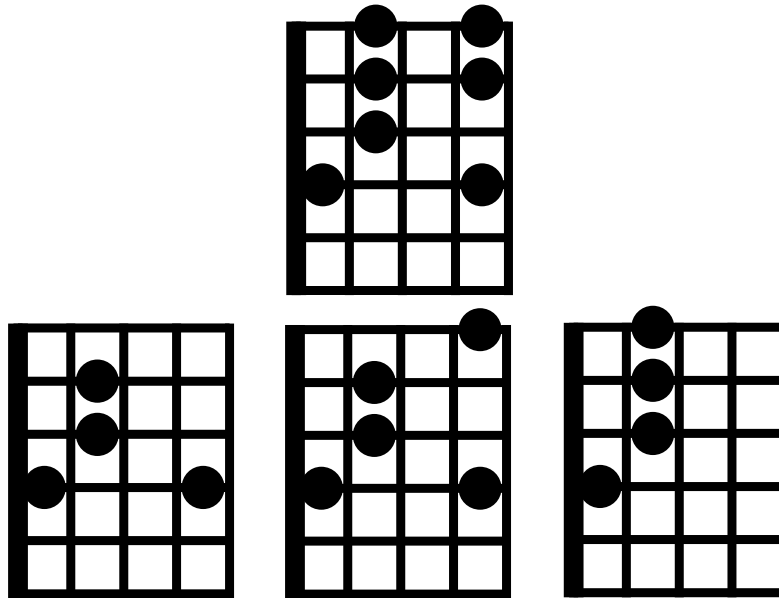


Figure 2.3. The left-hand pattern at the top allows the performer to play the notes in **HA**<sub>1</sub>, **HA**<sub>4</sub>, and **HA**<sub>7</sub>, in order from left to right on the bottom.

itches for all the riffs in the **HA** family besides **HA**<sub>6</sub>. I will describe all these riffs in detail later in this chapter. In these diagrams, the lowest string of the instrument is at the bottom; the lowest fret is at the left.

How did Christian use his riffs? Spring says that the prevalence of riffs correlates positively with the tempo of a tune, and how well he knew a tune.<sup>72</sup> In addition, he tended to elide riffs with one another: the final note of one riff also functioned as the first note of the following riff.<sup>73</sup> To explain this second point, Spring observes that Christian recorded “Flying Home”, “Honeysuckle Rose”, “I Got Rhythm”, “Air Mail Special” all at least four times, and his solos on all of these takes are replete with riffs. On the other hand “Dinah”, “I Never Knew”, “I Found a New Baby”, and “Ida” he only recorded once each, and all use fewer riffs. This is despite the fact that all the above-named tunes are roughly in the same tempo range.<sup>74</sup> Strikingly,

<sup>72</sup> Ibid., 91, 93.

<sup>73</sup> Ibid., 98.

<sup>74</sup> Ibid., 93.

one recording of “Flying Home” has twice as many measures with “formulaic activity” as the one existing recording of “Ida, Sweet as Apple Cider”, save for mm. 9-16 of the solo on “Ida”, which is based on a common harmonic progression.<sup>75</sup> Because different riffs tend to treat certain kinds of harmony (tonic or non-tonic), the riff material helps define the harmonic structure of a tune.<sup>76</sup> In addition, because he has no standard riffs to deal with minor tonic harmonies, typically he uses few riffs over formal sections defined by this harmony, if at all.

Especially over tonic sections of tunes in major modes, Christian introduces riffs by playing a repeated tonic, or repeating a simple cell that is not unique or consistent enough to be considered a riff.<sup>77</sup> For example, over the tonic, he may play a stepwise ascent from the root to the 3<sup>rd</sup>, or alternate back and forth between a chord tone and a diatonic upper or lower neighbor. The first two A sections on “Honeysuckle Rose” from *Charlie Christian Live 1939/1941* serve well as an example. Despite the fact that Ayeroff notates the changes under the A section as four measures of Ab<sup>7</sup> followed by four measures of Db<sup>maj</sup>, it is clear from the way Christian improvises that he is treating the entire A section as on tonic, Db<sup>maj</sup>. At the outset of the solo, he ascends from Ab to Bb before leaping up to Db, which he repeats on quarter notes until the downbeat of the second measure. At this point he descends through Cb and Bb to Ab (this Mixolydian-seeming descent invariably eventually leads to one of Christian’s standard riffs).

After this he alternates back and forth between Ab and Gb before playing a riff in m. 4 (Example



Example 2.5. “Honeysuckle Rose”, by Fats Waller, mm. 1-4 of Christian’s solo. Christian implies Db major (with Cb hinting at the Mixolydian mode) before playing one of his characteristic riffs.

<sup>75</sup> Ibid., 95.

<sup>76</sup> Ibid., 91.

<sup>77</sup> Ibid., 32-33.

2.5). Later on, in mm. 13-15 over  $D\flat^{maj}$ ,  $D\flat$  is just about the only note Christian hits besides two hops up to play blue note-inflected Fs (Example 2.6). The opening of his solo on “I’ve Found a



Example 2.6. “Honeysuckle Rose”, by Fats Waller, mm. 13-15 of Christian’s solo.

New Baby” from *Solo Flight – The Genius of Charlie Christian* simply repeats the stepwise ascent from D to F over the tonic chord,  $D$ . In other cases Christian “noodles” around on **1**, **2**, **5**, and **6**. Each of the first two A sections of his solo on “Dinah” (which can be heard on the album *Jazz Guitar Hero*) open this way. In measure 1, he leaps up from  $E\flat$  to  $A\flat$  and then back down over the tonic  $A\flat^{maj}$  chord, and then in m. 2 steps up from  $E\flat$  to F before moving into a standard



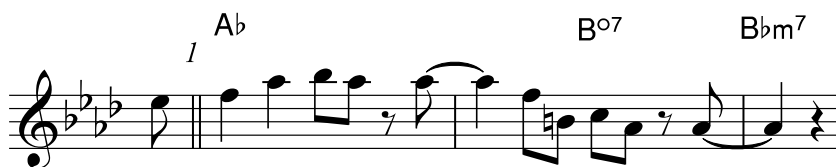
Example 2.7. “Dinah”, by Harry Akst, Sam Lewis, and Joe Young, mm. 1-3 of Christian’s solo.

riff he used to treat tonic chords (Example 2.7). The opening of the second A section, in mm. 9-13, develops these two very basic gestures (Example 2.8). The initial leap up from  $E\flat$  to  $A\flat$



Example 2.8. “Dinah”, by Harry Akst, Sam Lewis, and Joe Young, mm. 9-13 of Christian’s solo.

turns into a leap from  $E\flat$  up to  $B\flat$  in mm. 9-10, before returning to the original  $E\flat$  to  $A\flat$  leap at the pickup to m. 11. At this point, however, Christian adds in  $B\flat$  above  $A\flat$  as an upper neighbor, and after a bluesy descending gesture in m. 12, he reiterates the  $E\flat$ -F cell first heard in m. 2, which leads into a different tonic-area riff than the first A section. The start of his solo on “I Can’t Give You Anything But Love” demonstrates the same concept. Over the tonic  $A\flat^{maj}$  chord, he plays only  $E\flat$ , F,  $A\flat$ , and  $B\flat$  before playing a typical tonic-area riff (Example 2.9).



*Example 2.9. “I Can’t Give You Anything But Love”, by Dorothy Fields and Jimmy McHugh. Here are mm. 1-2 of Christian’s solo, showing “noodling” on tonic-area pitches before a riff in m. 2.*

As I said above, I do not prefer Spring’s method of categorizing riffs. This is because his method regards some cells as “prefixes” to a “core” riff, and not as riffs of their own. Therefore each of his two large families of riffs become a somewhat confusing web of possible arrangements of cells. I will instead regard any regularly appearing pitch cell as its own riff, and point out how some of them interact with others.

### **The 1T riff.**

I will begin by discussing the family of riffs that Spring identifies as his “First Tonic Formula”. Because this is a bit clunky, I will just refer to the riff as **1T**. As Spring’s name implies, this riff most often appears over tonic or serves to generalize a formal segment as in the tonic key of the tune. However, I will not discuss Spring’s prefixes and introductory phrases to this riff for the reasons I cover in the following paragraph. What Spring refers to as the “core” of the “First Tonic Formula” is what I regard as **1T**, shown in Figure 2.4 below.<sup>78</sup> The numbers in the figure represent scale degrees in the tonic. The second note of the riff can be either **4** or **6**, and the final note can be either **5** or **1**. The immutable element of this riff is the **b3** to **3** cell.



*Figure 2.4. 1T.*

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<sup>78</sup> Ibid., 37.

Spring classifies four prefixes to the “core”.<sup>79</sup> I am reluctant to parse Christian’s solos this way because I understand two of the prefixes as one riff of their own, and the other two as too generic and brief to count as “riff” material. In addition, Spring classifies “introductory phrases” to each one of his prefixes – that is, prefixes to the prefixes. Again, these gestures are either too generic, too brief, or both to warrant being categorized, not to mention that classifying prefixes of prefixes is cumbersome. Instead we should recognize that – as his fellow jazz musicians, and later Spring, did – Christian generally did not use riffs as much over tonic harmonies, and much of what he improvised over tonic was either based on scalar fragments connecting the members of the tonic triad, or a small set of descending gestures that he could stretch through repetition to fill up space in the changes. I will point out examples of this when analyzing complete solos below.

Christian typically uses **1T** over tonic chords, but he uses it over other harmonies as well. This is especially true in blues forms, and feasible because the riff is bluesy in itself. The critical notes (the first, third, fourth, and fifth) are all endemic to major-mode blues solos because they are the notes of the tonic triad and the blue third. Christian also uses the riff over non-tonic harmonies in the key of the tonic in many solos on tunes that are not blues, for example on tunes based on rhythm changes.<sup>80</sup> What this means is that Christian uses the riff to harmonically generalize, characterizing entire formal sections as tonic-area even when the sounding harmony is not the tonic.

**1T** most often starts on the downbeat or third beat of a measure. In some of these cases Christian lengthened its first note. If it does not begin on beats 1 or 3 of a measure, it will occur on the eighth note anticipation to one of those beats – this anticipation is an idiomatic feature of

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<sup>79</sup> Ibid., 36.

<sup>80</sup> Ibid., 57.

jazz rhythm. In these cases also, the first note of the riff is lengthened. Least common are placements such that the riff begins on last eighth note of a measure but the first note is not

The musical score is written in treble clef, 4/4 time, and key of F major (three flats). It consists of 32 measures, with measure numbers 5, 9, 13, 17, 21, 25, and 29 indicated at the start of their respective lines. The score includes various melodic patterns with annotations above the notes:

- Measures 1-4: Annotations include "leap" (over measures 2-3), "step" (over measures 3-4), "3T" (over measures 3-4), and "C (to G, m. 5)" (over measure 5).
- Measures 5-8: Annotations include "HA-5" (over measures 5-6), "Eb7" (under measure 5), "T" (over measures 6-7), "HD-3" (over measures 7-8), and "Eb7" (under measure 8).
- Measures 9-12: Annotations include "leap, developed" (over measures 9-10), "Ab" (under measure 9), "step, developed" (over measures 11-12), and "b" (under measure 12).
- Measures 13-16: Annotations include "(step)" (over measure 13), "1T" (over measures 13-14), "1T" (over measures 15-16), "Ab" (under measure 15), "Eb7" (under measure 16), and "D" (over measure 16).
- Measures 17-20: Annotations include "Fm" and "D (cont.)" (under measure 17), "Fm(maj7)" (over measure 18), "Fm7" (under measure 19), and "Fm6" (under measure 20).
- Measures 21-24: Annotations include "Fm" (under measure 21), "Fm6" (under measure 22), "Eb7" (under measure 23), and "T" (over measures 23-24).
- Measures 25-28: Annotations include "Ab" (under measure 25), "1T" (over measures 25-26), "1T" (over measures 27-28), and "1T" (over measure 28).
- Measures 29-32: Annotations include "Bbm7" (under measure 29), "1T" (over measures 29-30), "Eb7" (under measure 30), "3T" (over measures 30-31), "Ab" (under measure 31), "2T" (over measure 31), and "1T" (over measure 32).

Example 2.10. Christian's solo on "Dinah", by Harry Akst, Sam Lewis, and Joe Young. This transcription is by Stan Ayeroff.



lengthened, or it begins on the second eighth notes of beats 1 or 3.<sup>81</sup> However common any type of metrical placement is, it is noteworthy that Christian clearly intuitively felt the riff was metrically and rhythmically flexible. Christian's solo on "Dinah" is a perfect example of the rhythmic flexibility of **1T** (please see the notated transcription, in Example 2.10).

This tune is played in Ab major on this recording. The first occurrence of the riff takes up all of m. 13. Here the first note of the riff, Eb, is stretched out to a dotted quarter note, while the remaining notes are eighth notes. The **b3-3** movement (or "blue cell") is placed so that **3** lands on beat 4 of m. 13. The final note of the riff lands on the last eighth note of the measure. The next occurrence of the riff follows almost immediately. The first three notes of m. 14 are one way Christian typically introduce **1T**: a Mixolydian-sounding descent from the tonic through **b7** and **6** to **5**, where the riff begins. Here, the riff begins with Eb on the second eighth note of beat 2, the second note of the riff is eliminated, and the blue cell takes up beat 3, occurring an eighth note earlier in the measure compared to the previous instance of the riff. Instead of leaping from **3** up to **5**, this instance ends with a leap down from **3** to **1**. The final note lands on beat 4, following along with the blue cell's shift earlier into the measure. In the final A section of his solo, **1T** occurs four more times. The first occurrence, in m. 26, is missing what should be the first note, Eb. Instead, second note of the prototypical form of the riff, Db, lands on the downbeat. It is also effectively a dotted quarter note, since the third note of the riff lands on the second eighth note of beat 2. Here, the blue cell and final note are situated so **3** lands on beat 3. The second occurrence comes in m. 28, in a metrical disposition seen before (the blue cell takes up beat 3), and all the notes are present. The third occurrence crosses the barline between mm. 29-30. This is another case where the first note is stretched out, this time to a half note that lasts from the second eighth

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<sup>81</sup> Ibid., 36-42.

note of beat 2 in m. 29 to beat 4. Just as in m. 13, the following F is literally an eighth note preceding a strong beat. That strong beat is empty, and then Christian plays the final three notes of the riff. The blue cell is situated so that **3** lands on beat 2 of m. 30. The final occurrence of **1T**, in m. 32, is incomplete because it is missing its final note. It begins directly on the downbeat with a long Eb, the blue cell takes up beat 3. In this solo, we see Christian deploy this riff so that various critical notes (the first note and blue cell) land in different metrical positions, and with minor pitch alterations (sometimes a note is missing or the riff ends on a different note than usual).

### The 2T riff.

This is the same as Spring’s “Second Tonic Formula”, which is simply an ascending major triad that includes the blue third. See Figure 2.5. While often the b3<sup>rd</sup>-3<sup>rd</sup>-5<sup>th</sup> cell in the ascent takes the form of triplet eighth notes, the b3<sup>rd</sup> can also function as an ornament to an eighth note 3<sup>rd</sup>. Spring notes that Christian takes care to ensure that the final note of the formula, the tonic, lands on beat 1 or 3 of whatever measure in which it appears. Sometimes this requires Christian to add in notes, for example the 6<sup>th</sup>, after the 5<sup>th</sup>. Christian also employs this formula regularly at the close of phrases that end a formal segment of a tune. As Spring points out, **1T** and **2T** interact with each other, like other riffs.<sup>82</sup>



Figure 2.5. 2T.

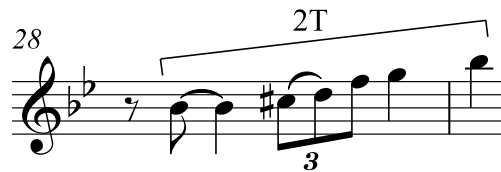
The “Dinah” solo will serve us again, now to provide us with a typical example of **2T** (please refer back to Example 2.10). The one instance of this riff occurs at the very end of

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<sup>82</sup> Ibid., 60-67.

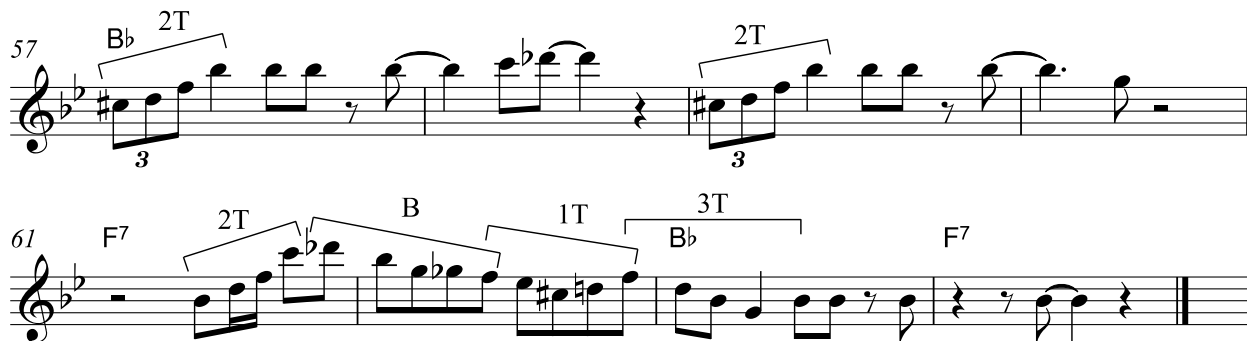
Christian’s solo, starting right on the downbeat of m. 31 and ending on beat 3 of the same measure. This instance demonstrates several standard features of the riff. First, it begins and ends on strong beats. Second, the first note is longer than the three notes in the ascent below the final tonic (those notes being the  $b3^{rd}$ ,  $3^{rd}$ , and  $5^{th}$ ). Third, the blue note is really just a brief ornament to the  $3^{rd}$ , in contrast to **1T**, where the blue note is an integral part of the riff. Lastly, it is not literally the last thing Christian plays at the end of the final A section of the tune’s form, but it is part of the final closing gesture in mm. 31-32.

There are several examples of **2T** in Christian’s solo on “Guy’s Got to Go” that demonstrate various common alterations to the riff. The first I will discuss appears in mm. 28-29 (Example 2.11). This is an instance where Christian added the  $6^{th}$  (G) between the  $5^{th}$  and the



Example 2.11. **2T** in “Guy’s Got to Go”, a contrafact on “I Got Rhythm”, the title of which refers to trumpeter Joe Guy.

tonic at the top of the figure, in part to help ensure the tonic landed on a strong beat (in this case, the downbeat of m. 29). It is worth noting, however, that part of how Christian makes this happen is by stretching the  $6^{th}$  out to a quarter note, whereas the preceding three notes (Db, D, and F) are triplet eighths. The other three examples of **2T** in this solo are in the final eight



Example 2.12. The final A section of “Guy’s Got to Go”, with three instances of **2T**.

measures, mm. 57-64 (Example 2.12). The first two are altered in the same way: they do not actually begin on tonic but on the  $b3^{rd}$ , and that note occurs on the downbeat in both instances (at the start of mm. 57 and 59). Spring’s transcription of these two figures is more rhythmically accurate than Ayeroff’s, in my opinion: the first three notes in each are best represented as triplet eighth notes. The third instance starts out on tonic exactly as you would expect, but lacks the  $b3^{rd}$  and, instead of finishing on the tonic, overshoots up to the  $9^{th}$  (C) and stretches just beyond that to Db before falling back towards tonic as an instance of another riff covered below gets rolling. All of these three occurrences are in line with Spring’s assessment that this riff often opens melodic statements.

One further example of **2T** bears mentioning, because it takes the front of the riff and transposes it up to create the implication of a plagal progression; the last note of the plagal progression provides the usual ending. Spring points this out in one of Christian’s solos on the tune “Wholly Cats”. As a teenager who was just starting to listen to his music, I always enjoyed hearing this happen right at the end of his solo on “Seven Come Eleven”. See Example 2.13. He starts on Ab at m. 29, and plays Cb-C-Eb (the  $b3^{rd}$ ,  $3^{rd}$ , and  $5^{th}$ ). Then, in m. 30, he essentially begins the riff again on Db. The E-F-Ab ascent completes the move up to the tonic through the  $6^{th}$ , just as the riff normally features, but the Db-E-F-Ab cell also implies the subdominant triad,  $Db^{maj}$ .

2T begins... and is transposed to imply a plagal progression.

*Example 2.13. The transposing version of 2T, as it appears in mm. 29-30 of Christian’s solo on “Seven Come Eleven”, by Christian and Benny Goodman.*

### The 3T riff.

The **3T** riff is an arpeggio that implies tonic by spelling out a tonic chord with the added 6<sup>th</sup>. See Figure 2.6. The only version of this riff is a descending tonic arpeggio that moves through all the members of the tonic 6<sup>th</sup> chord, starting from the 5<sup>th</sup> and moving down the full octave before leaping from the 5<sup>th</sup> at the bottom back up to the tonic. Sometimes, the low 5<sup>th</sup> is not present. For this reason the riff can appear to imply vi<sup>7</sup> in the major mode and vi<sup>7b5</sup> in the minor mode. Nonetheless it is always meant to imply tonic. On occasion part of the initial descent through the tonic triad is filled in with stepwise movement. I am calling this the **3T** riff

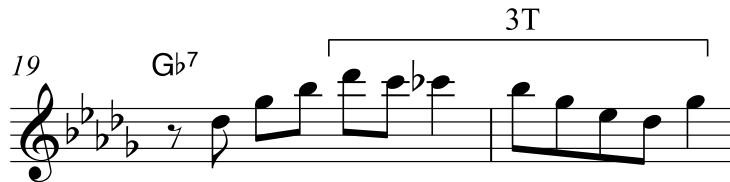


*Figure 2.6. 3T.*

because Christian uses it over tonic harmonies at the end of phrases – it is, in the spirit of Spring, a “third tonic formula”. It is very similar to a modal-mixture descending half-diminished figure Christian often plays when elaborating tonic sections as well. The difference is in the quality of the implied harmony and what function that harmony serves. I discuss this modal mixture riff in a following section.

Once again, “Dinah” will give us examples of the riff in question (please once again refer back to Example 2.10). The first example comes in the first phrase of the solo, stretching from the Eb at the end of m. 2 until the Ab at the end of m. 3. This is the riff’s standard form. The second example, along with occurrences of **1T** and **2T**, ties together the last phrase in the solo. **3T** takes up the second half of m. 30, starting from the Eb on the second eighth note of beat 2 and ending on the downbeat of m. 31. This instance of the riff omits the low 5<sup>th</sup>, which would have been Eb. This passage, from mm. 29-32, shows us how Christian linked his riffs together: **1T** begins in the middle of m. 29, and its last note in m. 30 is also the first note of **3T**. **3T**

finishes m. 30 and its last note on the downbeat of m. 31 is also the first note of **2T** in m. 31. The final measure is a slightly truncated version of **1T**, as I covered above.



Example 2.14. **3T** appears over a dominant chord in the mm. 19-20 of one of Christian's solos on "Honeysuckle Rose", by Fats Waller.

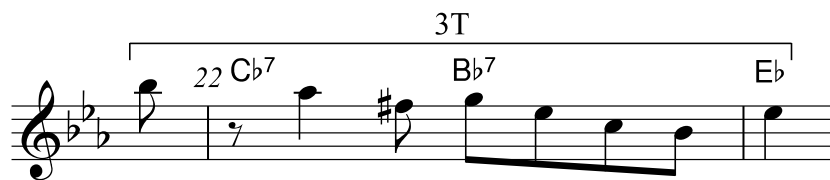
One curious example of the **3T** occurs in Christian's solo on "Honeysuckle Rose" from the album *The Essential Charlie Christian*. This is the only time I am aware of that Christian used the riff to imply a chord other than tonic. On the bridge of the tune in mm. 19-20, he plays it over  $G\flat^7$  (Example 2.14). Starting from  $D\flat$ , he descends chromatically to  $B\flat$ , and then continues the riff as normal down through  $G\flat$  through  $E\flat$  to the low  $D\flat$  before leaping back up to  $G\flat$ .

Christian's solo on "Pagin' the Devil" also features two clear instances of **3T**. This solo is two choruses of an 12-bar  $E\flat$  blues. For this reason both statements feature blue note inflections under the  $3^{\text{rd}}$  in the descending arpeggio. The first statement of **3T**, from mm. 18-19, serves to



Example 2.15. **3T** in mm. 18-19 of Christian's solo on "Pagin' the Devil", by Walter Page and Milt Gabler.

anticipate the return to tonic in the seventh measure of the form (which occurs at m. 19). See Example 2.15. This statement is standard except for the  $F\#$  blue note that precedes the  $G$ . The second statement stretches from the final eighth note in m. 21 to the downbeat of m. 23 (Example 2.16). This statement not only incorporates the  $F\#$  blue note again, but interpolates  $A\flat$  between the initial  $B\flat$  and the blue note cell. These instances of **3T** fit right in nicely in this solo: Christian relies on the pitches found in the  $E\flat$  version of **3T**, plus the blue note  $F\#/G\flat$ , to create



Example 2.16. *3T* centered on m. 22 from Christian's solo on "Pagin' the Devil", by Page and Gabler.

roughly half of the material in the solo in the second half of the solo, from the final upward movement at the end of the first chorus on.

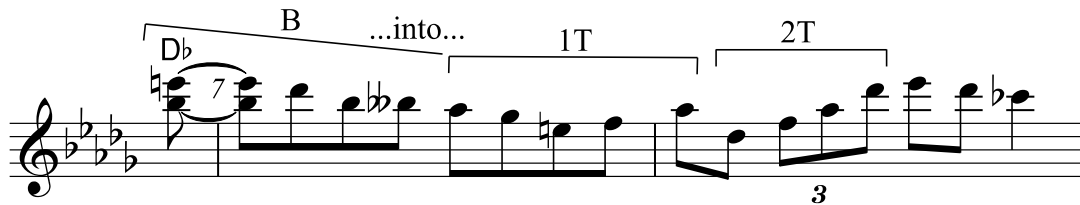
### The **B** riff.

This riff spans typically spans a minor sixth. See Figure 2.7. It opens with two downward minor third leaps creating a diminished fifth, and then descends two half steps. Christian sometimes supports the first note with the note a tritone below it. **B** often immediately precedes **1T**; that is, the final note of **B** is also the first note of **1T**. As a result, like **1T**, it most often appears over tonic harmonies and in tonic-area formal sections. Sometimes, the lower note of the initial tritone is absent or the entire tritone is absent and the figure only spans a perfect fourth. When this riff implies the tonic harmony, the chromatic cell always falls where it ought to in the major or minor bebop scale, which are the bebop scales used to imply major or minor tonic harmonies. Spring treats **B** as a prefix to his First Tonic Formula. I believe it is distinct enough to warrant being considered its own entity, separate from **1T**.



Figure 2.7. **B**.

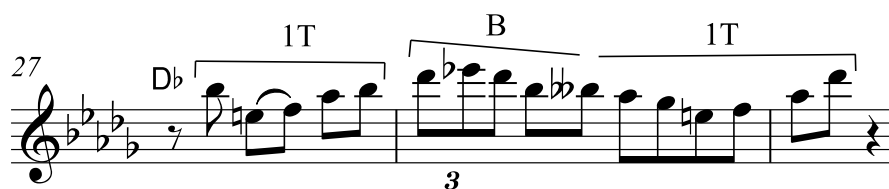
Christian's solo on "Honeysuckle Rose" from *Charlie Christian Live 1939/1941* features the standard usage of **B** (Example 2.17). **B** begins on the pickup to m. 7 and links up immediately with the instance of **1T** that begins in m. 8 and ends on the downbeat of m. 9 (and I



Example 2.17. **B** leads directly into **1T** in m. 7 of one of Christian's solos on "Honeysuckle Rose", by Fats Waller.

consider the  $\text{Db}^{\text{maj}}$  arpeggio that follows after to be **2T** despite the absence of the blue note). The chromatic cell  $\text{Bb-Bbb-Ab}$  is the chromatic cell between **6** and **5** found in the major bebop scale. Note that, just before this dual statement of **B** and **1T**, in mm. 5-6 a statement of **1T** closes out the solo's first phrase.

A more dramatic example of **1T** bookending **B** comes in Christian's solo on "Lips Flips", one of the performances Jerry Newman recorded at Minton's. This tune is just a contrafact<sup>83</sup> on the changes for "Stompin' at the Savoy", a Duke Ellington tune. The **1T/B** complex occurs in the final A section of his first chorus on the tune, from mm. 27-29 (Example 2.18). The first instance



Example 2.18. **1T** bookends **B** in mm. 27-29 of Christian's solo on "Lips Flips".

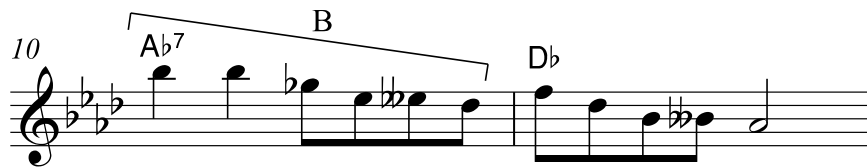
of **1T** here is missing what should be its first note,  $\text{Ab}$ , instead coming in on  $\text{Bb}$  before leaping down to its blue cell. The final note ( $\text{Ab}$ ) lands on beat 4 of m. 27, and then the line moves through  $\text{Bb}$  up to an upper-neighbor figure on  $\text{Db}$  on the downbeat of m. 28. The  $\text{Db}$  in this upper-neighbor figure is the first note of **B**, which spans the first half of the measure. Its final

<sup>83</sup> In jazz, a contrafact is a new tune that has been composed over previously existing changes.



Ab, on beat 3 of m. 28, is also the first note of the second instance of **1T**. That riff ends in the first beat of m. 29. Here, the three successive riffs are literally connected together into a single line with just one odd note out (the Bb at the end of m. 27) serving to connect the first two.

One more instance of **B** bears mentioning here because Christian uses it over a dominant harmony instead of over a tonic harmony. This occurs in m. 10 of his solo on “I Can’t Give You Anything But Love”. This song is in the key of Ab major; at this point in the form, the tune is tonicizing Db (IV in the tonic) with an Ab<sup>7</sup> chord. Christian lays **B** over this harmony starting on Bb, the 9<sup>th</sup> of the Ab<sup>7</sup>. Then, slightly different from usual, he drops a major third to Gb instead of the normal minor third drop in order to stay within the chord tones. From here on out the riff is as usual, dropping a minor third to Eb before descending chromatically to Db (Example 2.19).



Example 2.19. **B** appears in m. 10 of Christian’s solo on “I Can’t Give You Anything But Love,” by Dorothy Fields and Jimmy McHugh.

What happens here is still curious, however, as Eb, the last chord tone in the measure, comes in a metrically unaccented position (the second eighth note of beat 3) and the last two notes we hear are decidedly not chord tones (the b5<sup>th</sup> and 11<sup>th</sup> of the chord, in tertian extension-speak).

Christian releases the inherent tension here by momentarily leaping up to F (providing a resolution from the Gb of the Ab<sup>7</sup> to the F of the Db<sup>maj</sup>) and then continuing from Db (now a chord tone over Db<sup>maj</sup>) through what looks like a fragment of **3T**.

## The HA riffs.

Christian regularly used half-diminished seventh arpeggios, ascending and descending, to imply dominant harmonies. I will regard each of those sets as family. The members of the ascending family I will refer to as **HA<sub>x</sub>**, where the numeric subscript identifies each member.

Figure 2.8 contains all members of the family.

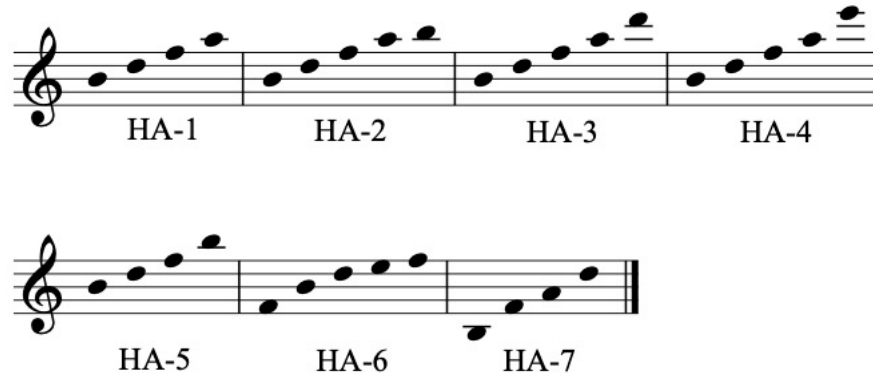


Figure 2.8. The HA family of riffs.

Without explicitly naming them, Spring treats as a family ascending half-diminished seventh arpeggios that end in various ways. After the initial arpeggio, which invariably begins from the 3<sup>rd</sup> of the underlying dominant, the arpeggio may step up from the 9<sup>th</sup> to the 3<sup>rd</sup>, or leap up to either the 5<sup>th</sup> or the 13<sup>th</sup>. In this family of riffs Spring also includes a diminished-triad arpeggio in root position; the last two of the four notes leap from the b7<sup>th</sup> of the dominant seventh up to the 3<sup>rd</sup>. Spring notes that the half-diminished arpeggios tend to start on a strong beat and end on a strong beat. If one does not begin on a strong beat, Christian will shorten the length of the b7<sup>th</sup> and 9<sup>th</sup> (first and foremost) in order to make sure the final note of the gesture (the 13<sup>th</sup>, 5<sup>th</sup>, or 3<sup>rd</sup>) does. The diminished-triad arpeggio also begins on strong beats typically, but because it is only four notes long, will end just before the following strong beat.<sup>84</sup>

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<sup>84</sup> Ibid., 70-72.

Christian’s solo on “Honeysuckle Rose” from *The Essential Charlie Christian* features **HA<sub>2</sub>**, **HA<sub>4</sub>**, and **HA<sub>6</sub>**. **HA<sub>4</sub>** is the very first thing we hear in the solo, on the downbeat of m. 1 (Example 2.20). This instance starts from C, the 3<sup>rd</sup> of the **A<sub>b</sub>7** below. **HA<sub>6</sub>** appears in mm. 10-11 in between **C** and **D** (Example 2.21). **HA<sub>2</sub>** is the last gesture in the bridge, starting on beat 3 of m. 23 and ending on the downbeat of m. 24 (Example 2.22). In all three cases, the riffs begin and

Example 2.22. **HA<sub>4</sub>** appears in m. 1 of one solo on “Honeysuckle Rose”, by Fats Waller.

Example 2.21. **HA<sub>6</sub>** in m. 10 of the same solo on “Rose”, by Waller.

Example 2.20. **HA<sub>2</sub>** closing out the bridge in m. 23 of this performance of “Rose”, by Waller.

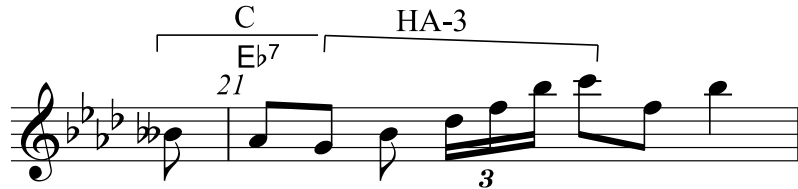
end on strong beats, just like Spring observes. I will admit that **HA<sub>6</sub>** is different from all the other **HA** riffs, because the ascent begins on the **b7<sup>th</sup>** of the underlying dominant beneath instead of its 3<sup>rd</sup> (and like **HA<sub>5</sub>** it only literally implies a diminished triad, and not a half diminished seventh chord).

**C** introduces **HA<sub>5</sub>** and leads into the first instance of **T** in Christian’s solo on “I Can’t Give You Anything but Love”. See the beginning of m. 15 of his solo (Example 2.23). This version of the riff begins on G because Christian is playing it over **E<sub>b</sub>7**. Because he is playing in

Example 2.23. **HA<sub>5</sub>** sandwiched between **C** and **T** in m. 15 of Christian’s solo on “I Can’t Give You Anything But Love,” by Dorothy Fields and Jimmy McHugh.

double time here, the final G can be considered to land on a “strong beat” even though it is literally beat 2 of the measure.

**HA<sub>3</sub>** does not seem to occur very often, but it pops up in the version of “Honeysuckle Rose” recorded during John Hammond’s “Spirituals to Swing” concerts at Carnegie Hall (Example 2.24). Halfway through the bridge, in m. 21, the riff sits over an Eb<sup>7</sup> chord. While the



Example 2.24. **HA<sub>3</sub>** in m. 21 of one of Christian’s performances of “Honeysuckle Rose”, by Fats Waller.

move up from G to the high Bb is literally **HA<sub>3</sub>**, Christian steps up to C right after, making it look like **HA<sub>4</sub>**. The fact that he ends this gesture on Bb on beat 4 of m. 21 suggests this was the note he “meant” to end on, although that is pure conjecture and it would have been unsurprising had he in fact ended on the C.

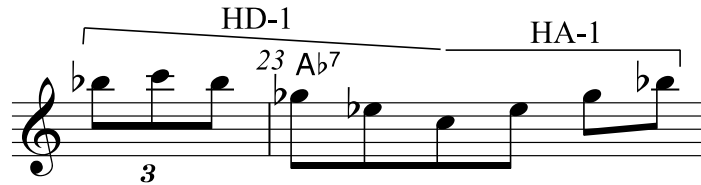
**HA<sub>1</sub>** is simply a half-diminished arpeggio, so it is somewhat odd to consider it a “riff”, but given that Christian systematically treats his dominant seventh chords with a collection of structures built on this arpeggio, it is justified. Spring points it out in m. 48 of “Air Mail Special” (also known as “Good Enough to Keep”) from *Solo Flight – The Genius of Charlie Christian*.<sup>85</sup> See Example 2.25. Christian in fact descends through the same arpeggio using **HD<sub>1</sub>**, described



Example 2.25. Half-diminished arpeggio riffs in mm. 47-48 of one Christian solo on “Air Mail Special”, by Benny Goodman, Jimmy Mundy, and Charlie Christian.

<sup>85</sup> Ibid., 73.

below, in the last two beats of m. 47, leading right into **HA**<sub>1</sub>. It seems this is Christian's favorite way to handle this particular moment in the form of this tune. In the previous chorus during the same solo, in mm. 22-23, he plays literally the same pitch sequence, starting one beat later in m. 22 than he does in m. 46 (in both cases he is anticipating the **Ab**<sup>7</sup> harmony). See Example 2.26.

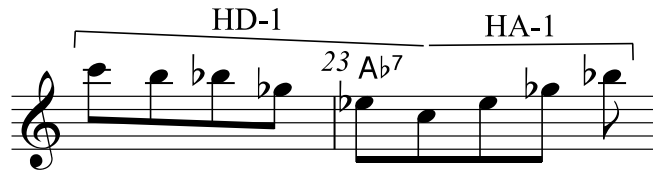


Example 2.26. The very same pitch and rhythmic content in mm. 22-23 from the same solo as Example 2.25.

A look at his solo on this tune from the album *Charlie Christian: The First Master of the Electric Guitar* again reveals the same pitch sequence at mm. 22-23 (Example 2.27). And in the same measures of a yet another solo on this tune from *The Essential Charlie Christian*, the only



Example 2.27. Another solo on "Air Mail Special" with the same pitch sequence at the same part of the bridge.

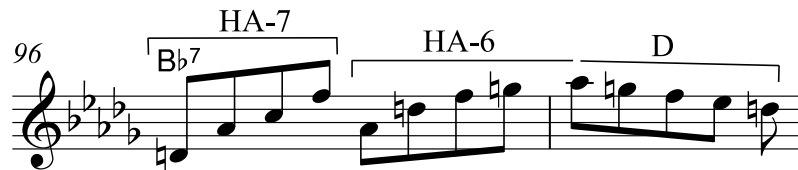


Example 2.28. Yet another "Air Mail" solo with the same spot in the bridge treated the same way.

difference is that the whole step at the beginning of **HD**<sub>1</sub> is chromatically filled in (Example 2.28). It should be noted that these two solos (from *Solo Flight*) were recorded in March of 1941 and June of 1940, in the order I discuss them. Therefore this was not just how Christian thought

of this formal moment or chord progression at one distinct point in time. This is according to the recording dates Spring provides with his transcriptions.

**HA7** appears in its typical disposition in m. 96 of the tune “Swing to Bop”, recorded at Minton’s. This is an alternate title for the Eddie Durham tune “Topsy”, which he wrote for Benny Goodman’s orchestra. The riff is similar to **HA6** because unlike others in this family, it begins with a tritone leap up. Unlike **HA6**, however, it begins from the 3<sup>rd</sup> of the prevailing dominant harmony, not its b7<sup>th</sup>. As we can see in m. 96, they are paired: **HA7** leads directly into **HA6**, which continues into **D** in m. 97 (Example 2.29). Other examples of **HA7** exist in



Example 2.29. **HA7** followed immediately by the common **HA6-D** complex in mm. 96-97 of “Swing to Bop”.

Christian’s two solos on “I’ve Found a New Baby”, one from *Solo Flight – The Genius of Charlie Christian* and the other from *Solo Flight – Charlie Christian with the Benny Goodman Sextet, Septet, and Orchestra*.

### The HD riffs.

This family is much smaller than the **HA** family, with just three members. They are not uniform in function. See Figure 2.9. **HD1** is just **HA2** in retrograde, and also implies dominant harmonies. Sometimes the initial whole step is chromatically filled in. **HD2** also clearly outlines a descending half diminished seventh arpeggio, but it begins from the 9<sup>th</sup> of the underlying

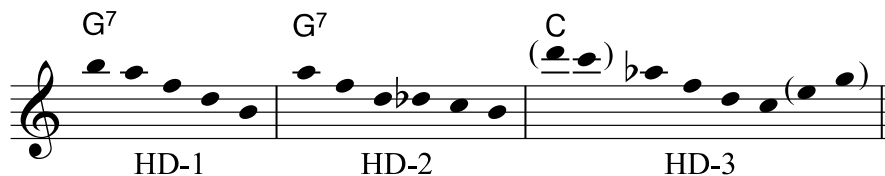
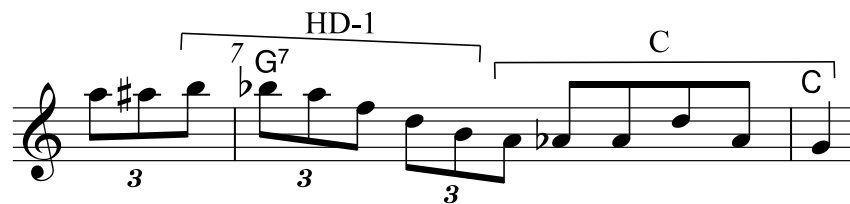


Figure 2.9. The **HD** family of riffs.

dominant chord instead of stepping down from the 3<sup>rd</sup> into the 9<sup>th</sup>, and when it reaches the 5<sup>th</sup> of the underlying dominant, it moves down chromatically to the 3<sup>rd</sup>. **HD<sub>3</sub>** is a half diminished seventh arpeggio in third inversion. This riff, which I have only observed in solos on tunes in major-mode keys, implies a plagal modal-mixture progression: I-ii<sup>7b5</sup>-I.

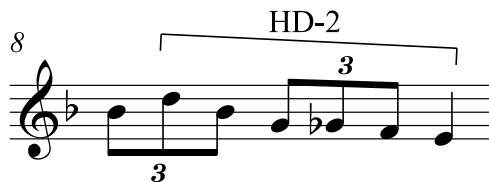
A standard example of **HD<sub>1</sub>** appears in Christian’s solo on “I Surrender, Dear” starting on the final note of m. 6 (Example 2.30). This instance is based on B, implying the G<sup>7</sup> that arrives in



Example 2.30. **HD<sub>1</sub>** elides into **C** in m. 7 of “I Surrender, Dear” by Gordon Clifford and Harry Barris.

the second half of m. 7, even though it literally sounds over D<sup>7</sup> (Christian is harmonically generalizing the measure). The initial whole step here is chromatically filled in. **C** immediately follows. This is a typical riff pairing.

**HD<sub>2</sub>** finishes off Christian’s brief solo on the bridge of “As Long as I Live” (Example 2.31). This is the eighth measure of his solo but the 24<sup>th</sup> measure of the song’s form. This measure is over C<sup>7</sup>, leading back to the tonic of the tune. The riff therefore spans from D down to E; the chromatic cell spans from the second into the third beat from G to E. Spring offers

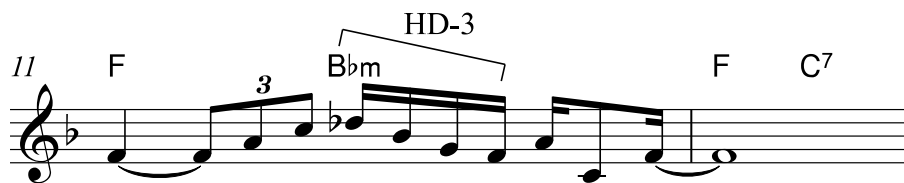


Example 2.31. **HD<sub>2</sub>** over a C<sup>7</sup> in m. 8 of Christian’s solo on “As Long as I Live”, by Ted Koehler and Harold Arlen.

examples from “Wholly Cats” on p. 162, “Memories of You” on p. 140, “I Can’t Give You Anything but Love” on p. 130, and “Benny’s Bugle” on p. 108 of his thesis; I have spotted it in

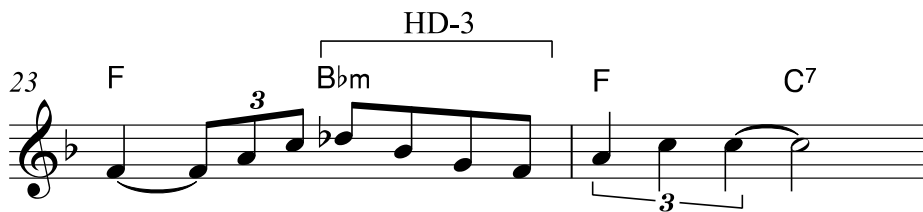
Ayeroff’s “Honeysuckle Rose (III)” in m. 18. This riff can end phrases, but as Spring points out, it can also introduce **HA** riffs or **2T**.<sup>86</sup>

**HD<sub>3</sub>** appears twice in Christian’s solo on “Good Morning Blues”, at the same formal point both times. Christian’s solo here is two choruses over a 12-bar blues in F. Irrespective of whatever Count Basie, the song’s author, envisioned for the final two bars of the changes, Christian uses **HD<sub>3</sub>** to imply a plagal modal-mixture progression, which is exactly the purpose it always serves. At m. 11, he ascends an F major triad, accelerating from a quarter note into triplet eighth notes, and then further accelerates into double time as he plays the descending G<sup>-7b5</sup> arpeggio in third inversion, ending back on F (Example 2.32). He then anticipates the return to



Example 2.32. **HD<sub>3</sub>** is part of the gesture in mm. 11-12 that ends the first chorus of Christian’s solo on “Good Morning Blues”, by James Rushing, Count Basie, and Eddie Durham.

tonic by one beat, still in double time. The exact same thing happens in the 11<sup>th</sup> measure of the second chorus, m. 23, except that **HD<sub>3</sub>** is no longer in double time (Example 2.33). Perhaps Christian plays it in double time in m. 11 to maintain a sense of momentum in the midst of the solo, and plays it in normal time in m. 23 to create a sense of release and closure as it ends. (**HD<sub>3</sub>** also shows up in m. 7 of “Dinah”: here it is Bb<sup>-7b5</sup> in third inversion over Ab.)



Example 2.33. **HD<sub>3</sub>** in mm. 23-24 of Christian’s solo on “Good Morning Blues”, by Rushing, Basie, and Durham, in a nearly identical gesture to that seen in Example 2.32.

<sup>86</sup> Ibid., 74. 76.



### The **D** riff.

**D** is a scalar descent between **b7** and **3** in the Mixolydian scale, often used to imply a dominant seventh chord. See Figure 2.10. The final note sometimes connects this riff with an **HA** riff. Spring points out that sometimes the first two notes in **D** are turned into a triplet upper-neighbor figure on **6** and **b7**.<sup>87</sup> This riff very often follows **HA**<sub>6</sub> and leads directly into **C**.

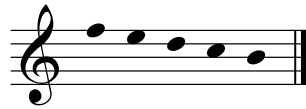


Figure 2.9. **D**.

Spring treats this riff as a prefix to the ascending half-diminished arpeggios of his “Non-Tonic Formulas” without giving it a specific appellation.<sup>88</sup> After reading through all the transcriptions he completed, and checking them against Ayeroff’s (which are really just a subset of those that Spring did), I can find only a few instances in which **D** actually immediately precedes an ascending half-diminished arpeggio. I will also add that although **D** is a rather plain scalar movement, it shows up regularly and in much greater frequency than other fragments of the Mixolydian scale, say. I am in fact unable to easily call to mind any other such fragment that does regularly appear and serves a similar purpose (elaborating a dominant harmony) in Christian’s solos. With the above in mind, I choose to regard it as a riff of its own.

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<sup>87</sup> Ibid., 73-74.

<sup>88</sup> Ibid., 73.



Example 2.34. Two characteristic instances of **D** in mm. 9 and 11 of one of Christian’s solos on “Honeysuckle Rose”, by Fats Waller.

Two perfect examples of **D** occur in Christian’s solo on “Honeysuckle Rose” from one of the Carnegie Hall “Spirituals to Swing” concerts organized by John Hammond in 1938 and 1939 (the recording can be found on the album *John Hammond’s Spirituals to Swing – the Legendary Carnegie Hall Concerts 1938/9*). In the second A section of the solo, in mm. 9-11, two separate instances of **D** lead into two separate instances of **C** (Example 2.34). They occur at the same pitch level both times, over  $A\flat^7$ , descending from  $G\flat$  to **C**. The first instance of **C** and the second instance of **D** are connected by **HA6**.

### The C Riff.

This riff is a chromatic cell that varies in size between a major third at its largest and a whole step at its smallest. See Figure 2.11. **C** almost always implies dominant, so in the figure the pitches reflect what different versions of the riff would look like were they implying  $G^7$ . All

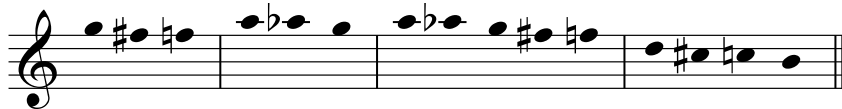
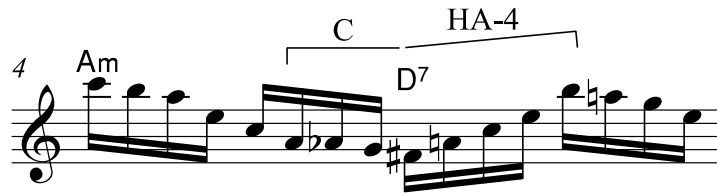


Figure 2.10. **C**.

but one instance of the **C** I found in Stan Ayeroff’s transcriptions of Christian’s solos clear the whole steps between **1** and **b7**, **5** and **4**, and **2** and **1**. In cases where the line descends from **5** to **4**, it always continues down to the third of the prevailing harmony, so that the riff spans a minor third from **5** to **3**. Otherwise, the riff either spans only the first and third whole steps listed above,

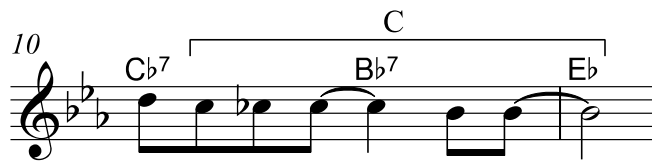
or it spans the ditone that they form in conjunction. **C** is often interrupted by a tritone leap up and down.

When **C** spans a minor third, it is almost never interrupted by a tritone leap up and down, and connects the 5<sup>th</sup> and 3<sup>rd</sup> of the prevailing harmony. The instance in beat 2, m. 4 of Christian's solo on "I Surrender, Dear" is an anticipation of the imminent **D**<sup>7</sup> harmony that arrives on beat 3 (the last note of the riff lands on beat 3). See Example 2.35.



*Example 2.35. C spans a minor 3<sup>rd</sup> and elides into **HA**<sub>4</sub> in m. 4 of Christian's solo on "I Surrender, Dear", by Gordon Clifford and Harry Barris.*

When **C** spans either a whole step or a major third, it usually does include one or more tritone leaps up and down. In the cases it spans a whole step, it chromatically connects **2** and **1**. Christian's solo on "Pagin' the Devil" features an instance of this without a tritone leap (Example 2.36). In m. 10, over the progression **C**<sup>b7</sup>-**B**<sup>b7</sup>, the line descends from **C** through **C**<sup>b</sup> to **B**<sup>b</sup> (note the instance of **D** that leads into this). This occurrence of **C** fits especially well over the



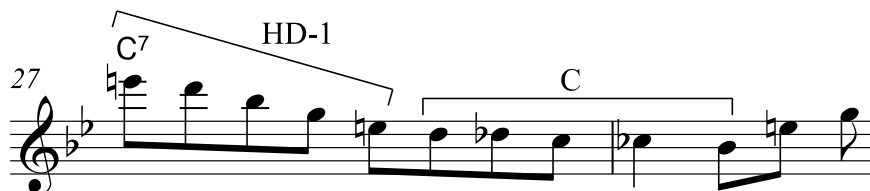
*Example 2.36. C spans a major 2<sup>nd</sup> and features no leaps, in mm 10-11 of Christian's solo on "Pagin' the Devil", by Walter Page and Milt Gabler.*

progression, which is just an applied tritone substitution for the dominant of **B**<sup>b7</sup>, the dominant of the home key of this blues in **E**<sup>b</sup>. At the end of his solo on "Honeysuckle Rose", **C** shows up over the tonic with one repeated tritone leap (Example 2.37). This is a slightly unusual example of the riff because it occurs over tonic. Notably, the whole step covered is the chromatic cell from the major bebop scale, so Christian's application of the riff over this tonic is appropriate.



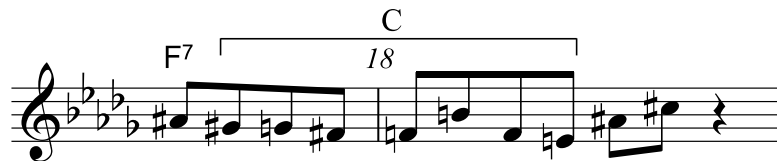
Example 2.37. *C* spans a major 2<sup>nd</sup> and repeats the same tritone leap twice, in mm. 29-30 of a Christian solo on “Honeysuckle Rose,” by Fats Waller.

In the cases it spans a major third, it chromatically connects **2** and **b7**. One example of this, without tritone interruptions, is in Christian’s solo on “The Sheik of Araby” from the album *Solo Flight – Charlie Christian with the Benny Goodman Sextet, Septet, and Orchestra*. The riff spans the barline between mm. 27-28, functioning over a *C*<sup>7</sup> chord (Example 2.38). The riff



Example 2.39. *C* spans a major 3<sup>rd</sup> and features no leaps, in mm. 27-28 of one Christian solo on “The Sheik of Araby”, by Henry B. Smith, Francis Wheeler, and Ted Snyder.

follows **HD**<sub>1</sub>, and descends from D (**2**) chromatically to Bb (**b7**). A truncated **HA**-type riff continues up from the Bb. The Cb on the downbeat of m. 28 is the passing tone between **1** and **b7** in the *C* dominant bebop scale. One instance of a major third *C* interrupted by a tritone occurs in mm. 17-18 of Christian’s solo on “Lips Flips” (Example 2.39). These are the first two



Example 2.38. *C* with one tritone leap, from mm. 17-18 of Christian’s solo on “Lips Flips”.

measures of the bridge, over an *F*<sup>#7</sup> chord. The descent prior to this riff is **D**; here, *C* begins on *G*<sup>#</sup> and continues down to *E* on the second eighth note of beat 2 in m. 18. The tritone leap happens above *F*. Just like the Cb mentioned above, this *F* is the passing tone between **1** and **b7** in the dominant bebop scale and not a member of the *F*<sup>#7</sup>. The fact that Christian places these notes on the downbeats of the measures in which they appear confirms a practice Salmon

observed: that Christian actually regularly sought to place the chromatic pitches of bebop scales on strong beats in order to highlight them, instead of placing them in metrically weak positions off of beats, as they are normally applied.

### The O Riff.

Effectively, **O** descends chromatically through a whole step, but each note in the whole step is preceded by the highest note of that chromatic cell, displaced down an octave. I am only aware of instances of **O** that imply dominant chords, moving from **1** to **b7** in the dominant bebop scale. See Figure 2.12.

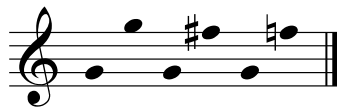
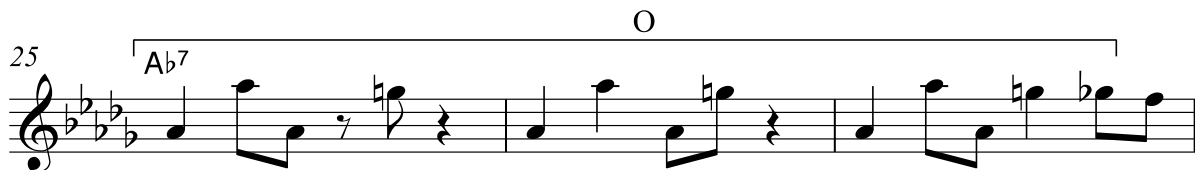


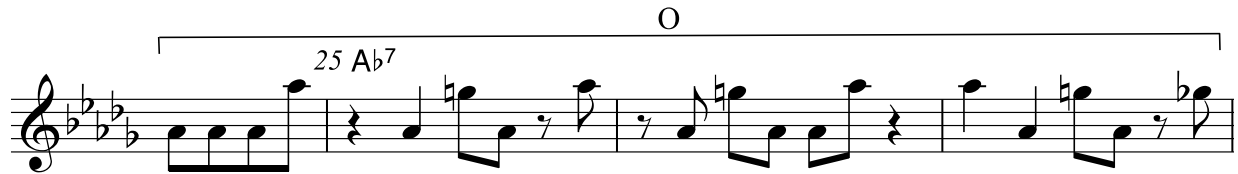
Figure 2.11. **O**.

The three takes of “Honeysuckle Rose” that Ayeroff transcribed each feature one instance of **O**. All three operate over an  $A\flat^7$  chord, and the chromatic cell at the top of the riff descends from  $A\flat$  through  $G$  to  $G\flat$  (from **1** to **b7** of the  $A\flat$  dominant bebop scale). It is clear from the variety in their rhythmic content that Christian prioritized the pitch content of his riffs first and molded their rhythmic content to the demands of the harmonic progression over which he used them. In “Honeysuckle Rose (I)”, Christian takes three attempts to descend past **7**, and it is only on the final attempt that he places it on a strong beat and continues on with the descent (Example 2.40). This lines up with Salmon’s assertion that Christian intentionally places **7**, a “wrong note” in the Mixolydian mode, on strong beats. In other words in this solo he had to get the note in the



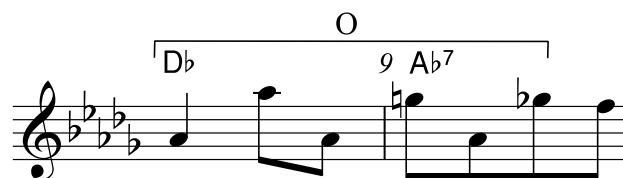
Example 2.40 An expansive occurrence of **O** in mm. 25-27 of one Christian solo on “Honeysuckle Rose”, by Fats Waller.

“right” place (on a strong beat) before he could finish the riff. In “Honeysuckle Rose (II)”, Christian does place **7** on a strong beat (beat 3) on the first attempt, but still takes three attempts to continue with the descent. In the second attempt the G (**7**) lands on beat 2 of m. 26; this is obviously relatively strong but not a strong beat; the third G lands on beat 3 of the following measure, again satisfying what Salmon stated (Example 2.41). In both of these solos, the listener



Example 2.41. Another lengthy instance of **O** in mm. 25-27 of a different Christian solo on “Honeysuckle Rose”, by Fats Waller.

gets the sense Christian is “buying time” with **O** until he needs to move towards the next harmony ( $\text{Db}^{\text{maj}}$ ) using **D**. In “Honeysuckle Rose (III)”, he begins the riff on the last two beats of a measure of  $\text{Db}$ , anticipating the approaching  $\text{Ab}^7$ , as he did in “Rose (II)” (Example 2.42). This is a much shorter version of the riff, with no prevarication over whether or not to descend past G. We only hear  $\text{Ab}$  and G once each before Gb elides into **D**. The G lands on the first downbeat of  $\text{Ab}^7$  in the second A section of the form (at m. 9), so again, the harmonically odd note gets metrical emphasis.



Example 2.42. **O** over and done with in less than four beats in mm. 8-9 of a third Christian solo on “Honeysuckle Rose”, by Fats Waller.

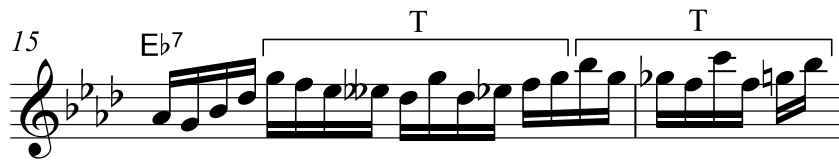
## The T riff.

**T** is a mostly stepwise riff that spans a tritone. This riff always begins with two whole steps down, followed by two half steps down. Then a tritone leap up and down leads into a final move back up two or three whole-steps. This riff always implies a dominant harmony. The highest and lowest notes of the riff are almost always the 3<sup>rd</sup> and b7<sup>th</sup> of the harmony, respectively. See Figure 2.13.



Figure 2.13. T.

Christian's solo on "I Can't Give You Anything but Love" includes two back-to-back statements of **T** (Example 2.43). The statements occur over an Eb<sup>7</sup> at the end of the tune's bridge, in mm. 17-18. The first is the standard version of **T**, starting on G, the 3<sup>rd</sup> of Eb<sup>7</sup>, and



Example 2.43. Two back-to-back instances of **T** in mm. 15-16 of Christian's solo on "I Can't Give You Anything But Love", by Dorothy Fields and Jimmy McHugh.

moving down to Db, the b7<sup>th</sup> of Eb<sup>7</sup>. Christian leaps back and forth between these two notes before moving back up to G by step. Immediately after this, **T** occurs again in a modified form. First, note that it begins on the 5<sup>th</sup> of Eb<sup>7</sup>, Bb. It then descends only a perfect fourth, leaps up and down by perfect fifth between F and C (the 9<sup>th</sup> and 13<sup>th</sup> of the harmony), and then moves back up a perfect fourth. The initial descent and final ascent are also not completely stepwise. I am still confident I can regard this as **T** based on the way the guitar is tuned. The diagrams I have provided of where these two instances of **T** fall on the fretboard should help the reader make sense of the necessarily wordy and therefore cumbersome textual description in my reasoning below (Figure 2.14).

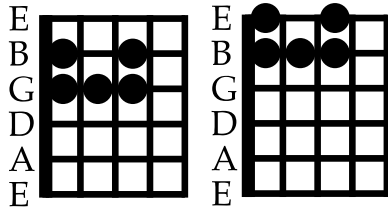


Figure 2.14. The pitch content of the two varieties of **T** derive from its shape on the fretboard and what strings Christian plays it on.

I believe that in many instances of **T** I have identified, including the first described here, Christian probably played the riff on the second and third strings. These two strings are separated by a major third, not a perfect fourth, as are all the other pairs of adjacent strings on the guitar. Therefore, a note played at a given fret on the third string and a note played two frets higher on the second string form a tritone instead of a perfect fifth. This serves to frame the riff. The two descending whole steps that start the riff fall naturally under the hand on these two strings: one simply starts at a given fret  $f$  on the second string, descends two frets (to  $f-2$ ), and then plays the third note of the riff at  $f$  on the third string. The chromatic cell that rounds out the initial descent occurs at  $f-1$  and  $f-2$  on the third string. The leap returns Christian to the original starting fret on the second string. The final ascent comprises  $f-2$  and  $f$  on the third string and  $f-2$  and  $f$  on the second string. Looking at the entire passage in Example 25, from the pickup to m. 17 to the downbeat of m. 19, I surmise Christian played the second instance of **T** here on the first and second strings. The lowest and highest notes in the riff, F and C, are at the sixth and eighth frets of the second and first strings. These are the same frets that the lowest and highest notes in the first instance of the riff (Db and G) occupy on the third and second strings – Christian has stayed in the same position on the neck of the guitar. Taking the eighth fret (where C is) as  $f$ , we see the riff falls on the fretboard the exact same way as before – we are simply “missing” the first and last notes, which would be C. Bb is at  $f-2$  on the first string, and the G-Gb-F cell falls between  $f$



and  $f-2$  on the second string. The only reason the pitch content of the riff is different is because the first and second strings are tuned a half step further apart than the second and third strings.

### The W riff.

**W** is a riff in two voices. The top voice alternates up and down a whole step. The bottom voice is an ascending half step. The lower note of the bottom voice and the higher note of the top voice are a perfect fifth apart. This riff lies under the left hand the same way **T** does. Because it seems to occur only on the first and second strings of the guitar, the lowest and highest notes are always a perfect fifth apart, as they are when **T** is on that pair of strings. In two of the three recorded instances of **W**, it functions over a dominant seventh chord. In both of these cases, the upper notes of the bottom and top voices are the  $b7^{\text{th}}$  and  $3^{\text{rd}}$  of the harmony. See Figure 2.15.

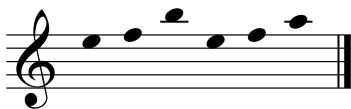
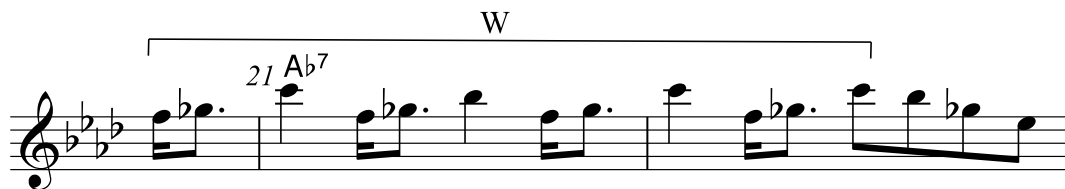


Figure 2.15. **W**.

The most straightforward example of **W** is from Charlie Christian’s recording of “Rose Room”. This 16-bar form begins with a short dominant chain that moves to tonic by its third measure; that tonic morphs into the dominant of IV in the fifth and sixth measures of the form. This performance of “Rose Room” is  $A\flat$  major. **W** shows up in mm. 21-22 over an  $A\flat^7$ , the fifth and sixth measures of Christian’s second chorus on the tune (Example 2.44). Here we see it exactly as described above. The half step in the bottom voice involves a slur from F up to  $G\flat$ . The top voice alternates between C and  $B\flat$ , the  $3^{\text{rd}}$  and  $9^{\text{th}}$  of  $A\flat^7$ .



Example 2.44. **W** as it typically occurs, in this case in mm. 21-22 of Christian’s solo on “Rose Room”, by Art Hickman and Harry Williams.

## The S riff.

This distinctively chromatic motive almost seems octatonic at first glance, although it is not. **S** leaps up a tritone, a major third, and a perfect fourth. Starting from that high point, it descends in two-note chromatic cells separated by a major third, perfect fourth, and perfect fourth. This riff either starts on the root of a diminished seventh chord, or the 3<sup>rd</sup> of a dominant seventh chord. See Figure 2.16. He most often uses this riff in double-time in ballads. Note that **HA**<sub>7</sub> is exactly the opening of **S**, but we never see **S** in up-tempo tunes as we do **HA**<sub>7</sub>. It is possible something about the tail end of the riff made it impractical for him to play **S** in faster solos.



Figure 2.16. S.

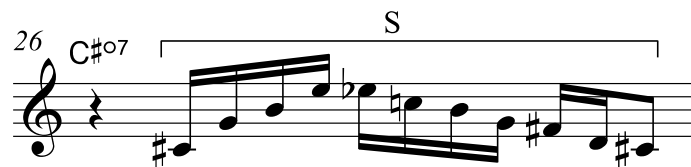
This riff sticks out in Christian's solo on "Stardust". This solo is notable for a number of reasons, such as being the only example of chordal melodies in his improvisations, and for the fact that he did not vary it from one performance to the next. **S** appears in m. 22 here, over a Bb<sup>7</sup> chord (Example 2.45). Accordingly it begins on D, the 3<sup>rd</sup> of the chord. It occupies the entire



Example 2.45. S as it appears in m. 22 of Christian's famous solo on "Stardust", by Hoagy Carmichael and Mitchell Parish.

measure of Bb<sup>7</sup> and is not daisy-chained together with any other motives or gestures, although it could perhaps be seen to chromatically connect the Db in m. 21 with the Eb at the start of m. 23, even though the Ds at the bottom of the gesture are displaced down the octave.

The only other example of **S** I found in Ayeroff’s and Spring’s transcriptions is on the tune “I Surrender, Dear” (Example 2.46). On the one hand this might recommend against considering **S** a riff. Yet I find it hard to imagine that he did not employ this melodic gesture in other performances that were not recorded, given it is so unique and that we can find it in two recorded solos. It is also much longer than any of the other riffs, moving it further away from a stock stepwise or arpeggiated device (such as **D** or **HAs** might appear to be) and towards a motivic or thematic idea.



Example 2.46. *S* implying a diminished seventh chord in m. 26 of Christian’s solo on “I Surrender, Dear”, by Gordon Clifford and Harry Barris.

### Christian’s solos on “Honeysuckle Rose”

The three solos discussed below can all be found in Stan Ayeroff’s collection of transcriptions. “Honeysuckle Rose (I)” can be heard on Spotify as part of the album *The Essential Charlie Christian*,<sup>89</sup> “Honeysuckle Rose (II)” can be heard on the album *Charlie Christian Live 1939/1931*;<sup>90</sup> “Honeysuckle Rose (III)” can be heard on the album *John Hammond’s Spirituals to Swing – The Legendary Carnegie Hall Concerts of 1938/9*.<sup>91</sup> I have included these solos in the order they are numbered in Examples 2.47, 2.48, and 2.49 below.

<sup>89</sup> The track can be heard on Spotify at this URL: <https://open.spotify.com/album/0nSik7OvMSIsemj5ocswCU>

<sup>90</sup> This album, which Ayeroff cites, is not readily available. Christian’s solo can be heard on YouTube at this URL: <https://www.youtube.com/watch?v=rPQHnSKtsic>

<sup>91</sup> This performance can be heard at the following URL: [https://media.dlib.indiana.edu/media\\_objects/5425kv772](https://media.dlib.indiana.edu/media_objects/5425kv772).

The image shows a musical score for a solo on "Honeysuckle Rose". The score is written in treble clef with a key signature of three flats (B-flat, E-flat, A-flat) and a 4/4 time signature. The music is divided into measures 1 through 30, with some measures containing rests. Various harmonic and melodic patterns are labeled above the notes:

- Measures 1-4: HA-4 (over Ab7), 1T
- Measures 5-8: 1T (cont.) (over Db), 1T, HD-1
- Measures 9-12: HD-1 (cont.) (over Ab7), C, HA-6, D, C
- Measures 13-16: 1T fragment (over Db), 1T
- Measures 17-20: 3T (over Db7, Gb7), T
- Measures 21-24: T (cont.) (over Eb7), C, HA-5 (over Ab7), HA-2
- Measures 25-28: O (over Ab7), D2, C
- Measures 29-30: 1T (over Db)

Example 2.47. One of Christian's solos on "Honeysuckle Rose", by Fats Waller. This particular performance features him with the Benny Goodman Orchestra.

“Rose (I)” begins with **HA**<sub>4</sub> immediately in m. 1. The remainder mm. 1-4 focus on Ab Mixolydian material (although the leapy content of mm. 1-2 after the riff is decidedly pentatonic,

taken alone). As the harmony shifts to Db<sup>maj</sup>, he states **1T** twice. They are connected by a brief descent from Db to Ab that implies Db Mixolydian; Spring notes how this type of descent often led into **1T**.<sup>92</sup> **HD**<sub>1</sub> takes us into m. 9, followed by **C** and **HA**<sub>6</sub> in mm. 9-10. The version of **C** here covers a major third between B-flat and G-flat, but Christian leaps up and down a tritone between A-double flat and D-flat before completing the chromatic movement down. **HA**<sub>6</sub> follows, beginning on G-flat. After repeated neighbor motion on F and G-flat in m. 11, he plays **D** and a whole step **C**, interrupted by a tritone leap up and down between B-double flat and E-flat. The remainder of the second A section, from mm. 13-16, “noodles” on Db major material – I have marked two fragmentary statements of **1T**. The first two measures of the bridge are not riff-based. The chromatic move down across the barline in mm. 19-20 fills in the first descending leap in the curious off-tonic example of **3T**; this all occurs over Gb<sup>7</sup>. The pickup into m. 21 begins a statement of **T**. The following measure uses **C** and what looks to be a truncated version of an **HA** riff that exits the tertian ascent by whole step after D-flat (the b<sup>7</sup><sup>th</sup> of the Eb<sup>7</sup> chord in the harmony). A clearer **HA**<sub>2</sub> wraps up the bridge in mm. 23-24. As Christian begins the final eight measures of the solo, he states **O**, which proceeds directly into **D**, followed by a whole step statement of **C** between B-flat and A-flat. He then ascends up a Db<sup>maj7</sup> arpeggio before coming to rest on Bb, the 6<sup>th</sup> of a tonic Db<sup>maj</sup> harmony. The last thing we hear in this solo is a bluesy run into **1T**.

“Honeysuckle Rose (II)” bears several similarities to the first. It begins quite differently, clearly generalizing the entire first A section as Db because Christian uses his Db Mixolydian descent to noodle before stating **1T** once in m. 4. More conventional Db major material in m. 5 leads into another **1T**. The following two measures demonstrate how **B** and **1T** were typically

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<sup>92</sup> Spring, “Style”, 43.

1  $A\flat^7$  1T (3T?)

5 (3T?) 1T B ...into... 1T 2T 3

9  $A\flat^7$  HD-1 C HA-6 D C 3

13  $D\flat$  1T/2T fragments?

17  $D\flat^7$  T  $G\flat^7$  1T

21 1T fragment  $E\flat^7$  HD-1  $A\flat^7$  C O

25 O (cont.) D

29  $D\flat$  C 3

Example 2.48. Christian's solo from a live performance of "Honeysuckle Rose", by Fats Waller, with the Benny Goodman Sextet.

paired. Note how **2T** immediately follows **1T** in m. 8, rounding out this opening formal segment. This is in line with Spring's observation that **2T** regularly ended phrases or formal sections. The second A section begins with the exact same sequence of riffs as "Rose (I)": **HD<sub>1</sub>**, **C**, **HA<sub>6</sub>**, **D**, **C**, all over the Ab<sup>7</sup> from mm. 9-12. Three wrinkles distinguish mm. 9-12 here from the same measures in the first solo. First, the whole step at the beginning of D1 is chromatically filled in. Second, the neighbor motion between F and G-flat that was in eighth notes in the first solo is transformed into a longer G-flat followed by an ornamental upper-neighbor figure on F in triplet eighths. Third, during the second instance of C, the chromatic descent between B-flat and A-flat is uninterrupted by any leaps as it was in the previous solo. Notably, though, Christian does leap up to E-flat after reaching A-flat. That is the same note he leapt to in the first solo before completing the riff. Also note that in **HD<sub>1</sub>** and both statements of **C**, it is the crunchiest notes that land on beats (Cb on beat 3 of m. 9, Bbb and Abb on beats 2, 3, and 4 of m. 10, and Bbb on beat 3 of m. 12). The remainder of the second A section is again not so riffy – there are hints of **1T**. Christian plays **T** in mm. 17-18 over Db<sup>7</sup>. It is introduced by an arcing Db Mixolydian line, and it is "missing" its first and last notes (F). "Rose (I)" also features **T**, but it occurs roughly four measures later over Eb<sup>7</sup>. Just like "Rose (I)", though, we get a tonic formula – **1T** this time – over Gb<sup>7</sup> in mm. 19-20. The gesture over Eb<sup>7</sup> in m. 21 also looks like a fragment of **1T**. The final two measures of the bridge consist of **HD<sub>1</sub>**, **C**, and the beginning of **O**. Just as before, **O** takes up the first three measures of the final A section (mm. 25-27). In mm. 28-29, we see a halting whole step **C** interrupted by tritone leaps. It is not typical for Christian to deploy this riff over a tonic harmony.

The third solo ("Rose (III)") contains a few slight differences compared to the other two, but largely bears a strong resemblance. As with "Rose (II)" he opens with freely improvised

1  $A\flat 7$  1T

5 1T (cont.)  $D\flat$  2T 1T 3T O

9 O (cont.)  $A\flat 7$  D C HA-6 D C

13  $D\flat$  B fragment? 2T?

17  $D\flat 7$  T HD-2  $G\flat 7$  C

21 C (cont.) HA-3 HD-1  $E\flat 7$   $A\flat 7$  C HA-6

25  $A\flat 7$  1T

29 1T (cont.)  $D\flat$  3T (approx.)

Example 2.49. This performance of “Honeysuckle Rose,” by Fats Waller, is from the 1939 *Spirituals to Swing* concert at Carnegie Hall, organized by John Hammond. Christian played with the Goodman sextet in that performance.



movement that implies Db major and then states **1T**. Measures 5-7 feature **2T**, **1T**, and **3T** back-to-back; so these measures feature a larger variety of tonic-area riffs, but move into them just the same as the first two solos. One of the small differences now crops up: Christian uses a compressed version of **O** to launch into the second A section of the work, careening down through **D** into **C**, **HA<sub>1</sub>**, **D**, and **C** followed by the Db<sup>maj7</sup> flourish also seen in mm. 28-29 of the first solo (with Db and F subject to rhythmic diminution). He does not use **O** until the final A section in the other two solos. Measures 13-16, on Db<sup>maj</sup>, are again very riff-light; only fragments of **B** and **1T** interrupt a mostly static line. The first two measures of the bridge again feature **T** like the second solo. This time, **HD<sub>2</sub>** follows. The chromatic descent from B-double flat to G across the barline into m. 21 is a whole step **C** that hooks up directly with **HA<sub>3</sub>**. Over the Ab<sup>7</sup> at the end of the bridge, Christian uses the first three riffs he applied over the same harmony in the opening A sections of this solo and “Rose (II)”: **HD<sub>1</sub>**, **C**, and **HA<sub>6</sub>**. The final A section relies on a repeated Bb, one statement of **1T**, and **3T** bookended by Db major material.

These solos demonstrate not just that Christian made wide use of a small set of riffs, each tailored to treat a tonic or off-tonic harmonies. He also chained these riffs together in consistent groupings from one performance to the next. This is a crucial reason why he was able to create longer melodic statements that connected not just successive harmonies, but often successive phrases. Learning to do this was part of my compositional process as I wrote music in his style, as we shall see in the following chapter.

## **Chapter 3: Compositions in the Style of Charlie Christian**

I have composed three short pieces in Charlie Christian's style. In the first composition, I mostly quoted Christian's riffs literally, placing them in the harmonic contexts in which he used them. This helped me understand how to employ them as he did. As I progressed through the three compositions, however, I became more comfortable with the riffs. I developed my own material from Christian's, and set his riffs in ways that would have been unfamiliar to him. Therefore the second and third pieces are less reliant on his riffs. Additionally, in some cases, I chain them together in ways he did not to create novel lines, and apply them in harmonic contexts that he would not have. The first piece is composed over rhythm changes. The second is a slow blues, over a 12-bar blues form. The third imagines what Christian might have played when improvising over Ray Noble's tune "Cherokee."

### **Charlie Got Rhythm**

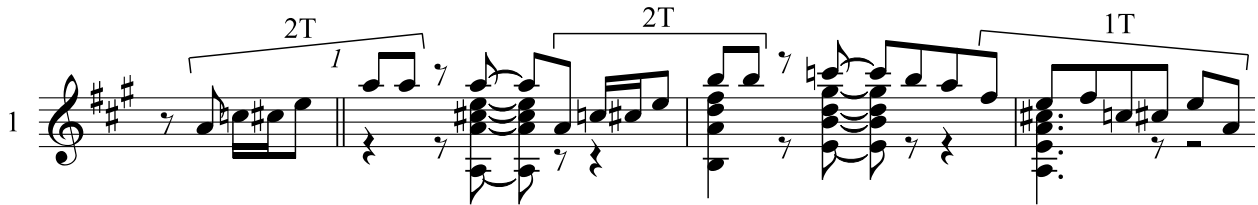
This piece is simply three choruses of rhythm changes set with an assortment of Charlie Christian's riffs, and a small amount of original material I have developed from them. This was the first composition I wrote in Christian's style, and consequently one of its purposes was to help me understand how to use his riffs in various harmonic contexts, and practice linking them together to create substantial melodic statements.

"Rhythm changes" are a standard harmonic form in jazz music, originally based on the progression to George Gershwin's tune "I Got Rhythm." One common version of rhythm changes, which I used in my piece, is shown in Figure 3.1 in the key of A major, the same key in

Figure 3.1. A common version of rhythm changes in A major, which I used as a harmonic form when composing “I Got Charlie.” The last measure may feature the  $ii^7-V^7$  shown or the cadential progression seen in the second ending to the first A section.

which I have composed my piece. This is far from the only version of rhythm changes, however; the form has been modified many times with individual chord substitutions and substitute progressions, and the original melody of “I Got Rhythm” is far from the only melody jazz musicians play over these changes. The tune “Anthropology,” famously taken from a Charlie Parker solo on rhythm changes, and the Miles Davis tune “Oleo,” are just two prominent examples of jazz tunes on the form. My piece utilizes the standard version of the changes. As the figure shows, the piece is a 32-bar “ballad” form, featuring a repeated eight-bar A section on the tonic, an eight-bar B section (or bridge) that cycles through a descending-fifths progression, and a final A section on the tonic.

Appendix A includes the entire score for this piece, notated to show Christian’s riffs and material developed from those riffs. In the following paragraphs, I will point out a few examples. The opening phrase (Example 3.1) relies on **2T** and **1T**, supported by standard guitar voicings of



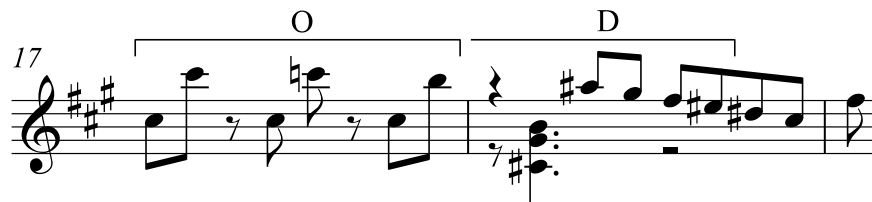
Example 3.2. Measures 1-3 of “Charlie Got Rhythm”, by the author, with two instances of **2T** and one of **1T**.

A<sup>maj</sup>, B<sup>-7</sup>, and E<sup>7</sup>. These two riffs almost always elaborate tonic or tonic-area progressions. The final A section of the first chorus begins with two repetitions of a short two-bar phrase that begins on repeated As before ascending or descending (Example 3.2). This mostly-static approach to tonic areas is also a trademark of Christian’s. The progression underneath is slightly modified from typical rhythm changes: instead of an F#<sup>7</sup> chord in mm. 25 and 27, I use an F#<sup>dim7</sup> chord.



Example 3.1. In mm. 25-27 of “Charlie Got Rhythm”, I composed a static line such as one Christian would use to “hang out” over a tonic-area progression.

At the opening of the first bridge, at mm. 17-18, I use **O** to imply the underlying C#<sup>7</sup> chord (Example 3.3). This riff functions over dominant seventh chords in Christian’s solos. I also made sure to place the C, the chromatic pitch in the C# dominant bebop scale, on beat 3 of m. 17,



Example 3.3. **O** leads into **D** at the beginning of the first bridge of “Charlie Got Rhythm”, mm. 17-18.



Example 3.5. While Christian usually ended phrases with **3T**, in mm. 68-69 of “Charlie Got Rhythm,” I use it segue into **HA6**.

In the third and final chorus, the opening A section features **3T** at the end of m. 68 (Example 3.5). Christian often played this riff in cadential progressions to return to tonic. That is almost how I have used it here: it functions over a  $E^7$  chord, but the following harmony is actually  $A^7$  instead of  $A^{maj}$ . Therefore instead of the leap up from **5** to **1** in the key of the arriving tonic we expect (a leap from E to A in this case), I leap from E up to G, the  $b7^{th}$  of the  $A^7$  in m. 69. That G is the first note in an instance of **HA6**, which normally begins from the  $b7^{th}$  of a dominant seventh chord.

Example 3.6. The opening of Christian’s solo on “I Got Rhythm”, by George Gershwin, performed with Jerry Jerome.

When composing all three pieces in Christian's style, I had to consider harmonic generalization. This is a phenomenon where a performer treats a progression of two or more harmonies as one harmony. In jazz, this often occurs with respect to ii-V progressions, generalized simply as the V chord in the progression. Christian does this often – partially explaining why when Spring analyzed his riffs, he only divided them into tonic and non-tonic categories. Christian also regularly harmonically generalizes short progressions in one key as simply the tonic chord of that key, which is eminently relevant when considering rhythm changes. This is because at least the first four measures of the A section, and in fact the entire A section, can be harmonically generalized as the tonic chord. Christian does this over rhythm changes practically as a matter of course; in Example 3.6, I have shown the first sixteen measures of Christian's solo on "I Got Rhythm" with Jerry Jerome, in a recording from September of 1939.<sup>1</sup> As the labeling makes clear, almost all the material is literally **1T**, **2T**, related to **2T**, or material Spring regards as a "prefix" to one of the tonic formulas. The line in m. 16 anticipates the D#<sup>7</sup> chord at the beginning of the bridge. (Spring transcribes this performance in B major – while I am somewhat skeptical this was actually the key a tenor saxophonist such as Jerome chose to play this piece in, the recording renders the music at this pitch level.) None of this material specifically treats the harmonies in the progressions (I have included the harmonies as Spring transcribed them).

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<sup>1</sup> You can listen to this performance on Spotify at the following URL: <https://open.spotify.com/artist/6E3mhys1viRwohc0EOqFOS>.

The most obvious example of this approach in my composition occurs in mm. 40-48, the second A section of the second chorus, which I have shown in Example 3.7. Here, an  $A^{7\#9(13)}$  chord stands in for the short progressions in A major I have implied in other A sections of my piece, and removes any tonicization of IV (D major) as one would expect in typical rhythm changes. Over the new harmony, I simply repeat **B** followed by **1T** four times until I reach the

Example 3.7. In mm. 40-48 of “Charlie Got Rhythm”, I harmonically generalize an entire A section with one chord,  $A^{7\#9(13)}$ , and two riffs.

bridge. Replacing a tonic A major chord with a dominant seventh chord on the same root (featuring two tertian extensions, no less) may seem odd at first, but the  $b7^{\text{th}}$  and  $\#9^{\text{th}}$  of the chord reflect the fact that Christian often used those two notes in a stepwise lines in tonic-area sections of many pieces. As we know, he also did not shy away from the  $6^{\text{th}}$  of a tonic chord, represented better here as the  $13^{\text{th}}$  because we are dealing with a dominant seventh harmony.

In the third chorus, I have generalized the two ii-V progressions normally found at the end of the A section simply as the two dominant seventh chords within them:  $F\#^7$  and  $E^7$ . This is

Example 3.8. *W*, twice in a row, over the turnaround at the of an A section in mm. 71-72 of “Charlie Got Rhythm”.



in mm. 71-72, shown in Example 3.8. **W** occurs twice in a row, transposed down a whole step from one measure to the next. I have anticipated E<sup>7</sup> by one beat at the end of m. 71.

Finally, although I of course quote Christian constantly throughout this piece by using his riffs, the very final A section opens with a direct quote from his solo on “Dinah.” The melody from m. 88 to the end of m. 91 simply transposes up a half step the pickup and opening three measures of his solo. In both mm. 89 and 91, I replaced F#<sup>7</sup> with its tritone substitution, C<sup>7</sup>. See Example 3.9.

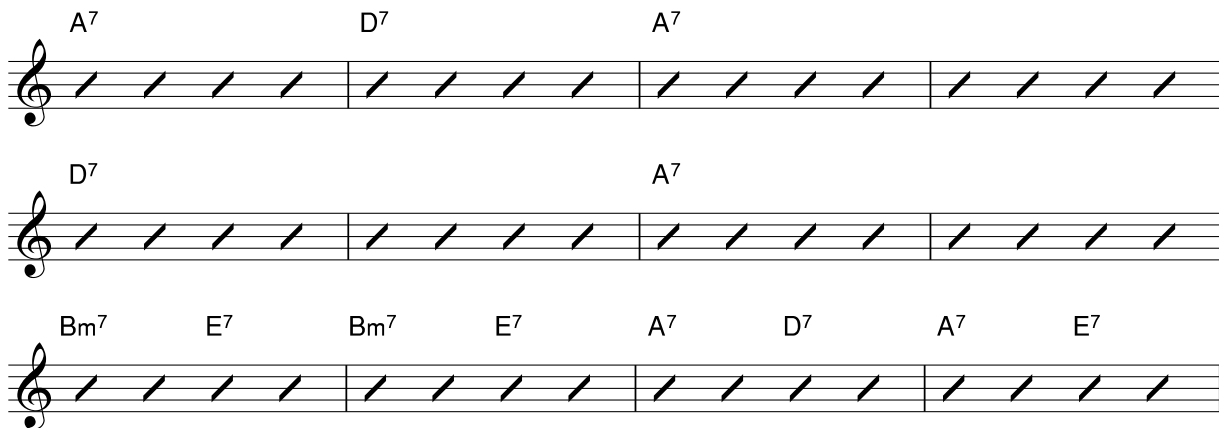


*Example 3.9. I quote “Dinah” – notably not a tune on rhythm changes – in mm. 89-91 of “Charlie Got Rhythm” (at the start of the last A section).*

Again, I took the process of composing this piece as an opportunity to increase my understanding of how Christian used his riffs. That is the foremost reason why I have quoted them unaltered throughout. The “original” aspects of this composition are the unique disposition of the riffs (besides the “Dinah” quote, Christian never literally played the melodic line of this work, taken as a whole), and the accompaniments I have devised to help imply harmonic movement. In the blues and my arrangement of “Cherokee,” I took more liberty in adapting Christian’s improvisational material.

## Good Christian Blues

I resolved early on in my work for this project to compose a slow blues following Christian's style. This composition is the result. It consists of five choruses on a 12-bar blues in A major. The opening three choruses take a simple theme and vary it slightly before the fourth chorus breaks into double time. Finally, the fifth chorus serves as a "shout chorus," a phenomenon I briefly explain below. I have used the theme of this blues as one would in a typical "riff tune": the theme repeats over the harmonic progression, changing slightly only when necessary to accommodate a harmonic movement. Figure 3.2 shows the blues changes I structured this composition on.



*Figure 3.2. The 12-bar blues changes on which I composed "Good Christian Blues".*

The theme of this piece, shown in Example 3.10 in context with the first chorus, is nothing more than a tonic-prolongation tactic Christian might have used over the A section of rhythm changes, a blues such as this piece, or any other tonic-area segment of a harmonic form he improvised over. Spring would classify the descent from C to A, and likely the alternation between A and F#, as "prefixes" to his tonic formulas. This theme works equally well over A<sup>7</sup> and D<sup>7</sup> in a blues in A major, and therefore when the form arrives at the latter harmony in mm. 5-6, the theme remains unchanged. It is only in mm. 9-10 that I vary the theme by adapting the

F#/A alternation to better imply the B<sup>7</sup>-E<sup>7</sup> movement in those bars, before reiterating the C to A descent into the downbeat of m. 11.

Example 3.10. The first chorus (mm. 1-12) of “Good Christian Blues”.

Over the course of the second and third choruses, I have intermixed slightly modified versions of this theme with several partial statements of **2T** and one statement of **HD<sub>3</sub>**. Example 3.11 shows **2T** in m. 15, where the form moves returns to A<sup>7</sup> after a brief turn to D<sup>7</sup> in m. 14. Example 3.12 shows **HD<sub>3</sub>** in m. 30. This is at the sixth measure of the form, typically the second measure of IV in a major-mode 12-bar blues. It is quite common for this measure to in fact be iv

Example 3.11. **2T** as the changes return to A<sup>7</sup> in m. 15 of “Good Christian Blues”.

Example 3.12. **HD<sub>3</sub>** implies modal mixture on IV in m. 30 of “Good Christian Blues”.

instead, creating modal mixture before the return to I at the seventh measure of the form. **HD<sub>3</sub>** always serves to imply a modal-mixture progression in Christian’s solos, which is why I have used it here.

Double time is a rhythmic phenomenon in jazz where a soloist performs material subjected to rhythmic diminution, such that all note values in the passage are half their original length. This occurs while the band maintains the same harmonic rhythm as before, allowing the soloist to fit twice as much material over each harmony as before. It is an exceptionally common occurrence in slow-tempo tunes of all varieties, including blues, often serving as a local, or global, maximum in rhythmic or overall intensity in a solo. I placed my double-time chorus before the last chorus to provide that global maximum of rhythmic intensity, but preserve the overall emotional climax of the piece for the last chorus. I have reproduced the double-time chorus in Example 3.13 (including the last two bars of the previous chorus, when the double-time begins), and annotated it to show where Christian's riffs pop up, and where I have spun out material from those riffs. I will highlight a few of these moments. Riff titles prefixed with "mod" have modified pitch content relative to their original form. Riff titles suffixed with "k" are shortened, missing beginning or ending material.

The first appearance of **HA6**, in m. 36, is technically misapplied. When Christian played this riff, he always began from the  $b7^{\text{th}}$  of the underlying harmony. From that point, the second note of the riff was the  $3^{\text{rd}}$  of the harmony, the third note the  $5^{\text{th}}$ , and so on (see Chapter 2). Here, instead, the first note is the  $3^{\text{rd}}$  of the  $E^7$ , the second the  $b7^{\text{th}}$ , and the third note the  $b9^{\text{th}}$ . Then the

Example 3.13. The lead-in to and double-time chorus of “Good Christian Blues” (mm. 37-48).

line alternates between the  $b3^{\text{rd}}$  (or  $\#9^{\text{th}}$ ) and the  $3^{\text{rd}}$ . This results in a crunchy sound – it could plausibly be interpreted as a within the E altered dominant scale, but of course because Christian never used the riff this way, or that scale, it is not properly in his style. I have adapted the riff to a new disposition within its original harmonic context, creating new relationships between the

line and the chord. The next time I used **HA<sub>6</sub>**, in m. 40, it is in the context Christian always played it in.

The two gestures marked **HA<sub>k</sub>** in m. 38 suggest that riff family to me primarily because they begin with tritone leaps up, as do both **HA<sub>6</sub>** and **HA<sub>7</sub>**. Immediately following is another quote from Christian's solo on "Dinah," this one from the opening of the second A section (mm. 9-10). The tritones in m. 38 lead relatively smoothly into the perfect fourth at the start of m. 39.

Measures 41-42 are illustrative of one aspect of this chorus and of Christian's style that I have not discussed before. Christian's lines often undulated up and down in cascading, arpeggiated figurations. In these two measures, I alternated between **HA<sub>4</sub>** and one possible modification of it, and two slightly different modifications of **3T**, resulting in that sort of contour. The first modified instance of **3T** implies  $D^7$ ; therefore it is not a tonic structure, but a dominant seventh structure. Instead of descending through a tonic major sixth chord, it moves down stepwise through the D Mixolydian scale and does not leap back up from **5** to **1** as **3T** normally does. In addition to these modifications, the second instance implies modal mixture. The first instance of **HA<sub>4</sub>** is standard; the second implies a  $B^{-7b5}$  structure that is equivalent to  $D^{-6}$ , which is how I harmonically interpret m. 42. The reader can peruse the score excerpt to see how I have used other Christian riffs here.

A shout chorus, prevalent in big band jazz, is a climactic (and sometimes final) statement on a tune's harmonic progression involving most, if not all, members of the band playing as loud as they can. A shout chorus can occur in any type of song. Here, I relied on the return of a thicker texture and my widespread use of planed diminished seventh chords to create greater intensity than the double-time chorus, despite the fact I returned to longer rhythmic values. The greatest problem I faced when composing this chorus is that Christian only incorporated chord melodies

in one recorded solo: “Stardust.” In this solo, the chord melodies are rather static, moving up the same half step repeatedly into the same melody note, which is always a chord tone. This does not provide much guidance to someone looking to create longer, more active melodic lines. I endeavored to include some of this thinking in my writing (in m. 53, there is neighbor motion between a D<sup>7</sup> and a C<sup>#7</sup>), but largely I had to imagine what Christian might have done if he had improvised in this texture more often. Consequently, I focused on smooth voice-leading in passages other than those that feature planed diminished seventh chords. I imagine this approximates how he may have accompanied another soloist while functioning as part of the rhythm section (how he “comped”), which along with the “Stardust” solo is as good a proxy as we have for how he may have improvised in a chordal texture. His comping style is hard to analyze because it is difficult to hear it on just about all the recordings of him available. Example 3.14 shows how this voice-leading concept works in m. 51, the third measure of the form, which



*Example 3.14. Measure 51, in the shout chorus of “Good Christian Blues”, alternates between A<sup>7</sup> and diminished seventh chords.*

is normally static on A<sup>7</sup>. The five chords shown in the example are in fact A<sup>7</sup>, G<sup>#dim7</sup> (a rootless E<sup>7b9</sup>), A<sup>7</sup> in second inversion, F<sup>#dim7</sup>, and then A<sup>7</sup> on the downbeat of m. 52. Example 3.15 demonstrates how the planed diminished seventh chords operate in mm. 53-54, where the prevailing harmony in the blues form is D<sup>7</sup>. Here, the one diminished seventh harmony in



*Example 3.15. In mm. 53-54 of “Good Christian Blues”, planed diminished seventh harmonies help reach a melodic peak that starts a paraphrase of the piece’s theme.*

question is  $F\#\dim^7$ , which is simply a rootless  $D^{7b9}$ . I plane between inversions of the harmony in order to reach the high C in the middle of m. 54, and then descend back to  $A^7$ .

As the discussion above demonstrates, this piece makes use of fewer Christian riffs, and in general modifies them more freely than the piece on rhythm changes. I still believe it remains in the spirit of his improvisations.

### Cherokee

This piece is the only I have composed in Christian's style based on another composer's tune. "Cherokee" is by Ray Noble, and known to me from Joe Pass' recording on his album *Virtuoso*. While Pass' performance is nothing but virtuosic, any guitarist can hear that he does grapple with some technical issues on this track, in no small part because of the blistering tempo he takes – and the fact that every track on the album was improvised in the studio in one take. Inspired by his performance, and searching for an appropriate up-tempo tune with which to end my set of Christian pieces, I resolved to design the final one around this song, played roughly at the same tempo Pass takes.

As I did when composing the blues, I rely less on literal statements of Christian's riffs here than I did in the composition on rhythm changes. I focus on **1T**, **2T**, **D**, and several **HA** family riffs, and material that I develop from them. This piece also includes an extended chord melody section, which again involved imagining what Christian might have played had he improvised that way with any regularity.

My first task when composing this tune, however, was to set Noble's melody, and this aspect of my piece is modeled approximately on how Pass performs the piece. In many cases, my voicings of chords are exactly the same or quite similar to his. This is both because his



performance is the only solo jazz guitar performance of this tune with which I am familiar, so it has a large influence on how I hear the song on the instrument, and also because there are only so many voicings one can choose on the guitar to set particular notes in the tune's melody. This second point is especially important when playing at a high tempo, because the voicing of any harmony will determine the fingering used to play it, and the fingerings of successive harmonies will either facilitate or hinder a clean performance.

I used my knowledge of jazz harmony, the guitar, and my aural memory of Pass' performance when setting the melody, without looking at a transcription of Pass' performance. Nonetheless, as I mentioned above, our approaches are similar. I compare them below. I have taken the excerpts of Pass' playing from Gilles Rea's transcription. Example 3.16 shows our harmonizations of the opening melody. As you can see, the only difference in our first three

The image displays two musical staves for the first seven measures of the opening melody of "Cherokee". The top staff represents the author's harmonization, and the bottom staff represents the harmonization by John Scofield. Both staves are in the key of B-flat major (two flats) and 4/4 time. The melody consists of the notes Bb, Eb, Ab, G, F, Eb, and Bb. The author's version uses a root position Bb chord in measure 1, a Bb chord in second inversion in measure 2, and a root position F chord in measure 3. Scofield's version uses a Bb chord in second inversion in measure 1, a D7 chord in second inversion in measure 2, and a root position F chord in measure 3. Scofield's harmonization includes more complex voicings and rhythmic patterns, such as triplets and sixteenth notes, compared to the author's simpler, more direct approach.

*Example 3.16. Two harmonizations of the melody in mm. 1-7 of "Cherokee", by Ray Noble. Mine is above and Pass' is below.*

chords is the second chord. Whereas I opted to substitute a G<sup>-7</sup> chord in second inversion for Bb<sup>maj7</sup> in m. 2, Pass plays a D<sup>-7</sup> chord. From there, our harmonizations differ more: I opted to preserve a bassline on the fifth and sixth string (Bb, Eb, and Ab) and let two melody notes go unaccompanied, whereas Pass uses closer voicings, harmonizes all the original melody notes, and adds in a little extra rhythmic activity. Pass' harmonization of the F<sup>-7</sup> underneath the Bb in m. 3 is arguably better than mine: in a rootless voicing, he preserves the b3<sup>rd</sup> of the chord (Ab) in the bass and includes the 6<sup>th</sup> and 9<sup>th</sup> (D and G). My voicing is in root position, and though it has

the  $b7^{\text{th}}$  (Eb), it lacks the  $b3^{\text{rd}}$  and any tertian extensions, resulting in a less rich sound. My next chord is a  $Bb^{7(13)}$  chord in root position; Pass gets at the harmony in a rootless third inversion, with Ab in the bass, moving from  $Bb^{7(9/13)}$  to  $Bb^{7(b9/13)}$ . We both handle the next two harmonies,  $Eb^{\text{maj}7}$  and  $Ab^7$ , with the same voicings, although he does insert chords underneath the D and F in the melody where I leave them unaccompanied.

Example 3.17 shows how we start the tune's bridge, which begins on  $C\#^{-7}$ . Our first chords are identical rootless  $C\#^{-9}$  in third inversion, although he reiterates the B in the bass on the third beat of the measure. The next chord, nominally  $F\#^7$ , I approach with a conventional root position voicing that includes all tertian members within the octave, and the  $13^{\text{th}}$  (D#) in the

Example 3.17. Two harmonizations of mm. 17-19 of "Cherokee", by Ray Noble. Mine is above; Pass' is below.

melody above. Pass again uses a rootless first inversion voicing that includes the  $b7^{\text{th}}$  (E),  $b9^{\text{th}}$  (G), and  $13^{\text{th}}$ . I deliver the rhythm in the next measure exactly as Pass does because his performance looms so large in my mind. Whereas the original melody descends through C# and A# in quarter notes before landing on a half note F# in this measures, we both retrograde that rhythm. Like Pass, I have also placed chords underneath the C# and F# while leaving the A# unaccompanied. I am personally somewhat skeptical of whether or not Pass actually plays an A# in the chord underneath F#, but I have included it here from Rea's transcription anyway. My voicings imply in a more straightforward fashion the  $B^{\text{maj}7}$  harmony in the original changes,

moving from a rootless voicing on the 7<sup>th</sup> to a root-position voicing that includes the 6<sup>th</sup> (G#) and 9<sup>th</sup> (C#).

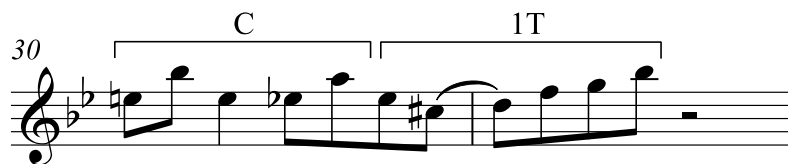
Pass' performance otherwise generally differs quite greatly from my piece, except for the fact that we both play at a fast tempo and rely mainly on quick scalar passages to imply harmonic movement instead of chunky and slow chords. Below I discuss how this piece reflects Christian's style. Figure 3.3 shows the original changes to the tune.

Figure 3.3. The changes to “Cherokee”, by Ray Noble.



Example 3.18. *2T* at the beginning of the second *A* section (mm. 17-18) in my arrangement of “Cherokee”, by Ray Noble.

Despite the fact that I relied less on literal statements of Christian’s riffs in my piece, I still made wide use of **1T** and **2T**. The score, in Appendix A, shows that the riffs, or fragments or variants of them, occur 20 times throughout my piece. The very first melodic statement after my setting of the original melody opens with **2T**, shown in Example 3.18. I use **1T** to cap off this opening “solo” section before launching into the original bridge, as I show in Example 3.19. As the example also shows, I link into this using **C** in a fashion that I do not believe Christian ever did on record. Here, after **C** has arrived on the correct tritone ( $Eb/A$ ) for the underlying harmony ( $F^7$ ), I use the second  $Eb$  as **4** in **1T** on  $Bb^{maj7}$ . Other literal statements of these riffs are notated in the score.



Example 3.19. *1T* closes the second *A* section (mm. 30-31) of my arrangement of “Cherokee”, by Ray Noble, right before the first bridge.

The final *A* section of the tune occurs starting at m. 177 of my piece. Here, though the material is not literally **2T**, all of mm. 177-184 is built from the portion of the riff that ascends from **3**. See Example 3.20. I have harmonically generalized the  $F^7$ - $Bb^7$  progression in mm. 179-180 to just  $Bb^7$ , and altered what should be  $Eb^{maj7}$  in mm. 181-182 to  $Eb^7$ . The riff fragment can remain the same over  $Bb^7$  as it was over  $Bb^{maj7}$ ; I imply the move between the two harmonies

The image shows two staves of musical notation in a key signature of two flats (B-flat major). The first staff, starting at measure 177, contains four measures of music. The first two measures are marked with a  $B\flat$  major 7th chord ( $B\flat$  maj<sup>7</sup>) and a melodic fragment labeled  $2T'$ . The next two measures are marked with a  $B\flat$  7th chord ( $B\flat$  7) and also labeled  $2T'$ . The second staff, starting at measure 181, contains two measures. The first measure is marked with an  $E\flat$  7th chord ( $E\flat$  7) and a modified  $2T'$  fragment. The second measure is marked with an  $A\flat$  7th chord ( $A\flat$  7) and an  $HA-1$  fragment. The melodic lines consist of eighth-note patterns with ties and slurs, ending with short three-note tails.

Example 3.20.  $2T$  slowly morphs into  $HA_1$  in the last A section (mm. 177-184) of my arrangement “Cherokee”, by Ray Noble.

with the short three-note tails at the ends of mm. 178 and 180. The  $A\flat$  in m. 180 is sufficient to imply the move along with the other notes heard before. The tail in m. 178 is a standard Christian gesture to imply a tonic-area chord, which handily also serves to imply  $E\flat$  7 in m. 182. In mm. 181-182, I adjust the first note of the riff fragment down a half step to  $D\flat$ , the  $b$ 7<sup>th</sup> of the  $E\flat$  7 chord. The final adjustments to the fragment transforms it completely into  $HA_1$ , a simple ascending half-diminished arpeggio from the root of the underlying dominant seventh chord,  $A\flat$  7. This involves lowering the first note from  $D\flat$  to  $C$ , the second from  $F$  to  $E\flat$ , and the third from  $G$  to  $G\flat$ . Throughout this entire passage, the final note of the gesture remains to be  $B\flat$ , which along with the ascending arpeggiated contour, helps make the successive ideas sound similar.

Example 3.21. Several riffs work together to form the second half of the second bridge (mm. 101-112) of my arrangement of “Cherokee”, by Ray Noble.

Another passage, taken from second bridge, demonstrates how I move between riffs to generate material. See mm. 101-112 in Example 3.21. **T** moves into  $E^7$ ; this is a version of the riff that Christian plays in “Dinah,” where instead of returning to the beginning note of the riff, **3** (in this case  $G\#$ ), he leaps up from the penultimate note a perfect fifth. In my piece, that meant a leap from  $F\#$  to  $C\#$ , making the riff span the major seventh between  $D$  and that final  $C\#$ . This pitch range, in this context (starting from the  $b7^{\text{th}}$  of a dominant seventh chord) suggested **HA<sub>6</sub>** to me because that riff begins on the  $b7^{\text{th}}$  of a dominant seventh chord, and its final step up is from the  $13^{\text{th}}$  to the  $b7^{\text{th}}$  an octave higher than its starting note. Here,  $D$  is the  $b7^{\text{th}}$  of the  $E^7$ , and  $C\#$  is the  $13^{\text{th}}$ . Therefore I follow **T** with a shortened version of **HA<sub>6</sub>** that features the riff’s opening tritone from the  $b7^{\text{th}}$  to the  $3^{\text{rd}}$ , but eliminates the  $5^{\text{th}}$  ( $B$  in this context) before the  $13^{\text{th}}$ . Furthermore I do not complete the ascent up to the final  $b7^{\text{th}}$ , instead descending mostly stepwise to  $E$ , the root of the harmony. I adapt the last four notes of m. 102 into a prefix for **1T** on  $A^{\text{maj}7}$ , and then continuing sequencing that four-note descent down by step through m. 103 into the downbeat of m. 104 (the final  $B$  in m. 103 acts as a chromatic lower neighbor to  $C$ , what I consider to be the final note of the descent that begins on  $F\#$  in the same measure). The  $C$  on this

downbeat is the first note of **HA<sub>6</sub>** over D<sup>7</sup>. This is, again, an incomplete version of the riff that does not finish the ascent to the higher b<sup>7th</sup>; it does include the 5<sup>th</sup> (A), however. The structure of the riff, and its outer interval in this instance, are similar to that of a shortened **2T** that is missing the opening root and **b3**. Therefore I use that motive, marked **2T'**, to anticipate the G<sup>maj7</sup> that arrives in m. 107. Notice how as I move from one riff to the next, the beginning note moves down by half step, providing a smooth lower line to connect the gestures together. To fully and confidently imply G<sup>maj7</sup>, I follow up **2T'** with a longer tonic prefix that begins on **b3** and descends into **1T**, similar to m. 103.

Finally, I use **HA<sub>7</sub>** and **HA<sub>6</sub>** in sequence (as Christian often did) before descending into an altered version of **C**. This isn't a proper version of that riff because it spans the major third from **1** down to **#5** of the underlying harmony, F<sup>7alt</sup>. When Christian played major third versions of this riff, it would invariably span **2** and **b7**. My application here also features a leap up and down of a perfect fourth instead of a tritone. I do place "wrong" notes on strong beats, however; E (**7**) lands on beat 3 of m. 110, and D (**6**, or the 13<sup>th</sup> of the harmony) lands on the downbeat of m. 111. These are not the most fundamental notes in the altered dominant harmony underneath. Those are, in contrast, the F where the riff begins, the Eb on beat 4 of m. 110, and the C# where it ends. Only the last of these three notes lands in a metrically strong position. I follow this with a shortened statement of **S** that helps emphasize an altered dominant sound by reiterating C# and introducing Gb (the b<sup>9th</sup> of F<sup>7alt</sup>) before relaxing down into more conventional chord tones. The final C in this measure leads smoothly into the following D (see score in Appendix A).

These excerpts are just two examples of how I put Christian's riffs to use in "Cherokee." In some cases I used them exactly as he did; in other cases I have adapted them by slightly altering their pitch structure, presenting them in a different context than he would have, or both.

These strategies allowed me to develop musical phrases that build on his style, satisfying in part one of the ultimate purposes of this project: helping me learn to play jazz on guitar.



# Chapter 4: Wes Montgomery's Life and Improvisational Style

## A Brief Biography of Wes Montgomery

Wes Montgomery was one of the most influential jazz guitarists of all time by virtue of his uniquely mellow sound, lyrical melodic style, and prolific recording career. Initially inspired by Charlie Christian, Montgomery's mature improvisational style went beyond his model's. His solos used a more complex pitch language in line with the hard bop of his time, and were in many ways more technically impressive than Christian's, in part because they employed thicker textures. No jazz guitarist regards Montgomery as anything less than a giant of the instrument and the music.

An Indianapolis native who started playing jazz with his brothers, Montgomery was first given a four-string tenor guitar by his older brother Monk when he was still a teenager.<sup>1</sup> It wasn't until 1943 that he got his first six-string, electric guitar. By his own account, his passion for guitar was directly fueled by hearing Christian play, whom he preferred to other early jazz guitarists such as Eddie Lang and Django Reinhardt. After hearing a recording of Christian, he bought the six-string guitar and began teaching himself the famous guitarist's solos by ear every night. Because his wife and neighbors complained about the noise of the amplified guitar, and he found using a pick awkward, he started to use his thumb to strike the strings, leading to his signature mellow sound.<sup>2 3</sup>

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<sup>1</sup> Adrian Ingram, *Wes Montgomery* (Blaydon on Tyne: Ashley Mark Publishing, 2008), 11.

<sup>2</sup> Ingram, *Wes*, 11.

<sup>3</sup> Shawn Salmon, "Imitation, Assimilation, and Innovation: Charlie Christian's Influence on Wes Montgomery's Improvisation Style in His Early Recordings (1957-1960)" (DMA diss., Ball State University, 2011), 32.

During the mid-1940s, Montgomery played on a nearly nightly basis in Indianapolis while working during the day. He began performing in 1943 (soon after purchasing his six-string instrument), with the Mel Lee band at Club 440 in Indianapolis. He played at several other clubs regularly as well. At this point in his development he still only knew Christian solos. Nonetheless, he convinced the vibraphonist Lionel Hampton to hire him to tour with his band starting in 1948. He was included on recordings of the band, but never featured in its small group recordings. Therefore, he did not gain much fame from performing with them. He toured with them until 1950, when he returned to Indianapolis. Not only had he not gained fame or recognition from his time with Hampton's group, but according to his wife he missed his family constantly during the periods he was on tour those two years. From 1950 until 1957, he resumed his old pattern of working during the day and performing at night in Indianapolis, often with his organ trio featuring Melvin Rhyne on the organ and Sonny Johnson on drums.<sup>4</sup> While he did record during this period, and some of these recordings have come to light since the turn of the century, during Montgomery's lifetime they were unknown and unreleased.

Wes' two brothers, Buddy and Monk (who played piano and vibes, and bass, respectively), were also active in the Indianapolis jazz scene during the 1950s. In 1957, they headed to the West Coast to work with producer Richard Bock at the Pacific Jazz label (the same label on which jazz guitarist Joe Pass recorded in the early 1960s). Wes came out after them to participate in a session on December 30<sup>th</sup>, 1957. The resulting album, *The Montgomery Brothers and Five Others*, had one track featuring Wes, titled "Fingerpickin'." According to Freddie Hubbard, who was one of the "five others" on the album, this track got more airtime on the radio than anything else they laid down. Although overall the album was not a commercial success, it

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<sup>4</sup> Ingram, *Wes*, 12, 15.

gave Montgomery somewhat more visibility among jazz musicians and buffs. Between this session and 1959, all three Montgomery brothers kept recording together, although Wes returned to Indianapolis to be with his family and only traveled out to California for the recording sessions. Recording sessions in April 1958 and October 1959 resulted in the album *Montgomeryland*, but this was not in fact released until 1960, at which point his first Riverside record, *The Wes Montgomery Trio: A Dynamic New Sound* had already been released. This latter album made a bigger splash.<sup>5</sup> It was in the late 1950s that his final development as a guitarist took place: by the time the jazz critic and historian Gunther Schuller described and assessed Montgomery's playing in the May 1958 issue of *Jazz Review*, he had developed his habit of performing longer solos in three "tiers": single lines, octave melodies, and chord melodies.<sup>6</sup>

In September 1959, George Shearing and Cannonball Adderley were in Indianapolis performing and Montgomery went to hear them. After they finished he invited them to listen to him perform at the Missile Room. Adderley was awestruck by his playing. Upon returning to New York, he demanded that Orrin Keepnews, the producer at Riverside Records, immediately sign Montgomery to the label.<sup>7</sup> Soon after Wes was recording for Riverside. He was leader or member on nineteen albums at the label before it went bankrupt in 1964. At this point, the producer Creed Taylor signed Montgomery to Verve, where he recorded four albums in two years. Taylor and Montgomery moved to the label A&M in 1966, with which he recorded his last three albums. The earlier Pacific and Riverside releases were true bebop and hard bop. The Verve and A&M records featured often stringy-heavy large ensemble arrangements. Over these Montgomery would play octave head statements, and shorter and therefore necessarily less-

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<sup>5</sup> Ibid., 15.

<sup>6</sup> Ibid., 21.

<sup>7</sup> Ibid., 22.

involved solos. Consequently the earlier recordings are generally more critically acclaimed and better represent his improvisational style.<sup>8</sup>

While Montgomery's first Riverside album, *The Wes Montgomery Trio: A Dynamic New Sound* was not completely critically acclaimed, it still won the approval of jazz critics Ralph Gleason and John S. Wilson, who felt Montgomery was the most innovative guitarist since Christian.<sup>9</sup> The main issues with this record were that a number of the tracks were down-tempo and low energy, and that Montgomery was not able to stretch his improvisatory legs – on the standard “Round Midnight,” for example, he only soloed for 16 bars. His second Riverside album, *The Incredible Jazz Guitar of Wes Montgomery*, was immediately and enthusiastically lauded by all, delivering the intensity Montgomery was known for creating (De Stefano 71).<sup>10</sup> Other Riverside records that featured him as a leader were *Movin' Along* (1960), *So Much Guitar* (1961), *Bags Meets Wes* (recorded in December 1961 with the Modern Jazz Quartet), and the incredible live recording *Full House* (1962). This record featured Johnny Griffin on tenor saxophone, and rhythm section from the Miles Davis Sextet: Wynton Kelly on piano, Paul Chambers on bass, and Jimmy Cobb on drums. The opportunity for this group to perform came together by chance, as all three components – the rhythm section, Griffin, and Montgomery – happened to be in the Bay Area in June of 1962. The next year he put down the album *Boss Guitar* with his organ trio (although Jimmy Cobb took over on drums from George Brown), which was also well-received. He also recorded several albums for Riverside with his brothers, including *Grooveyard* (1961).<sup>11</sup> The later Verve recordings failed to connect with jazz fans:

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<sup>8</sup> Salmon, “Imitation,” 35-37.

<sup>9</sup> Orrin Keepnews, liner notes to *SO Much Guitar!*, performed by Wes Montgomery, Hank Jones, Ron Carter, Lex Humphries, and Ray Barretto. Riverside/OJC 233, 1961, LP.

<sup>10</sup> Reno De Stefano, “Wes Montgomery's Improvisational Style (1959-1963): The Riverside Years” (PhD diss., University of Montreal, 1995), 71.

<sup>11</sup> Ingram, *Wes*, 24-27.

producer Taylor's goal was to create jazz with greater popular appeal.<sup>12</sup> Incidentally, one earlier album with Riverside also featured Montgomery with strings (*Fusion*, from 1963). This was also received poorly critically.<sup>13</sup> Apparently this format turned off those who wanted to hear Montgomery as the leader of a classic hard bop small group, with just a rhythm section and a few lead instruments.

Over the course nearly two decades gigging constantly in Indianapolis in the 1940s and '50s, Montgomery had to work during the day to supplement his income and support a growing family. This meant he worked from 7am to 3pm at a welding factory, and then played at night from 9pm until 5am. He was also a heavy smoker.<sup>14</sup> This outrageous work schedule and unhealthy addiction must have taken a toll on his health, and probably contributed to his early death of the age of 45. On June 15<sup>th</sup>, 1968, he passed away from a heart attack.<sup>15</sup>

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<sup>12</sup> De Stefano, "Style," 89.

<sup>13</sup> Ingram, *Wes*, 27-28.

<sup>14</sup> *Ibid.*, 22.

<sup>15</sup> *Ibid.*, 28.

## Wes Montgomery's Improvisational Style

Wes Montgomery is best known for the structure of his solos. He was famed for soloing not just in a single line, but for continuing on into choruses of octave and chord melodies<sup>16</sup>. He also used tertian extensions and their alterations constantly. This was de rigueur for any hard bop jazz musician and therefore unsurprising, but as we will see below, Montgomery carefully highlighted these extensions rhythmically and melodically. The language of his single-line and octave melodies was essentially uniform. His chord melodies tended to focus on chord tones and notes that resided in the mode of the major scale suggested by the underlying harmony, and the harmonizations themselves prioritized diatonic tones over altered pitches. Last but not least, his fuzzily warm timbre was elemental to his brand and remains instantly recognizable.

Montgomery achieved this timbre in two ways. First, although when he started to teach himself to play, he used a pick like Charlie Christian, he soon decided the pick felt awkward to him. Instead, he decided to use just his thumb to play the instrument. Because flesh is softer than a pick, and creates a larger contact with the strings, striking the strings of the guitar this way favored lower overtones in the harmonic series of any pitch and gave Montgomery's tone a mellow, round sound. Second, he used heavier-gauge, flat-wound strings on his guitar. Because flat-wound strings produce less noise when they are struck, this string choice further cleaned up and richened Montgomery's tone.

Below, I will explain how Montgomery deployed tertian extensions in his music, based on Reno De Stefano's dissertation on his improvisational style, which focuses heavily on this aspect of his playing. De Stefano does not analyze the melodic and harmonic language of

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<sup>16</sup> In this context, a "chord melody" is a melody in which every note is harmonized as part of a chord that implies the underlying harmony in a tune's changes. Usually in moderate-tempo and faster songs Montgomery used three- and four-note voicings; select slow-tempo ballad head statements are cast in richer five- and six-note voicings.

Montgomery's chord melodies, so I will undertake a description of several examples of that element of his playing, based on transcriptions of solos by Steve Kahn and myself. Furthermore, I will address a claim De Stefano makes about how Montgomery structures his blues solos, with the aim of showing his statement is only selectively true and that in fact, Montgomery structures these solos in a variety of interesting ways.

Montgomery made full use of all tertian extensions and their alterations out to the 13<sup>th</sup>. Montgomery often used the unaltered 11<sup>th</sup>, which was uncommon at the time because it created a half-step (or minor ninth) clash with the underlying third of Mm<sup>7</sup> and MM<sup>7</sup> chords, which many other jazz musicians found unappealing. These other players instead used the #11<sup>th</sup> more.<sup>17</sup> Why did he use these extensions and alterations? While they appeared in stepwise lines, they also appeared widely as part of arpeggios built from tertian members above the root (from the 3<sup>rd</sup> all the way out to the 9<sup>th</sup>) of the harmony he was elaborating. These arpeggios spelled out triads and seventh chords, but occasionally also ninth chords. The quality of the arpeggio depended largely on the underlying harmony, as Montgomery prioritized unaltered extensions. Altered extensions are not absent, however, and sometimes their presence is a telltale sign that Montgomery was implying a substitute chord progression over one or more original harmonies in a tune's changes. De Stefano also points out that Montgomery emphasizes extensions past the octave by placing them in rhythmically strong and melodically critical positions. They often occur on downbeats, for example, or at the peak of ascending figures.<sup>18</sup>

The discussion below will largely follow the general thrust, if not the structure, of Chapter 5 of De Stefano's dissertation. De Stefano's chapter is a highly detailed analysis of arpeggios of all qualities that Montgomery uses over various harmonies when improvising. To be

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<sup>17</sup> De Stefano, "Style," 123.

<sup>18</sup> *Ibid.*, 177.

clear, De Stefano appears concerned only with literal arpeggios: in his musical examples, he does not explore gestures where broader movement by third is briefly interrupted by two stepwise moves instead, for example. He details the inversion of these arpeggios and at what interval they occur with respect to the root of the harmony Montgomery is implying, and furthermore the relative frequency, in percentages, with which all these things occur. I will not provide this level of detail below, and would refer interested readers to De Stefano’s work.

Instead, I will examine several solos each from his albums *The Incredible Jazz Guitar of Wes Montgomery* and *Full House*. I will show how De Stefano’s analysis bears out in these solos by explaining how Montgomery employs tertian extensions, highlighting the more frequent arpeggios Montgomery used, and examining other noteworthy characteristics and passages of each solo.

Montgomery’s pitch language as demonstrated by “Four on Six”

The first solo I will consider is on the tune “Four on Six,” from *The Incredible Jazz Guitar of Wes Montgomery*. I have relied on De Stefano’s transcription for my analysis. This

The image shows four staves of musical notation for the piece "Four on Six" by Wes Montgomery. Each staff contains four measures of music, with diagonal slashes representing arpeggiated chords. Above the first staff is the chord Gm7. Above the second staff, starting at measure 5, are the chords Cm7, F7, Bbm7, Eb7, Am7, D7, Ebm7, and Ab7. Above the third staff, starting at measure 9, is the chord Gm7. Above the fourth staff, starting at measure 13, are the chords Bbmaj7, Am7, D7, Gm7, and D7(b9).

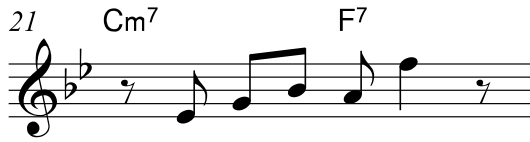
Figure 4.1. Changes to “Four on Six”, by Wes Montgomery.



tune by Montgomery is built on a 16-measure form. Please see Figure 4.1 for a depiction of the harmonic progression (the “changes”). Each half of the form begins with four measures of the G<sup>7</sup> tonic harmony. The first half then cycles through four ii<sup>7</sup>-V<sup>7</sup> progressions before returning to G minor. The second half rounds out with a move to the relative major before alternating between tonic and dominant. The second ii<sup>7</sup>-V<sup>7</sup>, Bb<sup>7</sup>-Eb<sup>7</sup>, is a tritone substitution for the dominant, D<sup>7</sup>, but Montgomery inserts an A<sup>7</sup> before the arrival of the D<sup>7</sup> to continue the sequence he set up in the previous two measures. The final ii<sup>7</sup>-V<sup>7</sup>, Eb<sup>7</sup>-Ab<sup>7</sup>, is a classic tritone substitution, but Montgomery inserts the Eb<sup>7</sup> for the purpose, again, of preserving the sequence of ii<sup>7</sup>-V<sup>7</sup> progressions.

Montgomery’s solo lasts nine choruses. Throughout this solo there are many instances where he uses an arpeggio spanning a triad or seventh chord that includes tertian extensions past the octave to imply the changes. Many of these instances include harmonic anticipations which make interpretation of the pitches somewhat more challenging. This solo is heavily imbued with bluesy gestures and lines, primarily in sections on the tonic, in mm. 1-4 and 9-12 of the form, and the relative major, at m. 13 of the form. In addition there are several occurrences of fragments of two bebop scales. Therefore, it is important to be careful when interpreting what may appear to be altered extensions in this solo.

Examples of triadic arpeggios implying harmonies abound in this solo. In m. 21 an Eb major triad implies C<sup>7</sup> (Example 4.1). Here a major triad a minor third above a mm<sup>7</sup> chord implies that chord. A little further on in m. 35, two descending major triads in succession imply



Example 4.2. An Eb major arpeggio over C<sup>-7</sup> in m. 21 of Montgomery's solo on his own piece, "Four on Six".



Example 4.1. F and C major arpeggios over G<sup>-7</sup> in m. 35 of Montgomery's solo on his piece "Four on Six".

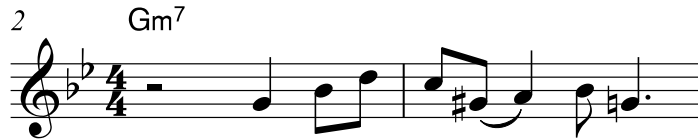
G<sup>-7</sup> (Example 4.2). The first is an F major arpeggio, which spells out the 11<sup>th</sup>, 9<sup>th</sup>, and 7<sup>th</sup> of the G<sup>-7</sup>. This arpeggio demonstrates one of De Stefano's main points, which is that Montgomery highlighted extensions past the octave by placing them in metrically strong positions: the 11<sup>th</sup> here, C, lands on the downbeat. It is also the longest note in the arpeggio, a quarter note, as opposed to the two following eighth notes. Furthermore, it is the highest note in the figure, which emphasizes it melodically (this exact same phenomenon reoccurs in m. 55 over A<sup>-7</sup>). The second descending major arpeggio in m. 35 is a C major arpeggio, which spells out the root, 13<sup>th</sup> (or 6<sup>th</sup>), and 11<sup>th</sup> of the G<sup>-7</sup>. Here, the C (still the 11<sup>th</sup> of the harmony) is not emphasized in any of the ways described above. The E just before it may seem out of place at first, but this note is both a member of the G Dorian scale (the scale typically used to harmonize G<sup>-7</sup> in jazz improvisation) and also in G<sup>-6</sup>, a common tonic minor chord in jazz. I am reluctant to analyze it as a 13<sup>th</sup> over G<sup>-7</sup> for this reason. Because this tune is in a minor key, Montgomery has relatively few opportunities to deploy major triads over the root, 3<sup>rd</sup>, and 5<sup>th</sup> of a major-mode chord; when this happens at all it is over the Bb<sup>maj7</sup> chord in the changes. Two major triad arpeggios fill up m. 77, over that harmony: an F major arpeggio and a Bb major arpeggio, spanning one octave. Tertian extensions do not receive a huge emphasis in this gesture, but note that the 9<sup>th</sup>, C, falls on beat 2



Example 4.3. F and Bb major arpeggios over Bb<sup>maj7</sup>, in m. 77 of Montgomery's solo on his piece "Four on Six".

and is the local high point. The second arpeggio here, of course, highlights the root, 3<sup>rd</sup>, and 5<sup>th</sup> of the Bb<sup>maj7</sup> underneath (Example 4.3).

Minor arpeggios outline harmonies here as well. Right away in m. 2, a G<sup>-</sup> arpeggio ascends over the tonic chord (Example 4.4). This is, of course, the most conventional and



Example 4.5. A G<sup>-</sup> arpeggio over G<sup>-7</sup> in m. 2 of Montgomery's solo on "Four on Six", by the guitarist.

straightforward way to imply a tonic minor chord. Montgomery again implies the tonic minor chord with a minor arpeggio in m. 25; however, this time, he uses a D<sup>-</sup> arpeggio (Example 4.5). This spells out the 5<sup>th</sup>, b7<sup>th</sup>, and 9<sup>th</sup> of the harmony. The 9<sup>th</sup> is highlighted by virtue of being the



Example 4.6. A D<sup>-</sup> arpeggio harmonizes G<sup>-7</sup> at the end of m. 25 of Montgomery's solo on "Four on Six", by Montgomery.

highest note in the gesture from m. 25 to the downbeat of m. 27, and as the main note in a upper neighbor figure that finishes on the downbeat of m. 26. An ascending Bb<sup>-</sup> arpeggio in second inversion appears over an Eb<sup>-7</sup> in the pickup to, and first beat of, m. 40 (Example 4.6). This



Example 4.4. A second inversion Bb<sup>-</sup> arpeggio over Eb<sup>-7</sup> in mm. 39-40 of Montgomery's solo on "Four on Six", by Montgomery.

arpeggio is also a perfect fifth above the root of the underlying harmony, and spells out the same extensions. However, because it is in second inversion, the 9<sup>th</sup> actually begins the gesture upwards. Beginning the gesture with this note serves to bring it out.

Several augmented arpeggios imply predominant to dominant movements in this solo.

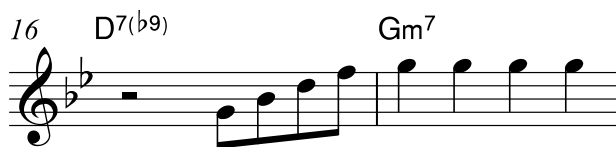
The augmented arpeggios are remarkable for the extensions they imply and their metrical placement. In the fifth chorus, at mm. 69-72, Montgomery implies the  $ii^7-V^7$  sequence with four ascending augmented arpeggios (Example 4.7). Each one of these arpeggios spells out the  $b3^{rd}$

69 Cm<sup>7</sup> F<sup>7</sup> Bbm<sup>7</sup> Eb<sup>7</sup> Am<sup>7</sup> D<sup>7</sup> Ebm<sup>7</sup> Ab<sup>7</sup>

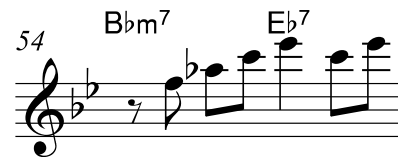
Example 4.7. A series of augmented triads harmonize the changes'  $ii^7-V^7$  sequence, in mm. 69-72 of Montgomery's solo on "Four on Six", by Montgomery.

and 5<sup>th</sup> of the  $ii^7$  that they imply, which are also the  $b7^{th}$  and 9<sup>th</sup> of each following  $V^7$ . The final note of each arpeggio only makes sense interpreted as the  $\#11^{th}$  of the  $V^7$ . This is a peculiar passage for Montgomery because it features this altered tertian extension prominently and repeatedly at the peak of these four successive arpeggios. As I will show below, Montgomery regularly implied dominant harmonies with arpeggios that began from the  $b7^{th}$ , so I believe each one of these augmented arpeggios is best understood to primarily imply the  $V^7$  in each  $ii^7-V^7$ . With this in mind, then, the metrical character of this passage stands out. These arpeggios anticipate the harmonies they imply by an increasing margin, which creates momentary harmonic confusion and therefore heightens tension. The first two begin a beat and a half early; the third, two and a half beats; the fourth and final, a full three and a half beats early (nearly a measure!). The only reason this increasing metrical and harmonic dissonance works at all is because Montgomery establishes the pattern and its harmonic implications in the first two iterations.

Among seventh-chord arpeggios, the “Four on Six” solo primarily includes  $mm^7$  and  $MM^7$  arpeggios, but there are several half-diminished seventh arpeggios and  $Mm^7$  arpeggios as well. Many of the  $mm^7$  arpeggios are  $G^{-7}$  arpeggios in root position, implying the tonic chord in a matter-of-course fashion. This first occurs in m. 16 and bears mentioning if only because the arpeggio actually sounds over  $D^{7b9}$ , anticipating by two beats the return to tonic and the beginning of the second chorus (Example 4.8). One ascending  $mm^7$  arpeggio serves to imply a



Example 4.11. A  $G^{-7}$  arpeggio anticipates that harmony's return in m. 16 of Montgomery's solo on "Four on Six".



Example 4.9. An  $F^{-7}$  arpeggio anticipates and sustains over  $Eb^7$  in m. 54 of Montgomery's solo on "Four on Six."

$Mm^7$  chord. In m. 54, an ascending  $F^{-7}$  arpeggio spells out the 9<sup>th</sup>, 11<sup>th</sup>, 13<sup>th</sup>, and root of the  $Eb^7$  in bb. 3-4 (Example 4.9). The 13<sup>th</sup> and root get extra emphasis here because they are immediately reiterated, and they are the peak of the local gesture in mm. 54-55. The first  $MM^7$  arpeggio to appear is a  $Bb^{maj7}$  arpeggio that implies the  $G^{-7}$  chord in m. 41 (Example 4.10). Montgomery descends through it and then repeats it an octave down, moving from the 9<sup>th</sup> down through to the



Example 4.8. A  $Bb^{maj7}$  arpeggio over  $G^{-7}$  in m. 41 of Montgomery's solo on "Four on Six".



Example 4.10. An  $Eb^{maj7}$  that anticipates a  $C^{-7}$ - $F^7$  progression in mm. 52-53 of Montgomery's solo on "Four on Six".

$b3$  of the chord each time. Again, by virtue of how Montgomery has presented the arpeggio, the extension past the octave is its most prominent member because it is highest, and on the strongest two metrical positions in the measure (beats 1 and 3). The other  $MM^7$  arpeggio, an  $Eb^{maj7}$ , begins over a  $G^{-7}$  in m. 52, but its final note, D, lands on the downbeat of m. 53, which moves from  $C^{-7}$  to  $F^7$  (Example 4.11). It is tempting to regard this measure more broadly as simply  $F^7$ , and the  $Eb^{maj7}$  arpeggio as an anticipation of that harmony. This is because the  $MM^7$

arpeggio based on the  $b7^{\text{th}}$  of a  $Mm^7$  chord is Montgomery's standard choice to imply that quality of seventh chord.

Two of the half-diminished seventh arpeggios in this solo also imply a  $Mm^7$  chord, in

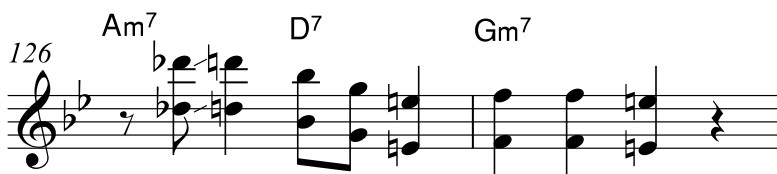


Example 4.12. A  $C^{-7b5}$  arpeggio anticipates  $Ab^7$  by one beat in m. 24...



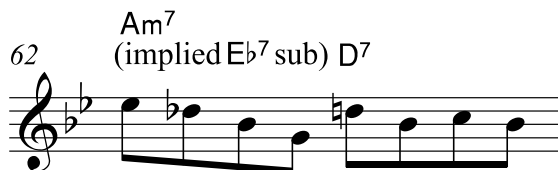
Example 4.13. ... and again in m. 40 of Montgomery's solo on "Four on Six".

both cases ascending from the  $3^{\text{rd}}$  of an  $A^7$ , hitting its  $3^{\text{rd}}$ ,  $5^{\text{th}}$ ,  $b7^{\text{th}}$ , and  $9^{\text{th}}$  (see Examples 4.12 and 4.13, which shows where this happens in mm. 24 and 40, respectively). This is classic Christian and it is likely Montgomery learned to imply  $Mm^7$  chords this way from his original



Example 4.15. An  $E^{-7b5}$  arpeggio over  $D^7$  in m. 126 of Montgomery's solo on "Four on Six".

model on the guitar. In m. 126, during the octave-melody portion of the solo, a descending  $E^{-7b5}$  arpeggio spells out the root,  $b13^{\text{th}}$ ,  $11^{\text{th}}$ , and  $9^{\text{th}}$  of the  $D^7$  underneath (Example 4.14). This  $E^{-7b5}$  arpeggio is also part of a larger gesture begins on the  $Bb$  blues scale in mm. 124-125 and transitions to the  $G$  blues scale at m. 126 in order to move from  $Bb^{\text{maj}7}$  to the tonic in m. 127. The clear  $Mm^7$  in this solo is an  $Eb^7$  in m. 62 (Example 4.15). It descends in first inversion over an



Example 4.14. An  $Eb^7$  arpeggio implies a substitute harmony for the  $A^7$  in the changes, in m. 62 of Montgomery's solo on "Four on Six".

A<sup>-7</sup>. Of the four notes Eb, Db, Bb, and G, only the last can easily fit into the harmony. Here, Montgomery is implying a substitute chord (precisely Eb<sup>7</sup>), the tritone substitution for the applied dominant of the D<sup>7</sup> that follows the A<sup>-7</sup>. This moment also bears out De Stefano's assertion that when one thinks one sees altered tertian extensions or odd chromatic pitches in Montgomery's improvisations, he is implying substitute harmonies instead of the notated changes.<sup>19</sup> This choice also stands out in this song because in the ii<sup>7</sup>-V<sup>7</sup> sequence in the changes, the following four chords occur: Bb<sup>-7</sup>-Eb<sup>7</sup>-A<sup>-7</sup>-D<sup>7</sup>. Here in mm. 61-62, Montgomery is revisiting that harmonic movement, roughly, moving from Bb<sup>maj7</sup> through Eb<sup>7</sup> to D<sup>7</sup>. Finally, what could be considered a Mm<sup>7</sup> arpeggio in first inversion, or an ascending half-diminished seventh arpeggio with the root filling in its final third, occurs over F<sup>7</sup> in m. 37 (Example 4.16). Looking just from beat 2 of this measure to the second eighth note of beat 3, there is a clear statement of the F<sup>7</sup> in first inversion likely in the exact same left-hand pattern on the fretboard as the Eb<sup>7</sup> in m. 62. But looking through the end of the measure, and noting that that left-hand pattern would place the Eb and F in m. 37 on the third string with the G above them on the second string, from the A, a guitarist recognizes a clear half-diminished seventh arpeggio beginning from the fourth string. As I already noted, Christian treated Mm<sup>7</sup> chords with half-diminished seventh arpeggios habitually and it is likely Montgomery internalized this habit when learning from recordings of



*Example 4.16. Either an F<sup>7</sup> arpeggio in second inversion, or an A<sup>-7b5</sup> arpeggio, anticipates F<sup>7</sup> by one beat in m. 37 of Montgomery's solo on "Four on Six".*

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<sup>19</sup> De Stefano also notes that Montgomery overwhelmingly tends to present tritone substitutions such as this one in stepwise, not arpeggiated, movements. This case is something of an exception, then, as the substitution is elaborated mostly by leap. De Stefano, "Style," 146.

Christian, strengthening the case for regarding this as a half-diminished seventh movement upwards. Note that here, Montgomery anticipates  $F^7$  by one beat.

Montgomery uses tertian extensions beyond the octave in prominent rhythmic and melodic positions outside of arpeggiated gestures as well. The very first downbeat in the solo is on C, the 11<sup>th</sup> of the minor tonic chord. An early, colorful example of this occurs in m. 22 over a  $Bb^7$ - $Eb^7$  progression (see Example 4.17 for the passage discussed in this paragraph). Over both

*Example 4.17. Measures 22-27 of Montgomery's solo on "Four on Six," which clearly demonstrate how he highlights tertian extensions past the octave.*

harmonies, Montgomery surrounds the third of the harmony with the 9<sup>th</sup> and 11<sup>th</sup> (the quality of the third changes from one to the next, of course). He begins the measure on C, and ascends through Db to Eb over  $Bb^7$ . He steps up again to F, the 9<sup>th</sup> of  $Eb^7$ , leaps up to Ab, its 11<sup>th</sup>, and then descends through G back to F. This measure begins on an extension past the octave, reaches a different one at its highest point, and places one on the only strong beat attacked (beat 3). The melodic line in m. 22 continues through until the C in m. 27 (listening reveals that the brief rest in m. 25 does not end the phrase). As we look through the rest of the gesture, two points in particular stand out. On the second eighth note of beat 3 in m. 24, Montgomery reaches Bb, the peak of a  $C^{-7b5}$  arpeggio and the 9<sup>th</sup> of the  $Ab^7$  below (this discussed above). This local maximum is exceeded by the C on the downbeat of m. 25, the 11<sup>th</sup> of the  $G^7$  there. The note C, and in particular this one, is in many senses the most important pitch in the melodic line from mm. 22-27, and at the most critical points, is a tertian extension past the octave. First, note that the



passage begins and ends on this note. It starts as the 9<sup>th</sup> of the Bb<sup>-7</sup> and ends as the 11<sup>th</sup> of the G<sup>-7</sup>. Second, it is the highest note in this passage, serving as its emotional peak at the downbeat of m. 25 (again, here, it is an extension past the octave). Finally, when Montgomery reaches this peak, he hangs on to it: the C in m. 25 is the longest rhythmic value in the entire line. The very next melodic statement from mm. 28-31, which I will discuss more below because of its blues characteristics, ends with an alternating figure between Bb and C, the b3<sup>rd</sup> and 11<sup>th</sup> of the underlying G<sup>-7</sup> in m. 31. The first C is again the longest rhythmic value in the passage, and lands on the downbeat of the measure.

The opening of the fourth chorus is another perfect example of Montgomery's predilection for focusing on tertian extensions, in particular the 11<sup>th</sup>. Surveying mm. 49ff (Example 4.18) conservatively and with an eye for succinctness, we see that practically, C is *the*

Example 4.18. Another passage (mm. 49-55) from Montgomery's solo on "Four on Six" that highlights tertian extensions, in this case particularly the 11<sup>th</sup>.

melodic note from the downbeat of m. 49 to the downbeat of m. 52, supported by G<sup>-7</sup> arpeggios. This C the highest note in mm. 49-52, and the longest-held note. Montgomery offers some release from the melodic high by playing the C an octave lower at the pickup to m. 52. Looking at a slightly bigger picture, we can see the C taking part in an upper-register melody that it begins in m. 49. It ascends to D (the 9<sup>th</sup> of C<sup>-7</sup>) on the downbeat of m. 53, and peaks at Eb (the root of Eb<sup>7</sup>) in m. 54 before falling back through D (the 11<sup>th</sup> of A<sup>-7</sup>) down to a C an octave below (the b7<sup>th</sup> of D<sup>7</sup>). From the above, we can see the opening seven bars of the fourth chorus feature

an upper-register melody that is defined primarily by tertian extensions past the octave. Several other passages and gestures in this solo focus on extensions past the octave, including more than the first half of the eighth chorus (mm. 113-123), the opening three measures of the ninth and final chorus (mm. 137-139), the two daisy-chained double-neighbor figures across the barline at mm. 129-130, and the gesture in the first half of m. 3 (refer back to Example 4.4). (All of these passages can be found in De Stefano’s transcription of this solo, which I have edited and included in Appendix B.)



Figure 4.2. The two blues scales Montgomery uses in his solo on “Four on Six”.

This solo is suffused with melodies and melody fragments from the blues scale (see Figure 4.2 for the G and Bb blues scales, which both appear in this solo). The blues-infused lines are almost exclusively on tonic sections or progressions that lead directly back to the tonic, or on the brief turn to relative major at the 13<sup>th</sup> measure of the changes. The first clear statement within a blues scale comes in the second chorus at the turn to the relative major, in m. 29 (Example



Example 4.19. A Bb blues melody in mm. 28-31 of Montgomery’s solo on “Four on Six.”

4.19). The line in which the statement resides begins in m. 28 on a gesture that can reasonably be interpreted as totally within the prevailing harmony there ( $G^{-7}$ ), or as more roughly within the Bb blues “sound” despite the presence of the note G, which is not properly in the Bb blues scale. All of the notes in m. 29, however, belong to that scale. Montgomery plays Ab-F-Bb-E-Eb. Note that the Bb and F are the only two notes that literally belong to the  $Bb^{maj7}$  in the changes. It is

important to regard the E and Eb as members of a scale instead of as tertian extensions here: they are #4 and 4, not the #11<sup>th</sup> and 11<sup>th</sup>. This is because the passage does not elaborate harmony by explicit emphasis of chord tones, within or beyond the octave, as other passages do. If we analyzed the notes (especially in m. 29) as tertian extensions of the underlying harmony, we would have two questions to answer: how the Ab could be analyzed over the Bb<sup>maj7</sup>, and how to explain the presence of the #11<sup>th</sup> when we know, given De Stefano's work, Montgomery avoided this note and utilized the 11<sup>th</sup> habitually instead. It is probably best to understand the contour of mm. 29-31 from the Ab on as a descending Bb blues melody, moving through each member of the scale, with Bb itself acting like a pedal tone until the line finally comes to rest on it in m. 31.

One particularly strong statement in G blues comes in mm. 79-80, where the second half of the changes returns to tonic, right at the end of the fifth chorus (Example 4.20). This tightly



Example 4.20. A snaky G blues melody in mm. 79-80 of Montgomery's solo on "Four on Six."

circumscribed but chromatically angular line moves up from C through C# to D (4-#4-5) and then back down through those same pitches, with Bbs interpolated between. The last four notes are just falling thirds; the A is technically not a member of the G blues scale but this is nothing if not a blues melody. The opening of the ninth chorus also features a blues lick in mm. 98-99, also on the tonic (Example 4.21). Here Montgomery descends from Db through C to Bb, and then



Example 4.21. A descending G blues line in mm. 98-99 of Montgomery's solo on "Four on Six".

leaps down to G. He repeats the lick down the octave immediately. A rhythmically similar gesture takes the solo to  $Bb^{maj7}$  later in the same chorus in mm. 108-109 (Example 4.22). It



Example 4.22. A similar line that strongly suggests the  $Bb$  blues scale, in mm. 108-109 of Montgomery's solo on "Four on Six".

begins on the same note, descending from Db to Bb. Then it steps down to Ab before leaping down to F for the downbeat of m. 109. The last three notes are C, E, and Eb; F-E-Eb is the chromatic cell from the  $Bb$  blues scale. There are other hints of blues scales and gestures, including individual blue notes, scattered throughout this solo, but the last one I will mention is in fact the final melodic statement in the solo itself, from m. 140-144 (Example 4.23). This again



Example 4.23. The final melodic statement of Montgomery's solo on "Four on Six" (mm. 140-145), which relies almost entirely on pitches from the G and  $Bb$  blues scales.

begins by implying the turn to  $Bb^{maj7}$  with the  $Bb$  blues scale, the exact same way as in mm. 108-109: Db-Bb-Ab-F. In m. 141, following the F, Montgomery slides up and down into the chromatic pair Eb-E before dropping from Eb through Db to Ab. The remainder of the line is G blues. He reiterates the Ab as a blue note that moves up to A, and then falls to G. The climb up the octave finishes out with this G blues gesture: Db-Bb-C (note that the very first downbeat and the last note in this solo are C). If there is any doubt this is a G blues gesture, the recording helps

confirm: Tommy Flanagan, the pianist, opens his solo by reiterating this gesture and spinning out from it his own line in the G blues scale.

### Montgomery's chord melodies

Montgomery was famous in part for constructing solos that became texturally thicker as they progressed. They began with individual lines, which were followed by octave melodies, and culminated in chord melodies. It is in some sense strange that people would associate him so strongly with this solo structure, because he did not use it exclusively, or even the majority of the time, at least in his recorded solos. He is also not the only jazz guitarist who played chord melodies; at least Django Reinhardt did this before him, and Joe Pass did contemporaneously and after him. Besides improvised chord melodies, Montgomery did occasionally use chord melodies to harmonize tunes themselves, usually in ballads.

Montgomery's chord melodies are generally cast in closed voicings and exist in diatonic modes related to the prevailing harmony. His chords harmonize melody notes in a straightforward fashion. Diatonic notes are typically harmonized by seventh chords built from the complete tertian set of the underlying harmony (and he overwhelmingly uses unaltered members of that tertian set). Chromatic notes that do not function explicitly as chromatic neighbor and passing notes are treated as altered tertian members of the set, and their harmonizations may include additional altered members of the set or they may indeed be interpreted as substitutions for the underlying harmony. Chromatic neighbor and passing notes are typically harmonized by planing<sup>20</sup> into and out of the chords that harmonize diatonic pitches,

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<sup>20</sup> To "plane" between two harmonies, every member of the initial harmony ascends or descends by the same interval to the subsequent harmony. Therefore both harmonies will be the same quality and remain in the same inversion.

or perhaps by planed diminished seventh chords, but Montgomery may also cast these chromatic notes with harmonies that imply altered members of the underlying chord.

It is important to understand that though his voicings are closed, they are not literally closed-position voicings where all the chord members are arrayed with the smallest distance possible between them. This is because such voicings are often wildly impractical if not literally impossible to play on the guitar because of the intervals between the instrument's strings. A wordy explanation of this is feasible but not particularly salient here. What we should understand is that, because of the layout of the guitar, many of Montgomery's voicings end up being drop-2 voicings. To create a drop-2 voicing, you lower the second-highest voice of a closed-position voicing (in any inversion) by an octave. In Figure 4.3, I show a closed-position, second inversion F<sup>7</sup> chord and the drop-2 voicing (which is in root position) that results when that operation is performed on the closed-position voicing. This drop-2 voicing is a common way to play F<sup>7</sup> (or any dominant seventh chord) on the first four strings of the guitar and can be easily adapted for the other two sets of adjacent four strings on the instrument.

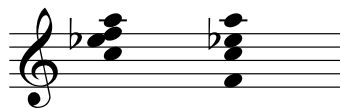


Figure 4.3. Two voicings of F<sup>7</sup>, one closed-position, one drop-2.

Below I will discuss the chord melody section of Montgomery's solo on his own composition, "West Coast Blues," from *Incredible*. First, though, I will analyze the changes of the song based on Steven Strunk's theoretical approach to harmonic progressions in bebop. This song is a 24-bar blues, which at its most basic would be an augmented twelve-bar blues where the every harmony has been doubled in length (Figure 4.4 shows such a blues in Bb). Because this structure would leave long stretches of static harmony, it is common for jazz musicians to insert substitute harmonies and progressions throughout. Figure 4.5 provides a diagram of one

1 B $\flat$ 7 Eb7 B $\flat$ 7

9 Eb7 B $\flat$ 7

17 F7 Eb7 B $\flat$ 7 (F7)

Figure 4.4. A 24-bar B $\flat$  blues.

1 B $\flat$ 7 Eb7 B $\flat$ 7

5 Eb7 B $\flat$ 7 G7

9 Cm7 F7 B $\flat$ 7 G7 Cm7 F7

Figure 4.5. A typical bebop 12-bar B $\flat$  blues.

common bebop approach to twelve-bar blues as a model to compare Montgomery’s changes against (again in B $\flat$ ).

“West Coast Blues” is harmonically complex, rich with ii $^7$ -V $^7$  progressions and multiple substitutions (see Figure 4.6 for a diagram of the changes of this tune). In this tune, bVII $^7$  functions as a substitute harmony for IV $^7$  wherever the latter appears in the changes in Figure 4b. This affects mm. 3-4 and mm. 11-12 of “West Coast Blues.” We should take this as an example of modal mixture: Strunk assesses that the harmonies bVII $^7$  and iv exist within the same “substitution set” because they “can be seen as subsets of [tertian harmonies including all unaltered extensions out to the 13<sup>th</sup>]” of that set.<sup>21</sup> Since in a major blues progression such as this

<sup>21</sup> Steven Strunk, “The Harmony of Early Bop: A Layered Approach,” *Journal of Jazz Studies* 6, no. 1 (Fall-Winter 1979): 15-16.

1 B $\flat$ 7 Ab7 B $\flat$ 7 Bm7 E7

9 B $\flat$ m7 Eb7 Ebm7 Ab7 Dm7 G7 Dbm7 G $\flat$ 7

17 Cm7 F7 Cm7 F7 B $\flat$ maj7 Db7 G $\flat$ maj7 F7

Figure 4.6. The changes to “West Coast Blues”, by Montgomery.

one we expect to find a major-quality harmony built on the 4<sup>th</sup> degree of the key, a harmony that belongs to the same diatonic set as a minor-quality harmony built on the 4<sup>th</sup> degree of the key therefore implies modal mixture. This explains the Ab<sup>7</sup> in mm. 3-4, and the progression in mm. 9-12. Following the first Ab<sup>7</sup>, the harmony is conventional (on tonic) in mm. 5-6, but beginning in m. 7 a long series of ii<sup>7</sup>-V<sup>7</sup> progressions alternately stray and return to the harmonic form outlined in Figure 4b. First, in mm. 7-8, we hear B<sup>-7</sup>-E<sup>7</sup>. This progression is a II-V elaboration (in Strunk’s terminology) on E<sup>7</sup>.<sup>22</sup> This harmony is a tritone substitution for B $\flat$ <sup>7</sup>, the applied dominant of Eb<sup>7</sup>, which in effect arrives at m. 9. It is common for jazz musicians to tonicize IV<sup>7</sup> at the end of the first third the blues form. At m. 9, however, we do not immediately move to IV<sup>7</sup> (Eb<sup>7</sup>). Instead, Montgomery inserts another II-V elaboration on that harmony, rendering the B $\flat$ <sup>-7</sup>-Eb<sup>7</sup> progression in mm. 9-10. The changes keep coming, however. Instead of remaining on Eb<sup>7</sup>, we move towards Ab<sup>7</sup>, the same substitute we saw for Eb<sup>7</sup> in mm. 3-4. Again, though, Montgomery has inserted a II-V elaboration, so mm. 11-12 are not merely Ab<sup>7</sup> throughout but the Eb<sup>-7</sup>-Ab<sup>7</sup> progression we hear. In a normal twelve-bar blues, the tonic would return at m. 7; the corresponding measure here is m. 13. Instead of tonic (B $\flat$ <sup>7</sup>) Montgomery moves to D<sup>-7</sup>,

<sup>22</sup> Ibid., 13-15.



which is  $iii^7$  in the key of Bb. Strunk recognizes this harmony as a substitute for tonic.<sup>23</sup> In a less complicated set of changes, this would sound until the arrival of  $V^7/ii$  in m. 8 (m. 15 in a 24-bar blues). Instead, yet another II-V elaboration rushes us to that harmony ( $G^7$ ) by m. 14, a measure earlier than we expect. I understand this  $G^7$  to be a tritone substitution for the dominant of  $Gb^7$  that arrives in m. 16 (also elaborated upon with a  $ii^7$  chord,  $Db^{-7}$ ), which is a tritone substitution for the dominant of  $F^7$  that arrives in m. 18 (again subject to a II-V elaboration). As we can see from the standard bebop blues changes, the presence of the  $ii^7-V^7$  progression on tonic at the outset of the final third of the changes is standard. Montgomery simply repeats this progression twice to fill up the expanded 24-bar form. The tonic returns at m. 21, as expected. The turnaround moves to  $Db^7$ , an applied dominant of the  $Gb^{maj7}$  in m. 23. This is another instance of modal mixture; Strunk does not include  $bVI^{maj7}$  in any of his substitution sets, but  $bVI$  has been used as a modal-mixture substitute for  $vi$  in various forms of Western music since the 19<sup>th</sup> century. The  $F^7$  in m. 24 prepares the return to tonic as the form repeats.

Montgomery's solo lasts nine choruses; the chord melody makes up the last two of these. I have given the entire chord melody in Example 4.24 and will include smaller excerpts of it throughout this discussion.

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<sup>23</sup> Ibid., 16.

The first six measures of this solo demonstrate how Montgomery typically harmonizes diatonic notes in his chord melodies. Such notes are generally supported by drop-2 voicings of

The musical score is written in 3/4 time with a key signature of two flats (B-flat and E-flat). It consists of seven staves of music, each starting with a measure number and a chord label above it. The chords are: 169 Bb7, 173 Bb7, Bm7, E7, 177 Bbm7, Eb7, Ebm7, Ab7, 181 Dm7, G7, Dbm7, Gb7, 185 Cm7, F7, Cm7, F7, 189 Bbmaj7, Db7, Gbmaj7, F7, 193 Bb7, Ab7. The notation includes various voicings, some with slurs and ties, and some with triplet markings.

Example 4.24. Montgomery's improvised chord melody on "West Coast Blues," from *The Incredible Jazz Guitar of Wes Montgomery*. This transcription is by Steve Kahn, although I have made several corrections throughout it.

seventh chords that exist in the complete tertian set the current harmony implies. The chord melody texture begins a beat and a half before the eighth chorus with two chords: a root position  $F^{-7}$  and a first inversion  $Eb^{-7}$ , which planes into a first inversion  $F^{-7}$  on the downbeat of the first measure of the chorus (m. 169), then descends through the root position  $F^{-7}$  to a root position  $Bb^7$  (which, notably, is not in a drop-2 voicing). Note that all the notes in these chords (except  $Eb^{-7}$ ) are within  $Bb$  Mixolydian. These chords harmonize the following melody:  $Ab-Bb-C-C-Ab-F$ . This is a straightforward melody, also comfortably within  $Bb$  Mixolydian (its ambit is between the 5<sup>th</sup> and the 9<sup>th</sup> of the  $Bb^7$  that begins the changes). The most noteworthy element of this brief passage is the  $Eb^{-7}$  chord Montgomery uses to harmonize the  $Bb$  pickup to m. 169, because it has both a  $Gb$  and a  $Db$  in it. Unlike the notes in the melody and all the other chords, neither of these notes occur in  $Bb$  Mixolydian. One could interpret them as the  $\#9^{\text{th}}$  and  $b13^{\text{th}}$  of the  $Bb^7$  this

chord anticipates, but it may be best to regard this as a rare occasion when Montgomery treats a diatonic pitch with a planed harmony. That is, he planes into the  $F^{-7}$  on the downbeat of m. 169 with a harmony that includes notes outside the prevailing mode, despite the fact the melody notes are both within that mode and he could have set the  $Bb$  with a harmony within that mode. This interpretation is plausible because of his pickups to mm. 171 and 173. Montgomery repeats the same two-bar figure he introduces in mm. 168-170 almost literally in mm. 170-174, transposed over  $Ab^7$  (from the pickup of mm. 171-172) and again over  $Bb^7$  (from the pickup of mm. 173-174). The only change is in the pickup itself. To reach  $Ab^7$ , he planes chromatically up from an implied  $Db^{-7}$ , which harmonizes an  $Ab$ , into the  $Eb^{-7}$ , which harmonizes a  $Bb$  on the downbeat of m. 171. He uses this same chromatic pickup, transposed, for the return to  $Bb^7$ . This new chromatic pickup preserves the harmonic oddity of the first: the implied  $mm^7$  chord based on the fourth degree of the prevailing mode (Mixolydian) includes the  $\#9^{th}$  while harmonizing the pitch center of the mode. Specifically, in the pickup to m. 171, where  $Ab^7$  begins, the lowest note is a  $Cb$  in a chord that harmonizes  $Ab$ . So, in the opening measures of his chord melody on “West Coast Blues,” we see a melody that resides comfortably within the modes implied by the two harmonies present ( $Bb$  and  $Ab$  Mixolydian), and chord planing to treat chromatic pitches.<sup>24</sup>

Out of the 17 chromatic pitches in this chord melody, seven function as neighbor notes. This excludes the melody notes in mm. 204-205, two measures I discuss below. The gesture in m. 175, over a  $B^{-7}$ , clearly demonstrates how Montgomery handles chromatic neighbor pitches:

*Example 4.25. Montgomery planes into and out of a  $D^{maj7}$  to render the chromatic line in mm. 174-175 of his solo on “West Coast Blues”.*

<sup>24</sup> See mm. 179-184, 193-198, and 214-215 for further examples of diatonic melodies harmonized by diatonic chords.

he harmonizes them with chords that plane chromatically into the main melodic pitch and the chord below it (see Example 4.25). Here, Montgomery plays C-C#-C-C#-B-A. The C is the neighbor note to C#. The C#s are harmonized by what is literally a D<sup>maj7</sup> chord, simply a rootless B<sup>-9</sup>. The B and A are both harmonized by inversions of B<sup>-7</sup>, naturally. The Cs are harmonized by Db<sup>maj7</sup>. This harmony planes chromatically into the D<sup>maj7</sup> that harmonizes the C#, as I said above.<sup>25</sup>

There are just 5 chromatic passing tones in this chord melody. They are treated in a more diverse fashion than the chromatic neighbor tones: Montgomery handles them with planed harmonies and treats them as altered tertian members. I have already described how, in the first six measures of the chord melody, chromatic passing tones are harmonized with planed harmonies (see the pickups to mm. 171 and 173). A special case of this occurs in m. 188 over F<sup>7</sup>,



*Example 4.26. Planed diminished seventh chords harmonize the chromatic melody in m. 188 of Montgomery's solo on "Four on Six".*

shown in Example 4.26. The melody moves from A chromatically up to C. These two notes are harmonized by an A<sup>dim7</sup> chord, which is a rootless F<sup>7b9</sup>.<sup>26</sup> The Bb and B in between are harmonized by Bb<sup>dim7</sup> and B<sup>dim7</sup> chords. So, to set this chromatic passing movement over a dominant seventh chord, Montgomery simply planes diminished seventh chords between those two which imply the prevailing harmony.

<sup>25</sup> Other chromatic neighbor pitches occur in m. 176 (G into G#), the pickup to and first half of m. 185, the pickup to and first half of m. 187, and m. 213. They are harmonized in the exact same fashion.

<sup>26</sup> Notably, he handles these two notes over the F<sup>7</sup> at the same formal point in m. 212 the exact same way.

Example 4.27. Measures 190-192 of Montgomery's solo on "West Coast Blues". In m. 190, Montgomery treats D, a chromatic passing tone, with a substitute harmony instead of a planed chord.

There is one chromatic passing tone treated not with a planed harmony, but as part of a substitute harmony. This occurs in m. 190 (see Example 4.27). The first chord in this measure is a slightly curious exception to how Montgomery usually treats melody notes within the prevailing mode (in this case, Db Mixolydian). The Eb in the melody here is the 9<sup>th</sup> of a rootless Db<sup>9/13</sup> chord played in a difficult-to-characterize quartal voicing that from bottom to top contains the notes Cb, F, Bb, and Eb. This chord is an atypical choice for Montgomery because the notes are not consecutive extensions of the underlying harmony, as they overwhelmingly are. The F is the 3<sup>rd</sup>, the Cb the b7<sup>th</sup>, the Eb the 9<sup>th</sup>, and the Bb the 13<sup>th</sup>. There are "gaps" in the voicing where one might have expected to find either Ab, the 5<sup>th</sup>, or Gb, the 11<sup>th</sup>, in some other approach to setting the Eb in the top voice. Ultimately, Montgomery probably chose this voicing in order to lead the voices smoothly through the next few chords – below I will explain how the music proceeds. The following note in the melody, D, is a chromatic pitch in Db Mixolydian (the "proper" mode for Db<sup>7</sup>). The supporting chord is best understood as a B<sup>-7b5</sup>, which is exactly a rootless G<sup>9</sup> chord, the tritone substitution for Db<sup>7</sup>. The top two notes in this chord are both a half step beneath the top two voices in the previous chord, while the lower two notes are the same. The next note in the melody is Db, harmonized by a Bb<sup>-7</sup> chord, a rootless Gb<sup>maj9</sup>. The second-highest voice here is Ab, a half step down from the A in the previous chord, and the lowest voice in Bb, a half step below the B in the previous chord. These three chords are a careful path from Db<sup>7</sup> to Gb<sup>maj7</sup> that set a chromatic pitch on the way as a member of a substitute harmony. Other tertian extensions help smooth the voice-leading: the top two voices plane down by half step in

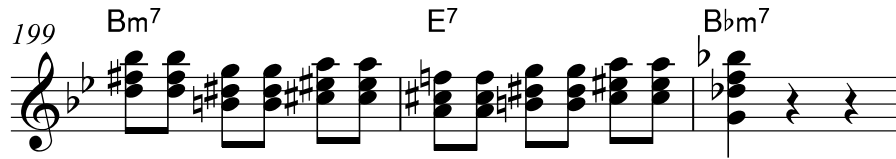
parallel fourths, and the lowest voice shifts down by half step in what is essentially a classic 4-3 resolution in this dominant-to-tonic progression. This passage is exceptional because Montgomery does not frequently prioritize smooth voice leading in this way. Save for instances of planing, voices other than the melody voice are not guaranteed to move mostly by step, and careful resolution of dissonance is not his priority.

As the above example demonstrates, sometimes chromatic pitches in the top voice of a chord melody indicate substitution, instead of functioning as part of chromatic chordal planing. This parallels De Stefano's assertion that notes in Montgomery's single-line melodies which appear to be altered tertians in fact indicate chordal substitution. Two of the three chords over F<sup>7</sup> at the end of the eighth chorus (starting from the pickup to m. 192) bear this out (refer back to Example 4.27). Notice here that the chromatic pitches are not chromatic neighbor or passing tones – in fact, the F at the top of the second chord in question is a chromatic lower neighbor to the melody. The first chord is an F<sup>#-9</sup> chord in root position. The G# in the top voice is enharmonically equivalent to Ab, the final note heard above Gb<sup>maj7</sup> in m. 191, so the top voice does not actually move as he gets into this harmony. This smooths the transition into the brief substitute progression. The following chord is Bb<sup>7</sup>, which in this case functions as a chromatic lower neighbor chord to the following B<sup>7</sup>. The F<sup>#-9</sup> and B<sup>7</sup> are best interpreted as a II-V elaboration on the tritone substitution for F<sup>7</sup>, which is B<sup>7</sup>.<sup>27</sup>

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<sup>27</sup> Montgomery plays literally the same melody (Ab/G#-Gb/F#-F) in both mm. 192-193 and 216-217. The difference is that in m. 216 the melody notes are clearly set as altered tones in a rootless F<sup>7</sup>. We can be sure that this is the implied harmony here because its 3<sup>rd</sup> is present in the lowest voice and the melody arrives at the root by the final beat of the measure.

One more passage of the chord melody is peculiar. It distinguishes itself by making use of several pitches that do not belong to the prevailing typical modes in the top and lower voices of the chord melody (see Example 4.28). The melody from the downbeat to downbeat in mm.



*Example 4.28. In mm. 199-201 of his solo on “West Coast Blues”, Montgomery treats the melody, which fits in the Bb melodic minor scale, with a series of planed augmented triads.*

199-201 is Bb-G-A-F-G-A-Bb. This fits into the Bb melodic minor scale. The majority of the other notes he plays in this passage, a series of augmented triads, belong to that scale as well. There are only three that do not: the D and F# in the first augmented triad, and the B in the triads underneath both Gs in the top voice. Because augmented triads do not strongly imply tonal centers, it may not be critical to reckon with the presence of these notes, and others in this passage that do not belong to the modes of the underlying harmonies (B<sup>-7</sup> and E<sup>7</sup>). Instead we might regard this melody as a long anticipation of the Bb<sup>-7</sup> in m. 201, harmonized underneath by planed augmented triads. Montgomery would not normally use this scale to harmonize either of the chords it appears over here. We have already seen that his chord melodies mainly rely on notes from modes of the major scale that are commonly used to improvise over tonal progressions.

One other instance of augmented triads crops up in the chord melody portion of Montgomery’s solo on his tune “Cariba” from *Full House*. This tune is a 12-bar blues in Bb; the changes are unadorned. I have included my transcription in Example 4.29. Of interest are mm. 125-128. The augmented triads begin in m. 125 over Eb<sup>7</sup>. The first we hear is C<sup>#+</sup>, reasonably interpreted as a rootless B<sup>9b5</sup>, which is a tritone substitution for the Eb<sup>7</sup>. The only other augmented triad in the two measures of Eb<sup>7</sup> is C<sup>+</sup>; this is clearly nothing more than a chromatic



97 Bb7

101 Eb7 Bb7

105 F7 Eb7 Bb7

109 Bb7

113 Eb7 Bb7

117 F7 Eb7 Bb7

121 Bb7

125 Eb7 Bb7

129 F7 Eb7 Bb7 3

Example 4.29. Montgomery's chord melody (mixed with octave statements) in mm. 97-132 of his solo on "Cariba", by Montgomery, as heard on the album *Full House*.

lower neighbor chord to the C $\sharp^+$ . The third and final augmented triad in this passage, Ab $^+$ , follows immediately at the return to Bb $^7$  in m. 127. I would interpret this as a rootless Bb $^{9b5}$ ; Montgomery just took the augmented triad he used to imply a tritone substitution for Eb $^7$  and

shifted it down a half step to tonic, exactly what you would normally do when moving from a tritone substitution to tonic – except he does change the “inversion” of the harmony, moving the note from the top voice of the  $C\#^+$  to the bottom voice of the  $Ab^+$ . He gets out of this floaty, nontonal sound by moving through another nebulously tonal harmony: a  $Bb^{dim}$  triad, which plausibly implies the applied diminished seventh chord ( $E^{dim7}$ ) of the following  $F^7$ . This harmony he implies with the mellow, almost-tonic sound of  $F^{6/9}$ . While he could have played the diminished chord directly “underneath”  $F^{6/9}$ , with the notes E, G, and Db, he instead keeps it close to the previous  $Ab^+$ , creating an expressive leap up to the  $F^{6/9}$  where tension finally resolves.

### Montgomery’s ballad style

De Stefano describes Montgomery’s ballad improvisational style as “paraphrase improvisation,” a concept he takes from Barry Kernfeld. Paraphrase improvisation involves creating a solo based exactly on the original tune of the melody, with new material added and rhythmic and melodic transformations of the original melody. Other jazz musicians used this technique, but critics found the way Montgomery employed them to be exceptionally artistic.<sup>28 29</sup> De Stefano states Montgomery’s paraphrase improvisational style incorporates six elements: the “blues tinge,” the introduction of “new scalar material” where originally the melody did not move, “rhythmic transformation,” “undulating melodic contours” including implied counterpoint, and “dramatic devices” including various types articulation and tremolo, all while

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<sup>28</sup> De Stefano, “Style,” 165-166.

<sup>29</sup> Ivor Mairants, *The Great Jazz Guitarists*, vol. 2 (London: Sanctuary Publishing, 1994), 117-119.

paying attention to preserve enough recognizability of the tune’s original “phrase beginnings and endings” so that it is clear on what tune he is improvising.<sup>30</sup>

Paraphrase improvisation is certainly at work Montgomery’s performance of “Polka Dots and Moonbeams” from *Incredible*. Everything about mm. 1-4 discussed in this paragraph and the one following can be observed in Example 4.30. Montgomery puts “the blues tinge” to work

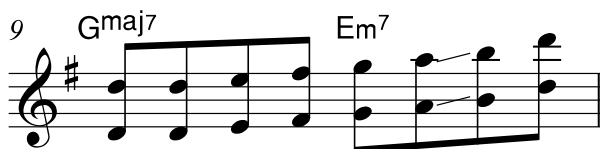
Example 4.30. The first four measures of Montgomery’s performance of “Polka Dots and Moonbeams”, by Jimmy van Heusen and Johnny Burke, from *The Incredible Jazz Guitar of Wes Montgomery*.

right away in the melody statement before his improvisation even starts. In beat 4 of m. 1, he adds in A#, the quintessential blue note in the tonic, G major, between the A and B in the original melody statement. Because he adds this extra note to the line, he compresses what was originally just two eighth-notes into a triplet eighth note followed by a dotted triplet eighth note and its complementary sextuplet sixteenth-note; that is, the bluesy inflection actually drives rhythmic transformation.<sup>31</sup> In beat 1 of m. 4, he adds D# (functioning as a blue note) between D and E in the original melody. The blue note occupies (roughly) the first sixteenth-note of the measure, and Montgomery holds E over into the first triplet eighth-note of the next beat to compensate for this displacement, instead of moving on to the next note immediately on the beat as the original melody does. Again, a blues affectation causes rhythmic transformation.

<sup>30</sup> De Stefano, “Style,” 166-167.

<sup>31</sup> Other examples of this same blue note causing rhythmic transformation occur in mm. 13, 42, and 45 of this solo.

Rhythmic transformations need not be associated with blue notes and bluesy gestures. In measure 2, there is a glissando from an E to the A above it, the A which is not in the original melody of the piece. Montgomery appropriately accentuates this new note by placing it right on the beat, delaying the original E until the second eight-note of the beat (and then sliding chromatically down through that to the D at the beginning of the next measure). Most statements of the original melody's opening ascending gesture, which occurs in mm. 1 and 3 of the tune, are also rhythmically altered in one way or another. The very first, in m. 1 of his melody statement, begins normally in eighth notes, but then the blue note discussed above scooches the last two notes in the ascent (B and D) slightly later in the measure. The next statement of the ascent, in m. 3 of his solo, adds in an extra D at the start of the measure, and in lengthening it to a quarter note, shortens what would have been the first D from an eighth note in the second half of b. 1 to a triplet eighth on b. 2. The outset of the second statement of the A section, beginning at m. 9, renders the ascent "correctly" save an extra D on the downbeat, just like in m. 3 (Example 4.31);



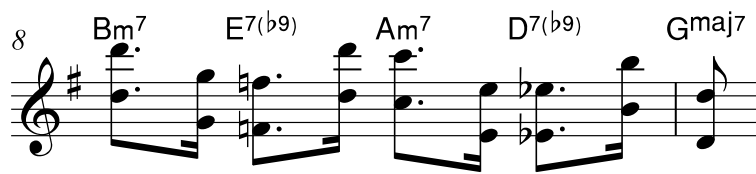
Example 4.31. The opening of the second A section from Montgomery's performance of "Moonbeams", by van Heusen and Burke.



Example 4.32. Rhythmic transformation in m. 11 of Montgomery's performance of "Moonbeams", by van Heusen and Burke.

the following ascent in m. 11 again employs an extra D on the downbeat, but this time shortens the first three notes even more than in m. 3: they are not triplet eighths, but sixteenth notes crammed into b. 2. Montgomery then pauses on the tonic, G, for an extra sixteenth note, before playing a shortened A on the final sixteenth of b. 3 (Example 4.32).

In measure 8, where the original melody consists solely of a single D held for a whole note, Montgomery instead employs two separate lines in different registers to outline the harmonies underneath (Example 4.33). Therefore he not only introduces “new scalar material” but also creates implied counterpoint, which De Stefano includes in his “undulating melodic contour” category of paraphrase improvisation. The upper line begins with a D that harmonizes with the B<sup>-7</sup> chord below. Montgomery plays it again over the following E<sup>7b9</sup> in the next beat



*Example 4.33. A two-part melody interpolated where the original melody is a single whole note, in m. 8 of Montgomery’s performance of “Polka Dots and Moonbeams”, by van Heusen and Burke.*

before descending to a C, which harmonizes with the underlying A<sup>-7</sup> harmony. The final note in the upper line is a B, which is the 13<sup>th</sup> of the D<sup>7b9</sup> below. The lower line begins with a G that descends into F, the b9<sup>th</sup> of the E<sup>7b9</sup> chord below; in b. 3 the E plays the same role, descending to the Eb that belongs to the D<sup>7b9</sup> below. This lower, more chromatic line finally descends by half-step to the D on b. 1 of m. 9. The new scalar material from the downbeat of m. 8 to the downbeat of m. 9 falls into two separate contrapuntally related lines: D-C-B in the upper voice, and G-F-E-Eb-D in the lower voice.

Perhaps the most delectable example of a “dramatic device” in this solo, according to De Stefano’s definition, occurs in mm. 25-26, at the return of the tune’s A section (Example 4.34). Three descending arpeggios are delivered in a lazily bubbly staccato. Over the E<sup>-7</sup> in the second half of m. 25, Montgomery plays a descending G<sup>maj7</sup> arpeggio (right at home in a measure that is essentially sitting on tonic). In measure 26 he falls through an E<sup>-7</sup> arpeggio over A<sup>-7</sup>, and a D<sup>+</sup>

arpeggio over D<sup>7</sup> (implying an altered dominant sound) that steps down into the downbeat of the next measure on the tonic substitute B<sup>7</sup>.

Example 4.34. A “dramatic device”: heavily swung and staccato arpeggios in mm. 25-26 of Montgomery’s performance of “Moonbeams”, by van Heusen and Burke.

The sixth element of Montgomery’s paraphrase improvisational technique, emphasis on phrase beginnings and endings, is evident in this solo as well. Every time the form reaches a statement of the initial melody of the piece, Montgomery at the very least plays the D that begins its ascent. Right at the beginning of the performance, he of course states the melody almost literally (save for the blue note discussed above and a brief lower neighbor decoration on the first beat of its second measure). At measure 9, it returns once again almost literally except for an extra D that Montgomery inserts on the first eighth-note of the measure (refer back to Example 4.31). In measure 25, when the music is clearly farther afield from the written melody, he still includes the telltale D at the beginning of the measure to alert listeners to the end of the bridge and the return of the A section of the piece (see Example 4.34 again). After a piano solo over the bridge from mm. 33-40, Montgomery signals the final reiteration of the A section in m. 41 with a

Example 4.36. The G at the beginning of m. 41 serves to ground the listener in G major, when this key area returns with final A section of Montgomery’s performance of “Moonbeams”, by van Heusen and Burke.

Example 4.35. At right, the leap at the beginning of the bridge in “Polka Dots and Moonbeams”, by van Heusen and Burke; at left, Montgomery preserves this leap (in the key of his performance) when he plays the bridge.

low G to announce the return to G major after the harmonically ambiguous bridge, and then recapitulates the melody (Example 4.35). He also makes sure to include the ascending major sixth in m. 17, at the beginning of his take on the bridge (Example 4.36). Although these nods to the original melody are slight, they are nonetheless effective references to the original melody, confirming Montgomery is in fact riffing on “Polka Dots and Moonbeams.”

### Montgomery’s melodic (scalar) language

While De Stefano provides an incredibly detailed analysis of Montgomery’s use of arpeggiated structures, he does not provide a parallel analysis of his stepwise melodic language. He does wrangle with how Montgomery employs the blues scale, and the pentatonic and octatonic scales, as well as one particular motive from the Lydian dominant scale. He also discusses how Montgomery sometimes develops an idea motivically, and separately addresses the fact that Montgomery does use formulas (similar to Christian). I have already mentioned the appearance of the blues scale in my analysis of Montgomery’s solo on “Four on Six,” so I will not focus on that aspect of his melodic language below. Instead I would like to address a few issues with De Stefano’s chapter on “Melody” (Chapter 6 of his dissertation).

First, he asserts that whenever Montgomery uses the octatonic scale, it always descends and doesn’t last longer than two measures.<sup>32</sup> He also notes Montgomery uses it mainly over dominant harmonies. While De Stefano is correct about the harmonic context in which it appears and that it never lasts longer than two measures (in mid- and up-tempo songs), I do not agree that it always descends. In “D-Natural Blues” from *Incredible*, for example, there are two separate instances of the ascending octatonic scale. In Montgomery’s first chorus, he plays a G# whole-

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<sup>32</sup> De Stefano, “Style,” 162.



Example 4.37. From the C# in beat 2 to the D in beat 4, Montgomery plays an ascending octatonic scale in m. 6 of his solo on “D-Natural Blues”, by Montgomery.

half octatonic scale from C# up a minor ninth to D over the G#<sup>dim7</sup> chord in m. 6 (Example 4.37). Jazz improvisers typically use the whole-half octatonic scale over diminished harmonies. This particular G#<sup>dim7</sup> is functioning as a common-tone diminished harmony to the following D<sup>7</sup>, essentially a dominant function. The same scale appears over the same harmony in the third chorus, at m. 30 (Example 4.38). Like before, the scale ascends one semitone past an octave (this time from Bb up a minor ninth to B).



Example 4.38. The same octatonic scale, again ascending, in m. 30 of Montgomery's solo on “D-Natural Blues”, his own tune.

De Stefano points out that Montgomery uses *one specific descending cell* from the Lydian dominant scale in Chapter 6 of his dissertation.<sup>33</sup> This is true and the cell is unique, but Montgomery also uses the scale more broadly. The cell De Stefano identifies is **1-b7-#4-(3)**. De Stefano notes that these pitches effectively identify the mode. I put **3** in parentheses because De Stefano does not include it in his paper, although in the four instances of the cell across the two examples he gives, this pitch appears three times following **#4**, and the only reason it does not in the one remaining instance is because it cannot: in that case **#4** is the lowest note on the instrument, E (the open 6<sup>th</sup> string) – Montgomery just ran out of room (Examples 4.39 and 4.40). The second example (here in my paper, 4.40) is also interesting because the cell appears not over

<sup>33</sup> Ibid., 164.





Example 4.39. Three successive instances of the Lydian dominant motif that De Stefano identified in mm. 25-27 of Montgomery's solo on "Freddie the Freeloader", by Miles Davis, from the album *Portrait of Wes*.



Example 4.40. The Lydian dominant motif over  $G^{-7}$  in mm. 9-10 of Montgomery's solo on "The Trick Bag", by Montgomery, from the album *Boss Guitar*.

a dominant harmony as you might expect and as occurs in the first example, but over a  $mm^7$  chord. The cell is centered on the 11<sup>th</sup> of the chord. Specifically, in this example, the harmony is  $G^{-7}$  and the cell is from the C Lydian dominant scale, so one gets the effect of the G melodic minor scale (the cell is C-B $\flat$ -F $\sharp$ -E). I have found one passage that employs the Lydian dominant scale in Montgomery's solo on "D-Natural Blues" but does not rely on the cell De Stefano singles out. This passage is in m. 17 over a  $G^7$  chord. Here, he uses the G Lydian dominant scale "twice," in effect (Example 4.41). First, after slipping into the scale from a half step below G, he



Example 4.41. Montgomery uses the G Lydian dominant scale (and an arpeggio found within it) in m. 17 of his solo on "D-Natural Blues", by him.

ascends to F,  $b7$ . That is the "first" statement of the scale; at this point Montgomery arpeggiates up through an  $F^{maj7\sharp 5}$  chord, the "second" statement. Essentially, here he has adjusted one of his favorite treatments of a dominant harmony (playing a  $MM^7$  arpeggio based on the  $b7^{th}$  of the harmony) to fit the context he has already established (Lydian dominant) by raising the 11<sup>th</sup> of the underlying harmony in the arpeggio by a half step (where he would have played C, he now plays C $\sharp$ ).

De Stefano makes no mention of the altered dominant scale in Montgomery's improvisation. This must be an oversight, because it appears in at least two of the guitarist's solos, on the tracks "Full House" and "Born to be Blue." I am hard-pressed to believe these are exceptional cases and do not reflect part of Montgomery's broader improvisational practice. The altered dominant scale can be understood as the 7<sup>th</sup> mode of the melodic minor scale.<sup>34</sup> Its members, relative to the pitch on which it begins, are conceived of as **1-b9-#9-3-#4-#5-b7**. I have shown a G altered dominant scale in Figure 4.7. This scale is typically deployed over



Figure 4.7. The G altered dominant scale.

dominant harmonies, especially those that a lead sheet explicitly calls to contain altered tones, or those that are in the tonic key in minor-mode tunes. The latter is true because several tones in the scale (**b9, #9, #5/b6**) allow the improviser to access **b6, b7, and b3** in the natural minor scale based on the tonic. For example, the Ab, Bb, and D# (enharmonically equivalent to Eb) in the scale shown in Figure 6 are exactly those members of a C natural minor scale.

In "Born to Be Blue," the appearances of the altered dominant scale, and select fragments within it, are not in uniform harmonic contexts. In the first chorus' final A section at m. 26, there is a very quick quadruple-time line, based partly on the Ab altered dominant scale (Example 4.42). It is interrupted in the middle by an E<sup>-</sup> ascending arpeggio before falling through a D<sup>maj</sup>



Example 4.42. An instance of the Ab altered dominant scale, disposed over a dominant-function Ab<sup>7</sup>, in m. 26 of Montgomery's solo on "Born to Be Blue", by Mel Tormé and Robert Wells.

<sup>34</sup> In the context of jazz theory, the melodic minor scale has a lowered 3<sup>rd</sup> degree. The 6<sup>th</sup> and 7<sup>th</sup> degrees are unchanged relative to the major scale. This is in contrast to what the term describes in classical theory, which is a scale whose upper tetrachord is either **5-6-7-1** or **5-b6-b7-1** depending on the melodic and harmonic context.

arpeggio; all the members of the latter arpeggio function also function in the scale (as **b9**, **b7**, and **#4**). Here we see the scale in its usual harmonic context, over a harmony functioning as a dominant. This line treats  $A\flat^7$ , the applied dominant of the following  $D\flat^7$ . The pitches of the scale can in fact be enharmonically reinterpreted as the members of a  $D^7$  chord, suggesting Montgomery was hearing a tritone substitution when he played this line (an idea bolstered by the emphasis on  $D^{\text{maj}}/D^7$  structures in the final beat of the measure). Montgomery revisits the  $A\flat$  altered dominant scale in b. 1 of m. 36 of his solo, in the second chorus (Example 4.43). The



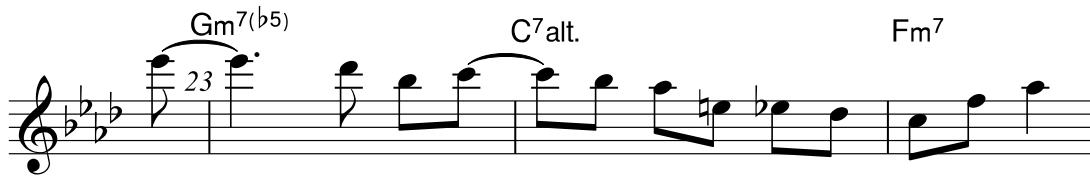
*Example 4.43. Another instance of the  $A\flat$  altered dominant scale, this time over a tonic-function  $A\flat^7$ , in m. 36 of Montgomery's solo on "Born to Be Blue", by Mel Tormé and Robert Wells.*

descent at the outset of this measure moves through almost every member of the scale, excluding only  $D$  (**#4**). This occurrence is peculiar: although the harmony underneath is literally  $A\flat^7$ , it does not function as a dominant harmony – at large this tune is in the key of  $A\flat$  (in this performance) and at the opening of the  $A$  section, it is treated as a tonic chord, decorated above by a chromatic neighbor harmony ( $A^7$ ).<sup>35</sup>

The instances of the altered dominant scale in Montgomery's solo on "Full House" are more fragmentary and thus less convincing than those seen in "Born to Be Blue," often because Montgomery disposes it in short stepwise cells of just two or three notes, each cell isolated by leap before and after it occurs. One of the earliest passages which suggest this scale, however, does so quite convincingly. In the first chorus, at m. 24, Montgomery descends through a nearly-

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<sup>35</sup> Other altered dominant scale fragments occur in this solo, both over  $E\flat^7$  chords that lead to back to tonic  $A\flat$  harmonies. At the end of m. 12, a fragment of the  $E\flat$  altered dominant scale arcs up before segueing into a descending  $A\flat$  minor scale, anticipating the following  $A\flat^7$ . At the end of m. 44, Montgomery ascends from  $D\flat$  stepwise through the  $E\flat$  altered dominant scale to  $G$  before transitioning into an  $A\flat^7$  arpeggio, anticipating that harmony on the next downbeat.



Example 4.44. From the pickup to m. 24 to the downbeat of m. 25, a descending C altered dominant scale, missing only F#, in Montgomery's solo on "Full House", by himself.

complete statement of the C altered dominant scale, leaving out only F#, or #4 (Example 4.44).

This occurs over a C<sup>7alt</sup> that leads directly back to the tonic F<sup>-7</sup> chord. This is the classic usage of the scale: over an altered dominant chord that precedes a minor tonic chord. The first passage that points toward this scale is m. 8, again over C<sup>7alt</sup> leading back to F<sup>-7</sup> (Example 4.45). The line



Example 4.45. In m. 8, a series of two-note cells which belong to the C altered dominant scale, from Montgomery's solo on "Full House".

is much more disjunct here: Bb-Ab-Eb-Db-Bb-B, moving up to C on the downbeat of F<sup>-7</sup>. In the C altered dominant scale, these notes are **b7-b6-#9-b9-b7-(7)-1**, excepting B, which I regard as a chromatic passing tone. The first degree of the scale does not occur until the harmony the scale is meant to imply has passed, and there are just two notes from the scale in each of the stepwise cells in the measure (Bb-Ab, Eb-Db, and Bb up to C), all of which are separated by leap.

Therefore one might think it somewhat spurious to analyze this measure as belonging to a "scale." Nonetheless the notes are there. Another such passage in this solo occurs in mm. 47-48 in the same harmonic context (Example 4.46). Here, De Stefano incorrectly transcribed the first



Example 4.46. From beat 3 of m. 47 to the downbeat of m. 49 of Montgomery's solo on "Full House", another series of two-note cells from the C altered dominant scale, separated from each other by leap. The A-E cell is peculiar and it may have been a mistake.

two notes of m. 48 as Ab and F; I have corrected them to A and E in my example. The first of these two notes does not belong to the C altered dominant scale. The remaining five notes in m. 48 do, and the last two fall down to C, giving us the first three degrees of the scale and most of the upper tetrachord of the F natural minor scale, just as F<sup>-7</sup> arrives. Also note that, across the four beats that precede the downbeat of m. 49 and the return of F<sup>-7</sup>, Montgomery clears an octave playing four two-note cells, the first and last of which are the same: Eb-Db. This suggests the gesture plays a sort of octave-displacement role, moving the melody to a higher register for the start of a new eight-bar phrase. Again, because Montgomery plays disjunct cells from the scale and not a larger stepwise fragment, it is hard to speak of a scale here, but without the analytical tool the scale provides, I am at a loss as to how to interpret this passage.<sup>36</sup>

Observing how Montgomery uses the Lydian dominant and altered dominant scales in his improvisations, I will make two final remarks here. First, these two scales are both modes of the melodic minor scale. As I already said, the altered dominant scale is the 7<sup>th</sup> mode of the melodic minor scale. The Lydian dominant scale is the 4<sup>th</sup> mode of the melodic minor scale. Second, this means that between De Stefano and myself, we have found that Montgomery used modes of just two diatonic scales when improvising, otherwise relying on the blues scale, the octatonic scale, and the pentatonic scale.

### The structure of Montgomery's blues solos

De Stefano states that Montgomery often structured portions of his solos on 12-bar blues around riffs or motives. De Stefano and Salmon attribute his use of riffs to influence from

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<sup>36</sup> This passage is quite similar to m. 40, the only differences being that Montgomery gets higher in pitch in m. 48, and that he plays F and Ab at the same position in the gesture as the A and E in m. 48.

Charlie Christian.<sup>37 38</sup> I find this notion debatable at best. Christian's improvisational toolset was a limited but versatile set of gestures that he deployed with very little variation in pitch content (besides transposition) from one performance to the next. Montgomery definitely reuses some gestures across solos, but in general each one of his solos is incredibly varied in motivic content largely unique to each recorded performance. I will address De Stefano's idea below and examine how Montgomery develops what might be called "riffs" in a number of solos, and analyze how they do or do not relate to the form of the choruses in which they appear.

De Stefano states that when Montgomery builds a blues chorus around a motive, most often he develops one idea based on a single riff in its first eight measures, and then moves on to contrasting material in its final four measures.<sup>39</sup> From the following analysis of "Cariba," it is clear that Montgomery did not take just one approach to structuring choruses in his blues solos. In fact, he took a diverse set of approaches, a subset of which derive their structure from small riffs or motives. It is not apparent to me that he habitually "developed" these ideas in the traditional classical art music sense of the term. I found that when Montgomery does divide a twelve-bar blues into eight- and four-bar phrases, most often the motive that "develops" in the first eight measures of a chorus forms the "basic idea" of what a typical music theorist would call a sentence. None of these phrases are neat textbook examples of this phrase type, though. Furthermore, this phrase type is usually discussed in the context of the Western art music tradition. Montgomery was a self-taught American jazz guitarist, not a classically-trained musician, so it is improbable he knew about the concept of a musical "sentence" and sought to apply it in his music.

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<sup>37</sup> De Stefano, "Style," 159.

<sup>38</sup> Salmon, "Imitation," 155-156.

<sup>39</sup> De Stefano, "Style," 159-160.

The broader point is to understand that as with other song forms, Montgomery uses riffs to help delineate the form of the twelve-bar blues on occasion. In a subset of those cases, a sentential structure occupies the first two thirds of the form. I will call this “sentence division.” Below, I will discuss the degree to which Montgomery employs both sentence division and more general riff development in his solos on “Cariba” from the album *Full House*. I have reproduced Steve Kahn’s transcription of this solo, with my transcription of the final three choruses tacked on, in Appendix B. Below I include excerpts in examples.

The first chorus of the solo on “Cariba” does not demonstrate sentence division, but the second and third four-bar phrases (mm. 5-12) are organized around riffs (see Example 4.47, which includes the whole chorus). Both of these phrases form a sort of miniature sentence where one idea is repeated twice before contrasting material closes out the phrase. In mm. 5-6 the idea is repeated literally over the static Eb<sup>7</sup> harmony; in mm. 9-10 it is sequenced down a whole step as the harmony moves from F<sup>7</sup> to Eb<sup>7</sup>. The only clear contrast between the first eight measures and the final four is based on the general structure of melodic content: either it is stepwise or by leap. In mm. 1-4, Montgomery seems to be warming up, hanging out on a single G before

The image shows three staves of musical notation in 4/4 time, transcribed in B-flat major (two flats).  
 - The first staff (measures 1-4) is labeled with a Bb<sup>7</sup> chord. It begins with a G4 note, followed by a series of eighth notes: G4, A4, Bb4, C5, Bb4, A4, G4. The phrase ends with a quarter rest.  
 - The second staff (measures 5-8) is labeled with Eb<sup>7</sup> and Bb<sup>7</sup> chords. It features a triplet of eighth notes (G4, A4, Bb4) in measures 5 and 6, followed by a quarter rest. In measure 7, the melody descends: Bb4, A4, G4, F4. The phrase ends with a quarter rest.  
 - The third staff (measures 9-12) is labeled with F<sup>7</sup>, Eb<sup>7</sup>, and Bb<sup>7</sup> chords. It starts with a G4 note, followed by eighth notes: A4, Bb4, C5, Bb4, A4, G4. In measure 10, there is a triplet of eighth notes (G4, A4, Bb4). The phrase ends with a quarter rest.

Example 4.47. Montgomery’s first chorus on “Cariba,” by Montgomery.

descending mostly stepwise through notes of the Bb Mixolydian scale. He plays a Bb blues gesture that gently arcs up and down on Eb Mixolydian in mm. 5-6, before closing out all of mm. 5-8 with a descending F<sup>-</sup> arpeggio that spells out the 9<sup>th</sup>, b7<sup>th</sup>, and 5<sup>th</sup> of the underlying Bb<sup>7</sup>. Note that the material in mm. 1-6 is predominantly stepwise. Montgomery offers a strong contrast to this with the three gestures in the final phrase (mm. 9-12), all arpeggiated. In both mm. 9 and 10, an anacrusis steps up a whole tone into the downbeat before a leap up of a major sixth. From that high point, in both cases the 13<sup>th</sup> of the underlying dominant seventh chord, a descending arpeggio highlights the 3<sup>rd</sup>, root, and b7<sup>th</sup> of the harmony (although Montgomery interpolates the 5<sup>th</sup> between the 13<sup>th</sup> and 3<sup>rd</sup> of the Eb<sup>7</sup> in m. 10). The takeaway is that he has iterated the same idea twice in a row at the beginning of this phrase. The final gesture in this phrase, in m. 11, is again primarily arpeggiated, but begins with a decorated figure around G (the 13<sup>th</sup> of Bb<sup>7</sup>) before dropping through an F<sup>7</sup> arpeggio, spelling out the 11<sup>th</sup>, 9<sup>th</sup>, b7<sup>th</sup>, and 5<sup>th</sup> of the Bb<sup>7</sup>. Clearly, there is not one motive that strongly defines the first eight measures of this chorus. Montgomery creates the sort of structural division that De Stefano perceives only by the character of his lines here. The first eight measures are primarily stepwise and the last four are primarily arpeggiated. It bears mentioning that he closes out the two structural segments with similar gestures: descending arpeggiated ideas over Bb<sup>7</sup> that emphasize the 9<sup>th</sup>, b7<sup>th</sup>, and 5<sup>th</sup> of the harmony, end on F (the 5<sup>th</sup>), and occur in the penultimate measure of in their respective phrases. These ideas serve as parallel punctuation marks for the two segments of the chorus that De Stefano proposes, but again, the structure is not otherwise apparent. This is also not sentence division.



The second chorus is frankly yet more weakly organized around motivic material than the first (Example 4.48). While a long melody spans the first eight measures, it is hard to frame it as a sentence, and there is no “punctuation mark” gesture at the end of the first eight-bar and second four-bar structural segments. The only implications of sentential structure in the first eight measures is the second inversion F<sup>-</sup> arpeggio anacrusis to mm. 13 and 15, and the following material in mm. 13-14 and 15-16, which primarily uses the notes F, Ab, Bb, and C (more broadly this material is built from notes of the F blues scale). In fact, despite the similar pitch content, I feel that the anacrusis themselves are exactly and only what signal that these two chunks of music are related.

Example 4.48. Montgomery's second chorus on "Cariba".

Still, the first eight measures of the second chorus are a complete phrase. Montgomery connects the line in mm. 15-16 leads directly into the ascending arpeggio at the beginning of m. 17. The syncopated rhythm in m. 18 keeps up momentum before the line ends on b. 3 of m. 19. Another ascending arpeggio anacrusis leads into the minor third leaps up in mm. 21-22 that define the final four-bar phrase of this chorus, and provide a contrast to the varied material presented in the first eight bars. Just like in mm. 9-10 of the first chorus, Montgomery takes a one-measure motive and sequences it down over the F<sup>7</sup> and Eb<sup>7</sup> harmonies in mm. 21-22. While

the first eight-bar segment and the final four-bar segment do not end with similar ideas, they again end in the same hypermetrical position as in the first chorus: the penultimate measure of the segment. They also both end on the 3<sup>rd</sup> beat of those measures. In the second chorus, then, Montgomery creates structure along the lines De Stefano proposes not through riffs, but through the length of his melodies and hypermetrical parallels.

The third chorus is structured similarly to the second in three critical ways (Example 4.49). First, Montgomery creates a complete idea that spans the first eight-measure formal unit by eliding over the internal boundary from m. 28 into m. 29. Second, an ascending arpeggio introduces the basic idea that Montgomery uses to generate the first eight measures (in the anacrusis to the chorus and in bb. 1-2 of m. 27). Third, the melodic lines in both formal segments end in their penultimate measures. On the other hand, distinct from the second chorus, the material in mm. 27-28 is more clearly related to the basic idea in mm. 25-26 that defines the first segment: Montgomery predominantly leaps back and forth between Eb and G.

The image shows a musical transcription of Montgomery's third chorus on "Cariba." It consists of three staves of music in 4/4 time, with a key signature of two flats (Bb and Eb). The first staff starts at measure 25 with a Bb7 chord and features a melodic line with eighth-note patterns and a slur over measures 25-26. The second staff starts at measure 29 with an Eb7 chord, followed by a melodic line with eighth notes and a triplet of eighth notes in measure 30, ending with a Bb7 chord. The third staff starts at measure 33 with an F7 chord, followed by a melodic line with eighth notes and triplets, ending with a Bb7 chord.

Example 4.49. Montgomery's third chorus on "Cariba."

By looking at the transcription alone (and not listening to the recording), it is not immediately clear why mm. 29-31 are related in any way to the opening four measures of this chorus. Beyond the first two beats of m. 29, the rhythmic content is much more varied than the

straight 8<sup>th</sup> notes that saturate nearly every subdivision at that level in mm. 25-28. Furthermore, the melodic contour becomes predominantly stepwise, as opposed to the arpeggiated texture from the first four measures. It may be exactly the contrast these three measures draw with the first four that pull the first eight of the chorus together. In the first four measures the melody seems to be straining upwards. The repeated leaps from Eb to G find a cathartic peak early on in the Bb at the end of m. 26. After this, the search upwards resumes, but seems almost exhausted, settling for a lower, second peak on Ab at the end of m. 28 before falling down through m. 29 and on. This descent, which lasts the rest of the phrase, provides release from the upward struggle in the first four bars of the chorus. Also, as I already mentioned, Montgomery's melody smoothly connects mm. 27-28 to mm. 29ff. This connection is facilitated by the straight 8<sup>th</sup> notes in bb. 1-2 of m. 29, which provide a rhythmic tether to the first four measures.

The final four measures of the third chorus return to predominantly arpeggiated material; again Montgomery sequences an arpeggio down over the F<sup>7</sup> and Eb<sup>7</sup> chords. The arpeggios are his typical choice for harmonizing a Mm<sup>7</sup> chord: a MM<sup>7</sup> arpeggio starting from the b7<sup>th</sup> of the chord. The distinguishing aspect of this instance is that his second arpeggio anticipates the Eb<sup>7</sup> by two beats; he repeats it once on the downbeat of the measure of Eb<sup>7</sup> before descending stepwise from C to F. The arpeggiated material here is quite distinct from that in mm. 25-28, in that it clearly spells out triadic forms that span a major seventh, as opposed to the mostly tightly circumscribed minor third leaps earlier on. This differentiates the final four measures of this chorus sufficiently from the first eight, helping it fit into the basic structure De Stefano and van der Blik suggest. But again, one riff does not define the first eight measures. Instead, one riff forms the basic idea of a sentence that occupies the first eight measures of the chorus, making this an example of sentence division.

The fourth chorus, from mm. 33-48, carries on the same formal structure (Example 4.50).

The most obvious manifestation of the division is the fact that, in a chorus defined largely by music moving by leap, the arpeggios in the first eight measures almost exclusively descend, while the arpeggios in the final four measures exclusively ascend. The arpeggios Montgomery plays in mm. 45-46 are again based of the b7<sup>th</sup> of the harmonies in those measures. The opening four measures do not rely on the repetition of a basic idea, as the second and third choruses do.

The image shows a musical score for Montgomery's fourth chorus on "Cariba." It consists of three staves of music in 4/4 time, written in a key with two flats (B-flat major or D-flat minor). The first staff starts at measure 37 with a Bb7 chord and features a descending eighth-note arpeggio. The second staff starts at measure 41 with an Eb7 chord, followed by a Bb7 chord and a triplet of eighth notes. The third staff starts at measure 45 with an F7 chord, followed by an Eb7 chord and a Bb7 chord, ending with a triplet of eighth notes. The score includes various musical notations such as rests, slurs, and accents.

Example 4.50. Montgomery's fourth chorus on "Cariba."

Instead, what helps draw these measures together, and the first eight-measure segment of the chorus, is a sort of hemiola based on a 3+3+2 rhythmic grouping. The first instance is at the quarter note level in mm. 37-38. This leads directly to the downbeat of the third bar, which contains the second instance at the eighth note level. Montgomery emphasizes the groupings quarter notes by accenting the first (and highest) note in each grouping. He emphasizes the groupings of eighth notes by accenting each new note in m. 39 as he descends from Ab to F. Montgomery uses a simple rhythmic pattern twice, the second time in diminution, in the first three bars of this chorus. This "accelerates" the music into the fourth bar, giving it momentum that carries through into the downbeat of the fifth bar. The heavy accents Montgomery uses to

highlight this fall on bb. 1 and 4 of m. 37, b. 3 of m. 38, bb. 1, 2+, and 4 of m. 39, and bb. 1 of both mm. 40 and 41. Listening to this makes the rhythmic drive clearest. The content of mm. 41-44 is much freer. Montgomery distinguishes the final four bars from the opening eight by never playing on a downbeat. After the strong hemiola, and heavy downbeats on m. 37, 40, and 41, this offers a much-needed contrast and release.

The next two choruses do not support De Stefano's claim that Montgomery delineates form in his blues solos by developing one motive in the first eight bars of each iteration of the twelve-bar form. The fifth chorus (Example 4.51) flips the typical eight bar-four bar format

The image shows three staves of musical notation for Montgomery's fifth chorus on "Cariba." The first staff starts at measure 49 with a  $Bb^7$  chord and features a triplet of eighth notes. The second staff starts at measure 53 with an  $Eb^7$  chord and continues with various chords including  $Bb^7$ . The third staff starts at measure 57 with an  $F^7$  chord and includes another triplet of eighth notes. The notation includes various rhythmic values, accidentals, and chord symbols.

Example 4.51. Montgomery's fifth chorus on "Cariba."

division: the first four measures stand alone and Montgomery carries a long phrase from the beginning of m. 53 (the fifth bar of the chorus) through to m. 60, its final bar. The sixth chorus (Example 4.52) is squarely divided into three four-bar phrases, each defined by its own melodic and rhythmic chunks that are repeated twice in each. The first phrase is entirely in  $Bb$  Mixolydian; the second entirely in  $Eb$  Mixolydian despite the harmonic change from  $Eb^7$  back to  $Bb^7$  halfway through (although it may be wisest to regard the material here as part of the  $Bb$

Example 4.52 shows three staves of musical notation in G-flat major (one flat). The first staff starts at measure 61 with a Bb7 chord. The second staff starts at measure 65 with Eb7 and Bb7 chords. The third staff starts at measure 69 with F7, Eb7, and Bb7 chords. The notation includes various rhythmic patterns, including eighth and sixteenth notes, and rests.

Example 4.52. Montgomery's sixth chorus on "Cariba."

blues scale, even though it also fits into Eb Mixolydian). The last four-bar phrase simply sequences a cell down over F<sup>7</sup> and Eb<sup>7</sup> before a closing figure over Bb<sup>7</sup>.

The argument for the seventh chorus following the hypothesized structure is less than perfectly clear, as again, each four-bar division is unique in melodic content (Example 4.53). The first of these is defined by a two-octave descending Bb Mixolydian scale that starts from a high Ab. Montgomery connects this to the second phrase with his one-beat anticipation of Eb<sup>7</sup>: a blues-inflected G is effectively an octave-displaced reiteration of the final note of the descending

Example 4.53 shows three staves of musical notation in G-flat major. The first staff starts at measure 73 with a Bb7 chord. The second staff starts at measure 77 with Eb7 and Bb7 chords. The third staff starts at measure 81 with F7, Eb7, and Bb7 chords. The notation includes a two-octave descending scale in the first staff and a triplet in the third staff.

Example 4.53. Montgomery's seventh chorus on "Cariba." Steve Kahn's original transcription omits the octaves Gs and muted F#s at the end of the scale in m. 76. I have included them here.

scale, followed by a Bb. He repeats the same chunk twice in the next four-bar phrase, affecting the second iteration only by raising the final note a half-step from Db to D to fit the move from Eb<sup>7</sup> back to Bb<sup>7</sup>. He uses almost the same pickup in m. 80 as he did in m. 76, loosely connecting the second and third four-bar chunks for the listener. Unlike previous choruses in this solo, the final four-bar phrase actually features the same melodic figure repeated three times: once on F<sup>7</sup>, Eb<sup>7</sup>, and upon the return of the tonic Bb<sup>7</sup>. Notice how Montgomery emphasizes the 13<sup>th</sup> over the first two measures (the Db over the F<sup>7</sup> is not the b13<sup>th</sup>, but instead anticipates the Eb<sup>7</sup> in the following measure). The phrase is over at the final Bb in m. 83 and the remainder of the material in this chorus is a long anacrusis to the next one.

Yet again, it is not entirely clear how to massage the material in eighth chorus into the eight-four structure (Example 4.54). Rather, each idea here seems to grow or continue naturally out of the last, with a peak right at the halfway point (m. 91) on a high G. The Bb anacrusis from the previous chorus leaps to an F that anticipates of the downbeat of m. 85, and then Montgomery plays the notes Bb-Eb-D. The F-Eb-D cell is critical here, recurring in mm. 87-88

Example 4.54. Montgomery's eighth chorus on "Cariba," right before he transitions to the final three choruses in his solo, found in Example 4.29 and the full solo in Appendix B.

and defining the opening four bars of the chorus. The anacrusis expands in pitch content from the single Bb to an entire second-inversion Bb triad during m. 86, again landing on F at the downbeat of m. 87. The F-Eb-D cell repeats now, with Bb inserted between all three notes. The Bb and Eb also appear in their original metrical positions; the D arrives later, on the downbeat of m. 88. I argue that the original three-note cell actually expands with the addition of Ab on b. 3 of m. 88. This Ab connects the line fluidly into the following measure. The final four notes of m. 88 are clearly a stepwise descent through the Eb Mixolydian scale (with an octave displacement between Ab and G), anticipating the Eb<sup>7</sup> harmony in mm. 89-90. The G-F cell in m. 88 is also critical, because it reappears in the first two beats of m. 91 with an interpolated D. And while the rhythmic contours of the pickup to m. 89 through m. 90 and the pickup to m. 91 into the downbeat of m. 93 are quite different, you can see that the actual pitch material is nearly identical. The first idea descends as follows: G-F-Eb-Db-Bb-Ab-F-Eb-Bb-Db-Eb. The second thusly: G-(D)-F-(F-Bb-D)-Eb-D-(Eb-D)-Bb-A-F-Eb. Save the last three notes in the first sequence and the interpolations notated in parentheses in the second, the only differences are the involve Dbs changing to Ds and Ab changing to A. The first set of changes occur on account of the move from Eb<sup>7</sup> to Bb<sup>7</sup> in mm. 89-92; the A in m. 92 anticipates the F<sup>7</sup> in m. 93. The G-F cell and the pitch sequence thus serve to tie together the second four-bar chunk of this chorus, and link it up with the final chunk. All of m. 92 effectively anticipates the F<sup>7</sup>, since all the pitches there belong to the F Mixolydian scale. Montgomery repeats the final three notes of that descent, transposed down a whole step, to imply the Eb<sup>7</sup> in m. 94. The Db-C-Bb descent leading into the downbeat of m. 95 is the exact same pitch pattern that led to the previous two harmonies. The Db in m. 94 echoes the blue-note inflections of the A in m. 92 and G in m. 93.



Two facts support the G on the downbeat of m. 91 as the emotional peak of this chorus, as opposed to the G in m. 88 or any other spot. First, the G in m. 91 is the second of these two highest pitches: Montgomery is done going high after that point, rendering everything following less intense. Second, we can see the same pickup figure to mm. 91 and 92. The first hits the second high G. The second only makes it up to Eb. It is as if the music is trying to repeat its earlier feat but cannot, beginning the clear decrease in intensity.

Overall in the eighth chorus we see that Montgomery does not seek to create any formal divisions, but instead seamlessly connects together the ideas that define each four-bar chunk, emphasizing the overall 12-bar structure by placing the chorus' expressive peak exactly at its middle.

In this chapter, I explored the various characteristics of Wes Montgomery's improvisational style. I have shown how he emphasized tertian extensions, understood which scales he employed when creating melodies, analyzed the harmonic language of his chord melodies, and examined the chorus structure of his blues solos and the content of his ballad solos. In the following chapter, I will show how I leveraged a number of these elements in order to compose a piece in his style.

## Chapter 5: *Theme and Variations on “Israel”* in the Style of Wes Montgomery

My composition in the style of Wes Montgomery reflects several aspects of his improvisational style, focusing on two: his careful emphasis of unaltered tertian extensions, and the vaunted “three-tier” structure of his longer solos. In order to achieve this, I conceived of the work as a “theme and variations” where each variation would mimic one or more aspects of his style. The theme is the tune “Israel”, by John Carisi, which is a 12-bar blues in D minor. The broad structure of the work is straightforward: the theme statement, several variations at a moderate swing tempo, one slow tempo variation in the parallel major mode, and an up-tempo finale. This structure is modeled on Manuel María Ponce’s solo guitar work, *Tema variado y final*.

### Structure

As stated above, I based this work on the John Carisi tune “Israel”. Figure 5.1 shows the melody and changes to that piece. The changes feature  $Bb^{maj7}$  ( $VI^{maj7}$ ) in m. 9 and the first half of m. 12 as opposed to  $E^{-7b5}$  ( $ii^{-7b5}$ ), and modal mixture in m. 7. As in a standard bebop blues form, the progression of fundamentals in mm. 7-10 of the form repeat in the turnaround (mm. 11-12) in rhythmic diminution. In this case, those fundamentals are **1**, **b3**, **b6**, and **5**. Note that, in the minor mode, the  $F^{maj7}$  and  $Bb^{maj7}$  in mm. 8-9 are completely at home, as they are  $bIII^7$  and  $bVI^7$  in the key of D minor. These two harmonies are modified to  $F^7$  and  $Bb^7$  in the turnaround, rendering a short chain of applied dominants:  $F^7$  is the dominant of  $Bb^7$ , and  $Bb^7$  is the tritone substitution for the dominant of  $A^7$ .

Figure 5.1. “Israel”, by John Carisi. This tune is a D minor blues.

The melody of “Israel” was clearly composed with care, but I will not go into great detail analyzing it here. It will suffice to make a few comments on it. First, several elements of the melody served as motivic sources for my composition: the opening two stepwise cells (G-A and E-D); the following descent centered on m. 2; the triplet neighbor figures in mm. 11-12. At one point beyond the initial theme statement I also use the quartal motion in m. 9. Note that Carisi has structured the melody so that the first and second four-bar phrases share parallel elements, and the final four-bar phrase largely deals in new material. The opening movement in m. 1 is an ascending whole step, which repeats in the gesture from the end of m. 4 into m. 5. Following this stepwise movement, a descending scalar gesture passes through a perfect fifth into beat 3 of mm. 2 and 6, respectively. Both of these gestures begin on the upper note of the initial ascending step; in the first phrase that is A, the 5<sup>th</sup> of the underlying D<sup>-</sup> harmony; in the second it is G, the root of the underlying G<sup>-</sup> harmony. After the scalar descent, the first phrase steps down to C and falls a minor third to A, and then cycles through the notes of an A<sup>-</sup> triad, ultimately leaping down from E to A. The second phrase condenses this continuation: the scalar descent ends on C, which elides into the same figure on A<sup>-</sup> that occurs in the first phrase. The final phrase’s two triplet

rhythmic figures help provide a sense of acceleration and heightened tension as the form prepares to repeat. The first figure is in triplet quarter notes, and an upper neighbor figure within the D minor scale on A, the 5<sup>th</sup> of the D<sup>-</sup> chord in m. 11. The second is in rhythmic diminution, in triplet eighth notes. It is also an upper neighbor figure, but the main note is E, the #4<sup>th</sup> of the Bb<sup>7</sup> below. The shorter rhythmic values and crunchier main note in the neighbor figure deliver the sense of acceleration and greater tension, respectively.

Ultimately, I chose to use “Israel” as a theme simply because I like it. However, several stepwise gestures and the figure in m. 9 feature tertian extensions, which reflects an important part of Montgomery’s style (see mm. 1, 7-9, and the end of m. 11).

The opening of my piece sets the melody chords and bass notes as necessary to imply the harmonic movement underneath. I show this below in Example 5.1. Given that this was the melody statement, I made no particular effort to reflect any part of Montgomery’s style.

*Example 5.1. My setting of “Israel” for solo guitar, which makes up mm. 1-12 of my composition.*

What follows are 11 iterations of the blues changes on which Israel is based. In a traditional theme and variations set, a composer will often use each variation to demonstrate an idiomatic texture or virtuosic technique possible on the instrument they are writing for. As I have

already stated, my variations are meant to mimic one or another aspect of Montgomery's style, so the texture does not vary as greatly from one variation to the next in that way.

Despite the number of choruses that make up the variation portion of my composition, I actually envision only five variations. The first, comprised of the first two choruses (mm. 13-36), focuses on creating mostly-stepwise lines that highlight tertian extensions. The second, which consists of the next two choruses (mm. 37-60), also aims to emphasize those extensions, but trades off ideas in two voices. The third, which lasts for three choruses (mm. 61-96), explores various arpeggiated gestures Montgomery would employ. While there are some arpeggiated figures in the first two variations, they are not a broad enough representation of the arpeggios Montgomery would superimpose over various harmonies. The third variation features such a broader set, even though there are some static passages and stepwise lines interspersed throughout. The fourth variation (mm. 97-132), which like the third lasts three choruses, employs octave melodies. Because the texture would have sounded thin otherwise, I included chords at important harmonic arrivals, and in order to punctuate phrases. Montgomery did not have to concern himself with this when performing his octave melodies, because he was always accompanied by a band that could imply harmonies underneath his line. The fifth and final variation (mm. 133-156) is two choruses of a slow, D major blues. This is largely in double time, like the fourth chorus of "Good Christian Blues"; I took inspiration from Montgomery's solo on his own composition, "D-Natural Blues", from *The Incredible Jazz Guitar of Wes Montgomery*.

The disposition of the five variations in my work is modeled roughly on those of Ponce's variation set. After his theme statement, which is at its core a lightly decorated, two-part harmonic progression in E minor, he presents five variations that gradually build in intensity. The final variation, however, is slow, marked *molto più lento*, and in E major (I will note that his

second variation is also in a major mode, C major, and marked *molto moderato*; my piece does not have such a variation early on in bVI). My work follows the same contour, approximately: over the course of the first four variations, the intensity generally builds, including through the three choruses in octaves. The final variation is, again, at a slow tempo and in the parallel major.

The remainder of my composition also borrows elements of Ponce's work. After the slow variation, both have fast finales that are approximately ternary forms, progressing from the minor mode to the major mode. At the midpoint, both feature a large arrival on bVI, soon after which the recapitulation occurs. I borrowed and slightly adapted the harmonic progression Ponce uses to move from his finale's arrival on bVI to the recapitulation. Since Ponce's work is in E minor, the arrival on bVI is a C<sup>maj7</sup> chord; in my work the same arrival is on Bb<sup>maj7</sup>. This element of the finale reflects the presence of the same harmonic root in the changes of the original tune. The progression Ponce employs to move from C<sup>maj7</sup> back to E min is the following: C<sup>maj7</sup>-G<sup>maj</sup>-G<sup>-</sup>-Bb<sup>7</sup>-F<sup>maj7</sup>-B<sup>7</sup>-E<sup>-</sup>. I transposed this progression and replaced the first dominant seventh chord with its tritone substitution, rendering this: Bb<sup>maj7</sup>-F<sup>maj</sup>-F<sup>-</sup>-E<sup>7</sup>-Eb<sup>maj7</sup>-A<sup>7alt</sup>-D<sup>-</sup>.

These are the broad structural characteristics of my work. Below I will discuss in more detail how I aimed to write in Montgomery's style.

### **Tertian Extensions in Scalar and Arpeggiated Lines**

Montgomery highlighted tertian extensions throughout his single-line and octave melodies, and even occasionally in chord melodies. Therefore that remained a constant priority for me as I wrote my own work. In the following paragraphs, I will discuss a few examples of how I did so.

Several melodic passages highlight tertian extensions without relying explicitly on arpeggios to do so. See the opening of the first variation, in mm. 13ff. The main note of the triplet upper neighbor gesture that defines the first chorus of the variation is E, the 9<sup>th</sup> of the D<sup>-</sup> harmony that defines the first phrase of the form. This figure initially leaps to A in mm. 1-2; in m. 3 I leap up to B, the 6<sup>th</sup> of the harmony, before descending an octave to the same note (Example 5.2). Note that the basic gesture in question has a similar contour to the gestures at



*Example 5.3. The opening of my first variation on “Israel”, mm. 13-16.*

the beginning of mm. 11 and 12 in the original melody statement. The defining melodic gesture of the next chorus, which first appears in mm. 25-26, starts with an ascent that spans the perfect fifth between E and B (Example 5.3). The E is highlighted because it is initial note of that



*Example 5.2. An ascending gesture focused on tertian extensions of D<sup>-</sup> helps define the second chorus of the first variation on “Israel”, in mm. 25-29 of my composition.*

gesture; the B is highlighted because it is the peak of the gesture and its longest note. The second iteration of the movement in fact moves up to C, the b7<sup>th</sup> of the D<sup>-7</sup> underneath; but when the descent that forms the second half of the gesture repeats twice over mm. 29-30 over an implied G<sup>-7</sup>, that C becomes the 11<sup>th</sup> of the harmony. The second iteration of that descent begins from A, the 9<sup>th</sup> of the harmony.

Several arpeggios that highlight tertian extensions are sprinkled throughout the variations. In mm. 37 and 39, I place an ascending E<sup>-</sup> arpeggio over the underlying D<sup>-</sup> harmony (Example 5.4). The E, G, and B in that arpeggio are the 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> (or 6<sup>th</sup>) of D<sup>-</sup>, and



Example 5.6. In mm. 37 and 39 of my composition, the tertian extensions of D<sup>-</sup> again imply that harmony, this time in the form of an arpeggio.

create a distinct suspended sound. Later in the same variation, I use an MM<sup>7</sup> arpeggio based on the b7<sup>th</sup> of an underlying dominant seventh chord, a classic Montgomery device. In this case it is an Eb<sup>maj7</sup> arpeggio where the original changes feature an F<sup>7</sup> chord, in m. 48 (Example 5.5). The



Example 5.5. An Eb<sup>maj7</sup> arpeggio implies F<sup>7</sup> in m. 48 of my composition.

first and third choruses in the third variation each begin with the same set of arpeggios implying D<sup>-</sup>. In mm. 61-62, an ascending D<sup>-7</sup> arpeggio moves by down into a descending C<sup>maj7</sup> arpeggio; a descending G<sup>maj</sup> arpeggio follows. I reiterate the final descending third of the G<sup>maj</sup> arpeggio down a step on F and D to melodically imply a return to D<sup>-</sup>; notice, however, that the harmony underneath is clearly G<sup>7</sup> (Example 5.6). At this point in my piece, my settings imply an alternation between D<sup>-</sup> and G<sup>7</sup> in the first two or three measures of the form, but the overarching harmony is still D<sup>-</sup>. The C<sup>maj7</sup> arpeggio renders the 13<sup>th</sup>, 11<sup>th</sup>, 9<sup>th</sup>, and b7<sup>th</sup> of D<sup>-</sup>; the G<sup>maj</sup> arpeggio



Example 5.4. D<sup>-7</sup>, C<sup>maj7</sup>, and G<sup>maj</sup> arpeggios all over a passage that is broadly D<sup>-</sup> in mm. 61-62 of my composition.



the root, 13<sup>th</sup>, and 11<sup>th</sup>. In mm. 85-86, roughly the same thing happens again, although the melodic and rhythmic contours are slightly different (Example 5.7). The chorus opens with a descending  $D^{-7}$  arpeggio, followed by descending  $C^{maj}$  and  $G^{maj}$  arpeggios. All the tertian extensions previously played appear again here.



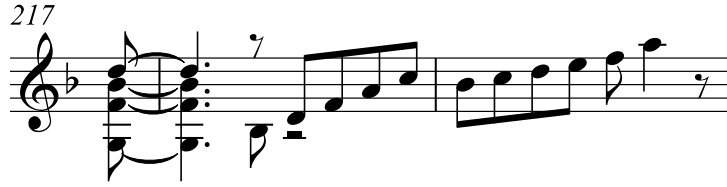
*Example 5.7.  $D^{-7}$ ,  $C^{maj}$ , and  $G^{maj}$  arpeggios again work to imply  $D^{-}$  (ignoring momentary plagal movement below), in m. 85 of my composition.*

Obviously, the finale includes passages that highlight tertian extensions in similar ways to those described above. The very opening gesture in mm. 157-159 is designed around two stepwise descents, which each move from an extension beyond the octave down to an extension within it (Example 5.8). The first step is from E down to D, the 9<sup>th</sup> and root of the underlying  $D^{-7}$



*Example 5.8. The first theme in the finale features the 9<sup>th</sup> and 11<sup>th</sup> of  $D^{-}$  (mm. 157-159 of my composition).*

chord. The second moves down from G, the 11<sup>th</sup>, to F, the 3<sup>rd</sup>. Note that both extensions past the octave are the longer note in each stepwise cell, and they are the initial note in a gesture that creates hemiola, which gives them rhythmic and metric emphasis. I reuse this gesture several times in mm. 213-240, either reproducing the same pair of tertian extensions past the octave or the 11<sup>th</sup> and the 13<sup>th</sup> (see Appendix B for the full score). Many arpeggios in the finale feature tertian extensions. The ascending gesture in mm. 217-218 over  $G^{-7}$  begins with an upwards  $Bb^{maj9}$  arpeggio, reaching from the  $b3^{rd}$  out through the 9<sup>th</sup> to the 11<sup>th</sup> of that harmony, before



Example 5.9. An ascending Bb<sup>maj</sup> gesture includes the 9<sup>th</sup> and 11<sup>th</sup> of the previously stated G<sup>-7</sup>, in mm. 217-218 of my composition.

ascending mostly stepwise through a Bb<sup>maj7</sup> gesture, end on A, the 9<sup>th</sup> of the G<sup>-7</sup> (Example 5.9).

The ascending Eb<sup>-</sup>-based arpeggio in m. 225, where the underlying harmony I imagined was simply meant to be Eb<sup>-7</sup>, extends all the way out to the 11<sup>th</sup> of that harmony, Ab, before falling to the b3<sup>rd</sup>, Gb (Example 5.10).



Example 5.10. An Eb<sup>-11</sup> arpeggio where I initially imagined just an Eb<sup>-7</sup> chord, in m. 225 of my composition.

Other examples of highlighted extensions abound in this work. The score is provided in Appendix B.

### Harmonic Substitutions

Recall from the previous chapter that De Stefano concluded that when it appeared Montgomery was employing altered tertian extensions, he was in fact employing a harmonic substitution. I used this technique myself several times while creating this piece.

One example of this occurs in mm. 21-22, where the original form moves from Bb<sup>maj7</sup> to A<sup>7</sup> (Example 5.11). Instead of this pair of harmonies, I employ Bb<sup>maj7</sup> (better represented as Bb<sup>6/9</sup>



Example 5.11. An altered tertian extension in the melody in mm. 21-22 of my composition, justified with a chordal substitution.

given my voicing and the melody, which begins on C) and Eb<sup>7</sup>. The melody moves from C, the 9<sup>th</sup> of the first harmony, up to Eb, the root of the second, and down to Db, the b7<sup>th</sup> of the harmony. The last three notes in m. 22 anticipate the upcoming D<sup>7</sup> chord in m. 23. These two measures effectively paraphrase mm. 9-10 of the original melody: the leaps between G and C evoke the quartal leaps in m. 9 (even though the G does double duty as a member of the underlying harmonies), and the Eb<sup>7</sup> chord “justifies” the Eb on the downbeat of m. 10, otherwise interpreted as the b5<sup>th</sup> of A<sup>7</sup>. The Db is enharmonically equivalent to the C# in the original melody in the same measure. The turnaround in mm. 23-24 continues to paraphrase the original melody.

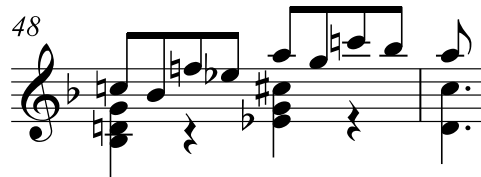
While there are a host of altered pitches in the slow blues variation, many of them are members of the altered dominant scale, which I will discuss in the next section. Other altered pitches in this variation could be interpreted as members of chordal substitutions, but my approach to the changes in this portion of the work was rather liberal, making it hard to say an implied chord is a substitution for an “original” chord.

### **Beyond Modes of the Major Scale**

Large bulks of Montgomery’s improvisational output are based entirely on the modes of the major scale, applied in conventional bop harmonic language. This is why his solos often do not feature altered tertian members. For example, in his solo on “Four on Six”, analyzed in the previous chapter, there are literally no notes that could be considered altered tertian members found outside of m. 62 and mm. 69-72, except when he employs the blues scale, and in that context I am reluctant to regard them as such. But as we saw in that solo, and in others such as his solos on “Full House”, “D-Natural Blues”, and “Born to Be Blue”, he does use other scales

when improvising, such as the blues scale, the altered dominant scale, and the Lydian dominant scale, rendering notes that do not reside in the complete tertian set of the underlying harmony. Therefore when composing my piece, I included fragments of such scales to capture this aspect of his style.

I use the altered dominant scale in several passages in my composition. The first instance occurs in m. 48, and this is essentially a brief quote of mm. 47-48 Montgomery’s solo on “Full House” (the fact that measure numbers are so similar is pure coincidence, and completely unplanned). This passage from my work relies on the A altered dominant scale, moving up upwards in two-note cells that step down through the scale. The gesture, like Montgomery’s, clears an octave, and comes to rest on the 5<sup>th</sup> of the tonic minor chord that follows the dominant chord that the gesture treats (Example 5.12). I have “corrected” two of the notes from m. 48 of



Example 5.13. An altered dominant gesture in m. 48 of my composition, based on two passages from Montgomery’s solo on “Full House”.

Montgomery’s solo, based in part on what he plays in m. 40 of his solo. Examples 5.13 and 5.14 show mm. 40 and 48 of his solo. On the first beat of m. 48, he plays A and E in eighth notes; only the E is a member of the C altered dominant scale that would treat the C<sup>7alt</sup> beneath. Instead, in the same position in the gesture, I move from F to Eb, #5/b6 and #4/b5 of the A altered dominant scale. In m. 40 of his solo, Montgomery plays Ab and F. Ab is #5 in the C altered



Example 5.12. One altered dominant gesture in mm. 47-48 of Montgomery’s solo on “Full House”, by Montgomery, upon which my gesture, shown in Example 5.12, is based.



Example 5.14. A similar altered dominant gesture from m. 40 of Montgomery's solo on "Full House".

dominant scale. This is a descending minor third, however, disrupting the otherwise consistent pattern of descending stepwise cells separated by leap found in both mm. 40 and 48 of his solo. I wanted to preserve that characteristic across my gesture, hence the F-Eb cell.

Another instance of the altered dominant scale appears in m. 88 of my composition (Example 5.15). Here, a D altered dominant line leads into a G<sup>-7</sup> chord on the downbeat of m. 89. These are the fourth and fifth measures of the changes of the tune. I've harmonized this line with a Ab<sup>7</sup>, the tritone substitution for the D<sup>7</sup> harmony in the original changes. However, I conceived of the melodic line first here, specifically thinking of using the D altered dominant scale, and



Example 5.15. A D altered dominant scale in my composition.

chose the chordal accompaniment second. Nonetheless this melody, including the D in the pickup to m. 88, could be interpreted as within the Ab Lydian dominant scale. This ambiguity is a result of the altered dominant and Lydian dominant scales both being modes of the melodic minor scale, and my choice of chordal accompaniment.

Montgomery regularly used the blues scale in his solos, even on tunes that were not built on the blues form. Since “Israel” is in fact built on a 12-bar blues form, it seemed to me that some blues statements and fragments would be requisite in my composition. In his solo on “Four on Six”, Montgomery tended to use the scale when improvising over the tonic harmony, or over a cadential progression approaching it. In my composition, one blues statement occurs in mm. 68-72, at the end of one chorus of the form (Example 5.16). The melody line here is entirely



*Example 5.17. One passage from my composition (mm. 68-72) that employs the D blues scale.*

within the D blues scale. Though mm. 68-70 are certainly off-tonic, the harmonies there lead back to the D<sup>7</sup> chord in the 11<sup>th</sup> measure of the form, which arrives at m. 71, making it reasonable to consider this a cadential progression in the tonic. The same thing can be said of mm. 71-72, since the progression here is explicitly meant to be a “turnaround” that moves the music back to the tonic for the start of next iteration of the blues form (additionally, it cycles through the same fundamental pitches as the previous four measures of the form, as I have already mentioned, reaffirming both movements’ ability to function as cadential progressions). The opening and closing melodic statements of the final chorus of my octave melody variation are also within that scale (Examples 5.17 and 5.18). The opening melodic statement of that chorus implies the static D tonal center in the first four measures of the tune’s form, just as Montgomery uses the G blues scale over the tonic G<sup>7</sup> parts of the form in his solo on “Four on Six”. The final two measures of



*Example 5.16. An octave blues melody in mm. 121-123 of my composition.*



*Example 5.18. Another octave blues melody in mm. 131-132 of my composition, which ends the octave melody variation and leads into the slow blues variation.*

that chorus function over the cadential progression in that portion of the form, like the material in Example 5.16. Other blues melodies are scattered throughout the composition, including in the slow blues variation.

As both De Stefano and I pointed out, Montgomery uses the octatonic scale in his improvisations. The only restriction on this seems to be the compass of the scale, as De Stefano noted: it never lasts longer than two measures in medium and up-tempo solos. It makes sense, then, that in a double-time solo played on a slow-tempo tune, octatonic statements would never last longer than a measure (Steve Kahn’s transcription of “D-Natural Blues” demonstrates this). I made use of the octatonic scale only in the slow blues variation of my composition in order to imply  $G^{\#dim7}$  chords that function as common-tone diminished harmonies to either  $G^7$  or  $D^7$ , much in the same way Montgomery uses this type of scale in “D-Natural Blues”. I show my two statements of the  $G^{\#}$  whole-half octatonic scale in this variation below. In the first, in m. 136, I enter the scale from a descending D blues line (Example 5.19). The second, in m. 150, is more



*Example 5.19. A D blues line leads into the  $G^{\#}$  whole-half octatonic scale in m. 136 of my composition.*

disjunct from the surrounding melodic material (Example 5.20). However, it is worth noting a blues gesture that paraphrases the melody of Israel appears in the previous measure (not shown in the example). Therefore both of these more chromatically colorful passages are preceded by

somewhat more conventional lines. This is similar to Montgomery’s approach in “D-Natural Blues”, where a measure of broadly G Mixolydian material precedes the each of two statements of the G# octatonic scale.



*Example 5.20. A longer G# whole-half octatonic line after an explicit statement of a G#dim<sup>7</sup> chord, in m. 150 of my composition.*

### **My Chord Melody**

In his more expansive solos, Montgomery almost always capped off his extemporizing with a chord melody. As I covered in the previous chapter, he typically set his chord melodies with harmonies in closed voicings that existed in the complete tertian set of the prevailing harmony. Chromatic passing and neighbor pitches he generally set with harmonies that planed into those that set diatonic pitches, or with planed diminished seventh chords. Other chromatic pitches were set with harmonies that either included other altered members from the tertian set of the prevailing harmony, or substitutions for the underlying harmony. I of course strove to replicate this approach. Part of the effort involved understanding exactly which voicings set which melody notes. This turned out to be somewhat dependent on which string the highest note resided.



The chords in mm. 266-269 demonstrate well how I followed Montgomery's approach when setting diatonic melodies (Example 5.21). Here, the top voice of the chord melody remains within the D major scale in mm. 266-267, where the implied harmony is  $D^{maj7}$ , and within the F major scale in mm. 268-269, where the implied harmony is  $F^{maj7}$  (these four measures

The image shows a musical staff in treble clef with a key signature of one sharp (F#). The first two measures are labeled 'Dmaj7' and the last two are labeled 'Fmaj7'. The melody notes are D (quarter), F# (quarter), A (quarter), B (quarter), C# (quarter), and D (quarter). The chords are represented by block chords with stems pointing down.

*Example 5.21. Over both of these  $MM^7$  chords, I set the diatonic melody notes with harmonies that exist within the complete tertian set of each chord (mm. 266-267 of my composition).*

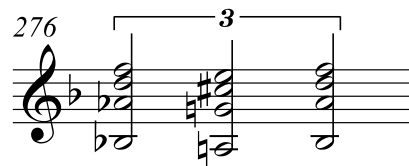
correspond to mm. 7-8 of the original form). The first chord in m. 266, setting F# in the top voice, is literally  $D^{maj7}$  in root position. The second chord, underneath A, is  $F\#^{-7}$ , or a rootless  $D^{maj9}$  chord. These were fairly straightforward choices because the top note I needed to set was in the underlying chord I intended to imply. The following melody note, the B on the downbeat on m. 267, presented greater difficulty. There are four chords in the complete tertian set for  $D^{maj7}$  that include the note B:  $E^{-7}$ ,  $G^{maj7}$ ,  $B^{-7}$ , and  $C\#^{-7b5}$ . I ruled out the last of these possibilities as too inherently dissonant to imply a major tonic sound. The first of these produced too “suspended” a sound for my taste, because it includes both E and G, the 9<sup>th</sup> and 11<sup>th</sup> of  $D^{maj7}$ . The third was too similar to the harmonization I chose for the next note in the top voice (C#), differing by only one note (B versus C#). Hence my decision to use  $G^{maj7}$  to harmonize this B. I could not rely on Montgomery's example in this case, because in the chord melodies of his that I have studied, he in fact nowhere plays **6** over a  $MM^7$  chord (B is **6** in the D major scale). Still, since  $G^{maj7}$  resides in the complete tertian set of pitches on  $D^{maj7}$ , I am using his logic of harmonization, broadly speaking. It may be that this choice also appeals to me because it implies a plagal movement over the underlying  $D^{maj}$ . The final note over  $D^{maj7}$ , C#, I set with a second-inversion voicing of

the chord. The next four notes, in mm. 268-269, allowed me to replicate my approach from mm. 266-267, because they bore the same relationship to the underlying harmony as the first three notes in the earlier measures. Under C, I used  $A^{-7}$  as I used  $F\#^{-7}$  under A in m. 266. Under A, I used  $F^{maj7}$  as I used  $D^{maj7}$  under  $F\#$  in m. 266. And under D, I used  $Bb^{maj7}$  as I used  $G^{maj7}$  under B in m. 267.

There are not many chromatic passing or neighbor tones in my melody. However, I will discuss here how one of the few instances applies Montgomery's method to such notes. As a reminder, to set such notes, he often planed the voicings he used for the preceding or succeeding chords into and out of these notes. In mm. 274 and 276, I use chromatic lower neighbor motion beneath a main note that resides in the prevailing harmony. The triplet rhythm and the neighbor motion in both measures are meant to be paraphrases of the upper neighbor movements in triplet rhythm at the end of the melody of "Israel", as mm. 274-277 serve as an augmented version of mm. 11-12 of the tune's original form. Consequently I imagined the harmony in m. 274 to be  $D^{-7}$ , and the harmony in m. 276 to be  $Bb^{-7}$ . In m. 274, a  $D^{-7}$  in first inversion sets the main note, A (Example 5.22). In order to set the chromatic lower neighbor,  $G\#$ , I simply planed that shape down to  $C\#^{-7}$ . The same logic applies in m. 276 (Example 5.23). The main note is F, which I set with a typical voicing of  $Bb^{-7}$ . The chromatic lower neighbor, E, I set with an identical voicing of  $A^{-7}$ .



Example 5.23. A planed chromatic lower neighbor chord to set a chromatic lower neighbor in the melody, in m. 274 of my composition.



Example 5.22. The same phenomenon as that shown in Example 10a, in m. 276 of my composition.

Chromatic pitches that were not explicitly passing or neighbor tones entered into my chord melody mainly as a result of setting notes over dominant harmonies on A returning to minor tonic harmonies on D. Recall that Montgomery dealt with such notes in his melodies by implying chord substitutions or using altered voicings of the prevailing harmony beneath them. In m. 265, I set the melody Bb-A-G in part using this tactic (Example 5.24). Here, the underlying harmony is A<sup>7</sup>. Because Bb is an altered tertian extension of that harmony (the b9<sup>th</sup>), I set it with a G<sup>-7b5</sup> chord, which I thought of as a rootless Eb<sup>9</sup>. Eb<sup>7</sup> is the tritone substitution for A<sup>7</sup>. The following two notes in the melody reside within A<sup>7</sup> so I use voicings of that chord to harmonize them.



*Example 5.24. A rootless Eb<sup>9</sup> sets Bb, here the b9<sup>th</sup> of the underlying A<sup>7</sup>, in m. 265 of my composition.*

Overall, my arrangement of “Israel” allowed me to experiment with many elements of Montgomery’s improvisational style, including his harmonic language in melodic and arpeggiated passages, his manner of chord improvisation, melodic paraphrase, and his approach to slow blues tunes. Composing more pieces in his style would give me greater appreciation for these elements, especially his approach to chord melodies. However, this piece represents a progression from my compositions in the style of Christian, specifically because I did not rely on quoting Montgomery’s improvisations in the way I quoted Christian. Instead, I relied on my understanding of the theory behind Montgomery’s style to inform my composition. This knowledge is in some sense more powerful than the knowledge I gain by quoting Christian,

because it allows me to create my own musical material, further deepening my understanding of how to improvise jazz on guitar.

## **Appendix A: Three Works Modeled on Charlie Christian's Improvisational Style**

# Charlie Got Rhythm

Thomas Aquino

Up  $\text{♩} = 92$

2T 2T 1T 3

4 C

8 1T-based

12 HA-1 1T D C

16 D C O D

20

25 tonic prolongation 1T

30 C

"Seven Come Eleven"

like  
HD-1 2T C

34 3

38 C (cont.) HA-6 B 1T

42 1T (cont.) B 1T 1T

46 1T (cont.) B 1T

50 tonic prolongation

55 1T see m. 35

60 tonic prolongation 1T

64 3 1T

Detailed description: This is a musical score for a piece titled "Seven Come Eleven". The score is written in treble clef with a key signature of three sharps (F#, C#, G#). It consists of ten staves of music, numbered 30 through 64. The notation includes various rhythmic values, accidentals, and articulation marks. Above the staves, there are several annotations and chord markings: "C" (Chord C), "HA-6", "B", "1T", "HD-1", "2T", "3", "C (cont.)", "1T (cont.)", "B", "1T", "tonic prolongation", and "see m. 35". A bracket labeled "like" spans the first two staves. A bracket labeled "quote" spans the first three staves. A bracket labeled "tonic prolongation" spans the last three staves. The score ends with a double bar line on the final staff.

68 1T (cont.) 3T HA-6 HA-1 W W

72 W (cont.) 1T tail 1T-like 3T

76 1T D C

80 HA-6 D C 2T

84 3T HA-7 HA-6 C

88 "Dinah" quote

93 2T



# Good Christian Blues

Thomas Aquino

Slow blues ♩ = 85

The musical score is written in treble clef with a key signature of two sharps (F# and C#) and a 4/4 time signature. The tempo is marked as 'Slow blues' with a quarter note equal to 85 beats per minute. The score is divided into seven systems, each starting with a measure number (6, 11, 16, 20, 25, 29). The annotations include 'riff' (measures 1-4), 'riff (cont.)' (measures 6-10), 'riff tail' (measures 10-11 and 15-16), 'riff start' (measures 11-12, 16-17, 29-30), '2T' (measures 13-14 and 17-18), '3' (measures 16-17 and 25-26), '1T-like gesture' (measures 24-25 and 26-27), 'HD-3' (measure 29), and 'mod. riff start' (measures 30-31).

34 mod. 3T HD-3 3T HA-6

37 HA(k) HA(k) "Dinah" quote

40 HA-6 into scalar gesture... mod. 3T HA-4 mod. 3T HA-4

43 3T 3T mod. 3T HD-3

46 HD-3 2T(k) mod. 2T(k)

48 S(k) riff tail 2T riff tail  
riff paraphrase

52 2T(k)?

56 HD-3 2T

59

Detailed description: This is a musical score for guitar, consisting of nine staves of music. The key signature is three sharps (F#, C#, G#). The score includes various technical annotations such as 'mod. 3T', 'HD-3', '3T', 'HA-6', 'HA(k)', 'HA-4', 'S(k)', 'riff tail', 'riff paraphrase', and '2T(k)'. Measure numbers 34, 37, 40, 43, 46, 48, 52, 56, and 59 are indicated at the start of their respective staves. The music features a mix of melodic lines and complex chordal textures, including triplets and sixteenth-note runs.

# Cherokee

Ray Noble  
arr. Thomas Aquino

♩ = 85

10 tonic prefix-like ... 2T

18 ... modified

23 HA-1 1T/2T HA-1

28 C 1T/2T

33

39

46

54

61

tonic prefix

1T

prefix/1T

2T

66

3T, interrupted by HA-6

D

C

sim. HD

HA-2

D

71

D (cont.)

2T fragments

76

C

81

tonic "noodling"

D

D

86

HA-6

1T/2T

90

prefix to 1T fragment

HA-1

HA-1

HD-1

HA-7

3T

95

3T (cont.)

3T

100 T HA-6' tonic prefix into 1T

104 HA-6 HA-6 2T' tonic prefix into 1T

109 HA-7 HA-6 C' S(k) tonic "noodling" ...

114 noodling ends

119 D tonic "noodling"

124 "noodling" bluesy 3T

129

133

136

143

149

156

161

166

171

176

181

186

190

1T into ... HA-6' HA-6

3 3

194

HA-7 1T core HA-6

198

HD-1 HD-1 2T' into final tonic "prefix"

## **Appendix B: Two Wes Montgomery Solos and Theme and Variations on “Israel”**



# Four on Six

Wes Montgomery  
trans. Reno de Stefano  
ed. Thomas Aquino

♩ = 206 Gm7 Cm7 F7

6 Bbm7 Eb7 Am7 D7 Ebm7 Ab7 Gm7

11 Bbmaj7 Am7 D7 Gm7

16 D7(b9) Gm7

21 Cm7 F7 Bbm7 Eb7 Am7 D7 Ebm7 Ab7

25 Gm7

29 Bbmaj7 Am7 D7 Gm7 D7(b9) Gm7

34 Cm7 F7

38  $B\flat m7$   $E\flat 7$   $A m7$   $D 7$   $E\flat m7$   $A\flat 7$   $G m7$

42  $B\flat maj7$

46  $A m7$   $D 7$   $G m7$   $D 7(b 9)$   $G m7$

51  $C m7$   $F 7$   $B\flat m7$   $E\flat 7$   $A m7$   $D 7$

56  $E\flat m7$   $A\flat 7$   $G m7$

61  $B\flat maj7$   $A m7$   $D 7$   $G m7$   $D 7(b 9)$   $G m7$

66  $C m7$   $F 7$   $B\flat m7$   $E\flat 7$

71  $A m7$   $D 7$   $E\flat m7$   $A\flat 7$   $G m7$

76  $B\flat maj7$   $A m7$   $D 7$   $G m7$

80 D7(b9) Gm7 Cm7 F7b

86 Bbm7 Eb7 Am7 D7 Ebm7 Ab7 Gm7

91 Bbmaj7 Am7 D7 Gm7

96 D7(b9) Gm7

101 Cm7 F7 Bbm7 Eb7 Am7 D7 Ebm7 Ab7 Gm7

106 Bbmaj7 Am7 D7

111 Gm7 D7(b9) Gm7

115 Cm7 F7 Bbm7 Eb7

119 Am7 D7 Ebm7 Ab7 Gm7

124  $B\flat$ maj7 Am7 D7 Gm7 D7(b9)

129 Gm7 Cm7 F7

134 Bbm7 Eb7 Am7 D7 Ebm7 Ab7 Gm7

139 Bbmaj7

142 Am7 D7 Gm7 D7(b9)

# Cariba

Wes Montgomery

trans. by Steve Kahn and Thomas Aquino

♩ = 172

B $\flat$ 7

5 E $\flat$ 7 B $\flat$ 7

9 F7 E $\flat$ 7 B $\flat$ 7

13 B $\flat$ 7

17 E $\flat$ 7 B $\flat$ 7

21 F7 E $\flat$ 7 B $\flat$ 7

25 B $\flat$ 7

29 E $\flat$ 7 B $\flat$ 7

33 F7 Eb7 Bb7

37 Bb7

41 Eb7 Bb7 3

45 F7 Eb7 Bb7

49 Bb7 3

53 Eb7 Bb7

57 F7 Eb7 Bb7

61 Bb7

65 Eb7 Bb7

69 F7 Eb7 Bb7

73 Bb7

77 Eb7 Bb7

81 F7 Eb7 Bb7 3

85 Bb7

89 Eb7 Bb7 3

93 F7 Eb7 Bb7 3

97 Bb7

101 Eb7 Bb7

104

F7 Eb7 Bb7

109

Bb7

113

Eb7 Bb7

117

F7 Eb7 Bb7

121

Bb7

125

Eb7 Bb7

129

F7 Eb7 Bb7



# Theme and Variations on "Israel"

Thomas Aquino

Med. swing  $\text{♩} = 86$

The musical score is presented in a single system with eight staves. Each staff begins with a measure number: 1, 5, 9, 13, 18, 22, 26, and 30. The music is written in a key signature of one flat (B-flat) and a 4/4 time signature. The tempo is marked as 'Med. swing' with a metronome marking of 86. The score includes various musical notations such as triplets, sixteenth-note runs, and rests. The first staff starts with a double bar line and a repeat sign. The piece concludes with a double bar line and repeat dots at the end of the eighth staff.

34

38

42

46

50

54

58

62

66

70

75

79

84

88

92

96

101

105

110

115

119

124

128

131 *molto rit.*

Slow blues ♩ = 86

133

136

139

141

144

147

149

152

154

Fast  $\text{♩} = 132$

157

162

168

173

178

183

188

193

198

203

207

212

217

Musical staff 217: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

221

Musical staff 221: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

225

Musical staff 225: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

229

Musical staff 229: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

233

Musical staff 233: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

237

Musical staff 237: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

241

Musical staff 241: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

247

Musical staff 247: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests.

252

Musical staff 252: Treble clef, key signature of one flat. The staff contains a series of chords and melodic fragments, including a triplet of eighth notes and various rests. The word "rub." is written below the staff.

257

264

271

277

283

289

295

301

306



## Appendix C: Charlie Christian's Riffs

The image displays ten musical riffs in treble clef, organized into two columns. The first column contains riffs HA-1 through HA-7, and the second column contains riffs HD-1 through HD-3. Riffs HA-1 through HA-4 are grouped together, as are HA-5 through HA-7. HD-1 through HD-3 are grouped together. The notation includes various chord symbols and accidentals.

**HA-1** **HA-2** **HA-3** **HA-4**

**HA-5** **HA-6** **HA-7**

**HD-1** **HD-2** **HD-3**

Chord symbols:  $G^7$ ,  $G^7$ ,  $C$

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