

# Innovation through Generations of Jazz Vibraphonists: Jackson, Hutcherson, Burton and Locke's Improvisations on *Bags' Groove*

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## Abstract

From its inception, jazz has always been a forward-looking and forward-thinking music. While almost all jazz musicians draw inspiration from the past, every new generation of artists revamp the genre with creative changes. This study focuses on the melodic, harmonic and rhythmic innovations of vibraphonists, including Milt Jackson (1923-1999, MI), Bobby Hutcherson (1941-2016, LA), Gary Burton (b. 1943, IN) and Joe Locke (b. 1959, CA), by analyzing transcriptions of their improvised solos on the same piece of music, *Bags' Groove*.

Following in the footsteps of vibraphonists Lionel Hampton (1908-2002, KY) and Red Norvo (1908-1999, IL), Milt Jackson's performance of this piece is rooted in the blues and bebop. For the purpose of this study, I use Jackson's improvisation style as a foundation for the other soloists' styles. Heavily influenced by Jackson, Hutcherson merges his pentatonic scales with blues inflection and bebop style. Burton blends chromatic elements with bebop. Locke absorbs the knowledge from his predecessors and includes more reharmonization. However, this kind of change in jazz doesn't necessarily mean contemporary musicians are superior to their precursors. In a recent interview with Locke, he concedes that not only was he influenced by Jackson, Hutcherson and Burton, but that they are all great musicians in their own right.

**Keywords:** Jazz vibraphone, *Bags' Groove*, Milt Jackson, Bobby Hutcherson, Gary Burton, Joe Locke

# 爵士鐵琴的世代革新： 傑克森、赫卻森、柏頓和拉克 在《袋之律動》上之即興

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## 摘 要

從最初開始，爵士樂一直就是向前邁進、思維前瞻的音樂。大部分爵士樂家都會取材自過往，創新和改變在各個新世代都看得見。這份研究藉分析鐵琴家傑克森（Milt Jackson, 1923-1999）、赫卻森（Bobby Hutcherson, 1941-2016）、柏頓（Gary Burton, 1943 生）和拉克（Joe Locke, 1959 生）在同一首曲子《袋之律動》（*Bags' Groove*）上的即興採譜，檢視他們在旋律、和聲及節奏上的革新。

跟隨著鐵琴家漢頓（Lionel Hampton, 1908-2002）和挪莫（Red Norvo, 1908-1999）的腳步，傑克森此曲的演奏根植於藍調和咆勃風格。在這份研究中，我以傑克森的即興風格為基礎，來和其他音樂家的演奏做比較。深受傑克森影響的赫卻森，將五聲音階融入藍調和咆勃風格之中。柏頓將半音素材與咆勃音樂結合。拉克吸收前輩的知識並納入更多的和絃重置。然而，這些爵士樂的革新，並不代表後期的音樂家一定就超越他們的前輩。在與拉克的訪談中，他承認自己受到傑克森、赫卻森與柏頓的影響，更讚揚他們各個都是偉大的音樂家。

關鍵詞：爵士鐵琴、《袋之律動》、傑克森、赫卻森、柏頓、拉克

## 1. Introduction

Jazz trumpeter Miles Davis (1926-1991, IL) said “I always had a curiosity about trying new things in music, a new sound, another way to do something.”<sup>1</sup> Although some musicians claim that traditional principles of swing, song structure and blues tonality are essential prerequisites for the genre of jazz, there are exceptions to these rules. Jazz has always been a forward-looking and forward-thinking music. While almost all jazz musicians draw inspiration from the past, every new generation of artists revamp the genre with creative changes. Jazz vibraphonists are no exception. But how could we prove the evolution between several jazz vibraphonists? We could find out by observing different eras of jazz vibraphonists' improvisations through transcriptions and seeking the innovation among them.

This study will focus on the innovations from one generation of jazz vibraphonist to the next, which including Milt Jackson, Bobby Hutcherson, Gary Burton and Joe Locke; using transcriptions of improvised solos, all on the same piece of music, *Bags' Groove*.

From the melodic aspect, the usage of diverse scales generally has increased, as has the use of altered notes. For example, heavily influenced by Jackson, Bobby Hutcherson merges his pentatonic scales with blues inflection and bebop style.<sup>2</sup> Furthermore, the reharmonization of the harmonic perspective has also increased from one performer to the next. For instance, Locke absorbs much of the knowledge from the greats before him and includes more

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<sup>1</sup> Ian Carr, *Miles Davis: The Definitive Biography* (New York: Thunder's Mouth Press, 1998), 44.

<sup>2</sup> “One of the main styles of jazz, generally considered to be the foundation for modern jazz. It was developed in the early to mid-1940s by musicians such as Charlie Parker, Dizzy Gillespie, Thelonious Monk, and Bud Powell.” Scott DeVeaux, “Bop,” *Grove Music Online, Oxford Music Online*, accessed September 13, 2018, <https://doi.org/10.1093/gmo/9781561592630.article.A2248431>.

reharmonization. Last but not least, rhythm has also “evolved” from simple to more complex. For example, Burton blends the eighth-note-triplets into the groups of two notes and chromatic elements with bebop.

## **2. Methodology**

### **(1) Research Question**

If we say jazz vibraphonists draw from the past, innovation can be observed with every generation. How can we prove it, prove the innovation from one generation of jazz vibraphonists to the next?

### **(2) Research Methodology**

To seek the answer of research question, the author uses transcriptions from different generation of jazz vibraphonists including Milt Jackson, Bobby Hutcherson, Gary Burton and Joe Locke. The innovation might be simple to discovery on the identical tune, so the transcriptions of improvised solos that the author chooses are all on the same piece of music, *Bags' Groove*. Through the analysis of the transcriptions and based on the oldest musician, Jackson's solo, the evolution will be find out.

### **(3) Research Objective**

The author hopes the outcome of this research will proffer jazz musicians, especially jazz vibraphonists, more information. The information includes transcriptions, influence and innovation between those above-mentioned vibraphonists. More widely, the author likes to share jazz, this beautiful art form, to more musicians, readers and audiences.

#### (4) Literature Review

For the history part, the author read *Grove Music Online*, *The Jazz Vibraphone Book* by Dick Sisto,<sup>3</sup> and *The History of Jazz* by Ted Gioia,<sup>4</sup> along with personal interviews with musicians Joel Weiskopf, Rufus Reid, Charlie Persip, Slide Hampton, Tim Horner, and Joe Locke.<sup>5</sup> For the analysis part, the author approached *The Jazz Vibraphone Book* by Dick Sisto and *The Jazz Theory Book* by Mark Levine.<sup>6</sup>

Furthermore, the analysis part encompasses melodic, harmonic and rhythmic innovations. According to *Grove Music Online*, in this research, melodic innovation means the innovation happens on the horizontal pitched sounds;<sup>7</sup> harmonic innovation means the innovation occurs on the combination of notes which produce the sound of chords;<sup>8</sup> and rhythmic innovation means the innovation bechances on the duration and durational patternings of the notes.<sup>9</sup>

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<sup>3</sup> Dick Sisto, *The Jazz Vibraphone Book* (Delray Beach, FL: Meredith Music Publications, 2005).

<sup>4</sup> Ted Gioia, *The History of Jazz*, 2nd ed. (New York: Oxford University Press, 2011).

<sup>5</sup> Slide Hampton, interview by author, July 24, 2016; Tim Horner, interview by author, October 10, 2016; Rufus Reid, interview by author, November 5, 2016; Charlie Persip, interview by author, October 23, 2017; Joel Weiskopf, interview by author, March 12, 2018; Joe Locke, interview by author, March 16, 2018 (see Appendix 2: Interview with Joe Locke).

<sup>6</sup> Mark Levine, *The Jazz Theory Book* (Petaluma, CA: Sher Music, 1995).

<sup>7</sup> "Melody, defined as pitched sounds arranged in musical time in accordance with given cultural conventions and constraints, represents a universal human phenomenon traceable to prehistoric times." "Melody," *Grove Music Online, Oxford Music Online*, accessed October 28, 2018, <https://doi.org/10.1093/gmo/9781561592630.article.18357>.

<sup>8</sup> "The combining of notes simultaneously, to produce chords, and successively, to produce chord progressions." Richard Cohn et al., "Harmony," *Grove Music Online, Oxford Music Online*, accessed October 28, 2018, <https://doi.org/10.1093/gmo/9781561592630.article.50818>.

<sup>9</sup> "If pitch is concerned with the disposition of the frequencies of musical notes, then rhythm is concerned with the description and understanding of their duration and durational patternings." Justin London, "Rhythm," *Grove Music Online, Oxford Music Online*, accessed October 28, 2018, <https://doi.org/10.1093/gmo/9781561592630.article.45963>.

### 3. Biographies

#### (1) Milt Jackson

Milt Jackson is recognized as the bebop innovator of the vibraphone. Following in the steps of two of the previous masters of the vibraphone Lionel Hampton and Red Norvo, Jackson succeeded in transferring the bebop idiom to his instrument, becoming one of the greatest vibraphonists in the bop style. Jackson used two mallets, almost treating the vibraphone as a single-line instrument. His playing is marked by his adept skills, but also laced with blues phrases that refer to his musical upbringing in the church.<sup>10</sup> He is universally recognized as a definitive interpreter of the blues.

As a member of the Modern Jazz Quartet (MJQ), he was required to read and memorize the arrangements written by John Lewis. These arrangements incorporated many classical materials with jazz, which is known as third stream.<sup>11</sup> Playing these arrangements inspired Jackson to find a voice beyond the bebop idiom.<sup>12</sup> Some of his significant works are *Bags & Trane* (1960), *Sunflower* (1972) and *The Prophet Speaks* (1994).

#### (2) Bobby Hutcherson

Studying piano briefly with his mother at an early age provided Bobby Hutcherson with a foundation in harmony. In his teens he heard Milt Jackson playing the vibraphone on a recording which filled him with joy and happiness. Jackson was the influence which led him to become a musician.

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<sup>10</sup> Sisto, *The Jazz Vibraphone Book*, 27-36.

<sup>11</sup> “The term was originally applied to a style in which attempts were made to fuse basic elements of jazz and Western art music—the two mainstreams joining to form a ‘third stream’.” Gunther Schuller and Thomas H. Greenland, “Third Stream,” *Grove Music Online, Oxford Music Online*, accessed September 13, 2018, <https://doi.org/10.1093/gmo/9781561592630.article.A2252527>.

<sup>12</sup> Gioia, *The History of Jazz*, 258-259.

Although Hutcherson was influenced by bebop, his playing here is characterized by the post-bop<sup>13</sup> style, combined with the two-mallet technique and his knowledge of jazz harmony. His major works are *Stick-Up!* (1966), *Bobby Hutcherson Live at Montreux* (1973) and *Skyline* (1999).<sup>14</sup>

### (3) Gary Burton

The inventor of his own grip, the “Burton Grip,”<sup>15</sup> Gary Burton is a four-mallet soloist. Comparing to two-mallet playing, four-mallet allows Burton to have more possibility on comping voicing and improvising. He is influenced by bebop and his improvisation language combines 20th century classical music with country music, as well as blues.

After establishing a piano background, Burton taught himself to play the marimba and vibraphone. He approached these keyboard percussion instruments like piano. However, he includes chromaticism and complex rhythms in his interpretation of *Bags' Groove*. Some of his pivotal works are *New Vibe Man in Town* (1961), *The Time Machine* (1966) and *Alone at Last* (1971).<sup>16</sup>

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<sup>13</sup> “A vague term, used either stylistically or chronologically to describe any continuation or amalgamation of bop, modal jazz, and free jazz; its meaning sometimes extends into swing and earlier styles or into fusion and third-world styles. It emerged as an attempt to circumscribe the eclecticism which has characterized jazz from the 1980s onwards.” Barry Kernfeld, “Post-bop,” *Grove Music Online, Oxford Music Online*, accessed September 13, 2018, <https://doi.org/10.1093/gmo/9781561592630.article.J752800>.

<sup>14</sup> Sisto, *The Jazz Vibraphone Book*, 43-50.

<sup>15</sup> Grips are the ways of holding mallets in hands when striking the keyboard percussion instruments including vibraphone. “The ‘Burton grip’ (after the jazz vibraphone virtuoso Gary Burton), in which the shafts are crossed in the palm of the hand with the outside shaft on top of the inside, and the grip has an axle pivot principal with the third and fourth fingers controlling the size of the interval.” James Blades, “Marimba, 2. The Modern Orchestral Marimba,” *Grove Music Online, Oxford Music Online*, accessed September 13, 2018, <https://doi.org/10.1093/gmo/9781561592630.article.40082>.

<sup>16</sup> Sisto, *The Jazz Vibraphone Book*, 37-42.

#### **(4) Joe Locke**

At a young age, Joe Locke started to play the piano and drums. The vibraphone eventually became his concentrated area of study.<sup>17</sup> Locke is primarily a four-mallet soloist. Through a combination of a fundamentally melodic approach, combined with dense ornamentation, patterns and phrasing that outline the harmony, he achieves an extraordinarily exciting forward motion, leaving the listener on the edge of their seat. He includes rhythmic complexity, reharmonization and wide intervals in his playing. His critical works are *The Little Presents Live Jazz in Front of the Silver Screen* (1983), *But Beautiful* (1991) and *Rev-elation* (2005).<sup>18</sup>

### **4. *Bags' Groove***

This study concentrates on the four solos on *Bags' Groove*. This jazz standard was written by Milt Jackson, whose nickname was “Bags.” It is a 12-bar blues in the key of F and contains a riff which repeats three times, each phrase being four bars. One of the most well-known recordings was by the Miles Davis quintet in 1954, which was collected in the *Bags' Groove* and released in 1957.<sup>19</sup>

## **5. Video Information**

The solos of Jackson and Burton are transcribed from the 1995 concert “Vibes Summit” in Umbria, Italy. The musicians in this concert are vibraphonists Milt Jackson and Gary Burton, bassist Ray Brown, pianists Geoffrey Keezer and Makoto Ozone, and drummer Gregory Hutchinson. Gary Burton was the guest

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<sup>17</sup> Locke, interview by author. See Appendix 2: Interview with Joe Locke.

<sup>18</sup> Joe Locke, “Biography,” Joe Locke: Official Website, accessed October 17, 2017, <https://joelocke.com/biography/>.

<sup>19</sup> Miles Davis, *Bags' Groove*, recorded 1954, Prestige PRLP 7109, 1957; reissued, Riverside Records OJCCD 245-2, 1988, CD.

artist who played the fourth song and the fifth song *Bags' Groove* during the first set of the concert.<sup>20</sup>

The transcriptions of Hutcherson and Locke are from the “Homage to Milt Jackson” concert on July 1, 2007, which was a part of the Baltica Jazz Festival. The performers in the concert were vibraphonists Bobby Hutcherson and Joe Locke, pianist Don Friedman, tenor saxophonist Johannes Enders, trumpeter Darren Barrett, bassist Martin Wind and drummer Andi Haberl. They played *Bags' Groove* at the end to honor Milt Jackson.<sup>21</sup>

## 6. Analysis

This section encompasses the melodic, harmonic and rhythmic aspects of Jackson, Hutcherson, Burton and Locke's interpretations of *Bags' Groove*. The melodic aspect comprises scales and altered notes. The harmonic aspect is comprised of reharmonization. It should be noted that the type of reharmonization we will be studying here happens spontaneously as part of the improvised solo as opposed to the type of reharmonization that a jazz composer might utilize. Rhythmically, we note development from simple to complex, from the earlier vibraphonists to the later.

The abbreviations of musical terms will be as follows:

alt. = altered	dim. = diminished
app. = appoggiatura	éch. = échappée
camb. = cambiata	n.t. = neighboring tone
chrom. = chromaticism	p.t. = passing tone

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<sup>20</sup> p3ximus, “Vibes Summit - Umbria Jazz 1995,” YouTube, published December 31, 2013, accessed September 13, 2018, <https://youtu.be/1NNHYjQSSZw>.

<sup>21</sup> Jazz Green, “Bobby Hutcherson / Joe Locke "Homage to Milt Jackson" - JazzBaltica 2007,” YouTube, published October 5, 2014, accessed September 13, 2018, <https://youtu.be/ZzSAKN3UdTI>.

## (1) Melodic Innovation

### a. Scales

Jackson's performance is rooted in blues and bebop.<sup>22</sup> In fact, he utilizes the blues scale in every chorus. In his fourth chorus (Example 1), he uses the blues scale throughout the entire 12 bars which also combines with F minor scale.

#### Example 1.

The musical notation for Example 1 consists of three staves of music in F minor. The first staff (measures 38-40) features a blues scale with triplets and a Cm chord. The second staff (measures 41-43) continues the blues scale with triplets and includes F7 and Bb7 chords. The third staff (measures 44-46) concludes the phrase with various chords including Gm, C7, and F7.

Hutcherson majors more on pentatonic scales than blues. As a post-bop musician, his usage of the pentatonic scale was outside of the bebop language, which was evidence that some post-bop musicians were seeking breakthrough from the previous era.<sup>23</sup> Other post-bop musicians approached more complex style, modal and chordal harmony.<sup>24</sup> Hutcherson creates pure F pentatonic scales phrases in bars 5-6, 16-19, 29-31 and 34-37 (Example 2).

<sup>22</sup> Gioia, *The History of Jazz*, 259.

<sup>23</sup> Weiskopf, interview by author.

<sup>24</sup> C. Michael Bailey, "Miles Davis, Miles Smiles, and the Invention of Post Bop," All About Jazz, accessed April 11, 2008, <https://www.allaboutjazz.com/miles-davis-miles-smiles-and-the-invention-of-post-bop-by-c-michael-bailey.php>.

## Example 2.

### (a) Bars 5-6.



### (b) Bars 16-19.



### (c) Bars 29-31.



### (d) Bars 34-37.



However, Hutcherson still utilizes the blues inflection, but in his own way. In bar 3 (Example 3), he creates a suspension by ending his phrase on the fourth degree of the F<sup>7</sup> chord. This was a significant move away from bebop.<sup>25</sup>

## Example 3.



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<sup>25</sup> Weiskopf, interview by author.

He applies the whole-tone scale in his playing (Example 4), which is also distinctive from previous bebop musicians' playing.

#### Example 4.

##### (a) Bars 7-8.

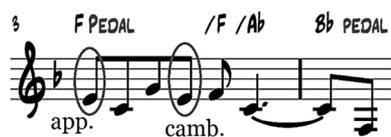


##### (b) Bar 11.



Burton includes a non-harmonic tone early on in his solo. For example, in bar 3 (Example 5), he maneuvers the note E as an appoggiatura in beat one, and he uses the note E again as a cambiata in beat two. This type of dissonance was seldom heard by Jackson.

#### Example 5.



Like Hutcherson, Burton uses pentatonic scales in his performing (Example 6).

#### Example 6.



He also includes chromaticism in his improvisation. He amalgamates the chromatic scale with syncopation in bars 19-20 (Example 7(a)). He manipulates the chromatic scale in bars 56-57 as well (Example 7(b)). This type of rhythmic and melodic innovation was not often heard in the earlier bebop style.

**Example 7.**

**(a) Bars 19-20.**



**(b) Bars 56-57.**



He invents a unique scale in bar 37 (Example 8), integrating the F blues scale with the C major scale.

**Example 8.**



Locke's performance is also filled with blues inflection. However, in bar 20 (Example 9), he utilizes wide intervals, another step away from bebop, emphasizing the fourth specifically. He uses a diminished fourth in beat two, a perfect fourth and an augmented fourth in beat three.

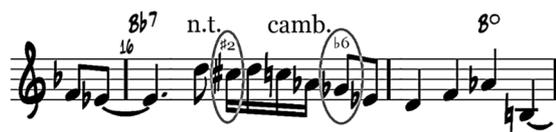
**Example 9.**



**b. Altered notes.**

Similar to Hutcherson, the younger Burton maneuvers altered notes. For instance, in bar 16 (Example 10), he uses notes C $\sharp$  (neighboring tone) as a sharp-second and G $\flat$  (cambiata) as a flat-sixth in the B $\flat$ <sup>7</sup> chord.

**Example 10.**



During Locke's performance, he applies the altered sound more often than the others. In bar 45 (Example 11), he utilizes notes D $\sharp$  (passing tone) as a sharp-second in beat one, D $\flat$  (échappée) in beat two as a flat-second, G $\flat$  (cambiata) in beat three as a flat-fifth, E $\flat$  and D $\flat$  (double passing tones) in beat four as flat-third and flat-second.

**Example 11.**



In bar 50 (Example 12), he approaches the F<sup>7</sup> chord as an altered dominant chord. He exploits the note C $\sharp$  (échappée) as a sharp-fifth in beat two, G $\flat$  and A $\flat$  (double passing tones) as a flat-second and flat-third in beat three, and D $\flat$  (échappée) as a flat-sixth in beat four.

### Example 12.



## (2) Harmonic Innovation

Hutcherson exploits reharmonization spontaneously. For example, He implies an  $F^7$  altered chord when the original chord is a straight  $F^7$  in bar 13 (Example 13).<sup>26</sup> He applies the notes  $D^b$  (flat-sixth),  $A^b$  (flat-third), and E (cambiata) in his phrase.

### Example 13.



In bar 28, he utilizes the D altered scale, which suggests that he may have been reharmonizing the  $ii-V^7$  (in  $B^b$ ) as a  $D^7$  altered chord.

### Example 14.



Locke reharmonizes during his solo even more than Hutcherson does. For example, in the third and fourth beats of bar 8 (Example 15), he reharmonizes the G minor chord into a  $D^7$  chord, which is the dominant chord of G minor chord.

<sup>26</sup> Levine, *The Jazz Theory Book*, 279.

**Example 15.**



In beat one of bar 11 (Example 16(a)), he reharmonizes the G minor chord into a  $G^7$  chord by playing a major third. He does this again in the first beat of bar 23 (Example 16(b)).

**Example 16.**

**(a) Bar 11.**



**(b) Bar 23.**



In bar 21 (Example 17), Locke again implies different chords than what is written. On beat one, he implies a C minor chord by the use of an arpeggiated  $Cm^7$  chord. On beat two, he reverts back to the  $C^7$  chord. On beats three and four he implies a  $C^7$  altered chord by the use of a C altered scale.

**Example 17.**



There is a sequence of using major triad arpeggio's reharmonization in bar 36-37 (Example 18). In the last two beats of bar 36, he utilizes C triad over a  $F^7$

chord. The C triad can be considered a V chord of the F<sup>7</sup> chord. In the last two beats of bar 37, he exploits a G<sup>b</sup> triad which is also a tritone substitution of the V chord of the F<sup>7</sup> chord.

**Example 18.**

36 F<sup>7</sup> Cmaj. (V of F<sup>7</sup>) B<sup>b</sup>7 G<sup>b</sup>maj. (tritone substitution of V of F<sup>7</sup>)

In bar 43 (Example 19), on beat one, Locke reharmonizes an A minor chord by implying a G diminished chord. He also reharmonizes the D<sup>7</sup> chord into an A<sup>b</sup> major chord (tritone substitution) on beat three, and he reharmonizes beat four as a G minor chord to anticipate the next chord from the following bar.

**Example 19.**

43 Am G dim. D<sup>7</sup> (tritone substitution) A<sup>b</sup>maj. (anticipation) Gm

In the last two beats of bar 48 (Example 20), Locke utilizes a C<sup>7b9</sup> chord with non-harmonic tones. The C<sup>7b9</sup> chord can be considered as a dominant chord of a F<sup>7</sup> chord. He treats G<sup>b</sup> (cambiata) as a flat-fifth, D<sup>b</sup> (cambiata) as a flat-second, and B (cambiata) as a sharp-seventh.

**Example 20.**

48 F<sup>7</sup> C<sup>7</sup> (V<sup>7</sup> of F<sup>7</sup>) camb. (b<sup>5</sup>, b<sup>2</sup>, #<sup>7</sup>) camb.

In bar 49 (Example 21), he treats beat two and three as a  $C^7$  altered chord over the  $F^7$  chord. The  $C^7$  altered chord, which applies the  $E^b$  as a flat-third and  $D^b$  as a flat-second, is also the dominant chord of the  $F^7$  chord.

### Example 21.



### (3) Rhythmic Innovation

There are regular quarter notes, eighth notes, eighth-note-triplets and sixteenth notes in Jackson and Hutcherson's solos. On the other hand, there are more complex rhythms in Burton and Locke's performances.

In bars 35-36 and 59-60 of Burton's solo (Example 22), he uses fast runs, in conjunction with descending lines and distinct rhythms. He creates several patterns with eighth notes, eighth-note-triplets, sixteenth-notes and syncopated sixteenth notes, all within one larger phrase. Each pattern begins on consecutive lower notes, developing an overall descending phrase.

### Example 22.

#### (a) Bars 35-36.



#### (b) Bars 59-60.



Additionally, in bar 56-57 (Example 7(b)), he performs the eighth-note-triplets in the groups of two notes and creates an ascending phrase with the chromatic scale.

In Locke's performance, the complexity of rhythm is even more intricate than in Burton's. For example, in bar 11 of his solo (Example 23), he utilizes quintuplets on beat four to demonstrate an enclosure.<sup>27</sup>

### Example 23.



In bar 44 (Example 24), he merges three kinds of rhythm: eighth notes, eighth-note-triplets and sixteenth notes, in only one measure.

### Example 24.



From bar 51 to 53 (Example 25), there is a complex mixture of rhythm which contains sixteenth notes, syncopated sixteenth notes, sixteenth-note-triplets, eighth notes, eighth-note-triplets and quintuplets.

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<sup>27</sup> "Enclosure is simply approaching a target note from above and below either diatonically or chromatically." Brent Vaartstra, "How to Use Enclosure in Your Jazz Solos," Learn Jazz Standards, accessed August 21, 2018, <https://www.learnjazzstandards.com/blog/learning-jazz/jazz-theory/use-enclosures-jazz-solos/>.

### Example 25.

51 F7

53 B<sup>b</sup>7

## 7. Conclusion

According to this research, we truly can prove that jazz vibraphonists draw from the past, innovation and influence can be seen from one generation of jazz vibraphonists to the next. There are many changes and evolutions in jazz vibraphone, starting with Milt Jackson, then progressing to Bobby Hutcherson, Gary Burton and Joe Locke.

Through the in-depth study of these four musicians' solos on *Bags' Groove* and using Jackson's improvisation as a model, we have observed some striking melodic, harmonic and rhythmic innovations. From the melodic aspect, the usage of alternate scales generally has increased such as Hutcherson's whole-tone scale, Burton's chromatic scale, and even Burton's own unique scale, as has the use of non-harmonic notes, such as Hutcherson's altered notes and even Locke's usage of wide intervals patterns. Jackson's Blues inflection, Hutcherson's pentatonic scale, non-harmonic notes and altered notes are the influences passing down from generations.

Furthermore, the reharmonization of the harmonic perspective has also increased from one performer to the next, such as changing of the chord quality, implying different chord and non-harmonic tones on the chord, and even a tritone substitution. The reharmonization on the dominant chord is the heritage from the previous musicians.

Last but not least, rhythm has also “evolved” from simple to more complex, like intricate patterns, quintuplets, and even eighth-note-triplets in the groups of two notes. The quarter notes, eighth notes, eighth-note-triplets and sixteenth notes are the traditional impact through all generations.

Based on these observations, it is clear that progressive changes, influence and innovations to the jazz vibraphone style can be observed in the artistry of these four experts.

## Appendix

### 1. Transcriptions

#### BAG'S GROOVE

SOLO BY MILT JACKSON

MILT JACKSON

FROM "VIBES SUMMIT 1995 LIVE"

TRANSC. YU CHIH CHERRY CHEN

START AT 26:43

[1st Chorus]

Musical score for "BAG'S GROOVE" (Solo by Milt Jackson). The score is in 4/4 time and features a complex melodic line with many triplets and chromaticism. Chord changes are indicated above the staff.

Measures 1-4: Cm, F7, Bb7, Bb7

Measures 5-8: Cm, F7, Cm, F7

Measures 9-12: F7, D7, Gm, C7, F7 [2nd Chorus], Bb7, Bb7

Measures 13-16: Cm, F7, Bb7, Gm

Measures 17-20: F7, D7, Gm

Measures 21-24: C7, F7, D7, Gm, C7, F7 [3rd Chorus], Cm

Measures 25-28: F7, Bb7, F7

Measures 29-32: D7, Gm, Gm, C7, F7/C

2  
38 [4th Chorus]  $F^7$   $C^m$

41  $F^7$   $B^b7$   $F^7$

45  $G^m$   $C^7$   $F^7$   $G^m$   $C^7$

50 [5th Chorus]  $F^7$   $B^b7$   $8^\circ$   $C^m$

53  $F^7$   $B^b7$   $8^\circ$

56  $F^7$   $D^7$   $G^m$   $C^7$

60 [6th Chorus]  $F^7/A$   $/A$   $/G$   $/G$   $F^7$   $/D$   $/E^b$   $/E$   $/F$   $/D$   $/E^b$   $/E$   $/F$   $/D$   $/E^b$   $/E$

65  $F^7$   $B^b7$   $/A$   $/A$   $/G$   $/G$   $/F$   $F^7$   $C^7$

70  $G^7$   $G^m$   $C^7$   $F^7$   $C^7$

## BAG'S GROOVE

SOLO BY BOBBY HUTCHERSON

MILT JACKSON  
FROM "HOMAGE TO MILT JACKSON 2007 LIVE"  
TRANSC. BY YU CHIH CHERRY CHEN

START AT 1:09:05

The musical score for "Bag's Groove" is presented in a single-staff format with a treble clef and a key signature of two flats (B-flat and E-flat). The time signature is 4/4. The score is divided into several measures, with chord changes indicated above the staff. The first measure (1) is marked "F7 [1st Chorus]". The second measure (2) is marked "Bb7". The third measure (3) is marked "F7". The fourth measure (4) is marked "Bb7". The fifth measure (5) is marked "F7". The sixth measure (6) is marked "D7". The seventh measure (7) is marked "Gm". The eighth measure (8) is marked "C7". The ninth measure (9) is marked "F7". The tenth measure (10) is marked "D7". The eleventh measure (11) is marked "Gm". The twelfth measure (12) is marked "C7". The thirteenth measure (13) is marked "F7 [2nd Chorus]". The fourteenth measure (14) is marked "Bb7". The fifteenth measure (15) is marked "F7". The sixteenth measure (16) is marked "Bb7". The seventeenth measure (17) is marked "Bb7". The eighteenth measure (18) is marked "F7". The nineteenth measure (19) is marked "Am". The twentieth measure (20) is marked "D7". The twenty-first measure (21) is marked "Gm". The twenty-second measure (22) is marked "C7". The twenty-third measure (23) is marked "F7". The twenty-fourth measure (24) is marked "D7". The twenty-fifth measure (25) is marked "Gm". The twenty-sixth measure (26) is marked "C7". The twenty-seventh measure (27) is marked "F7 [3rd Chorus]". The twenty-eighth measure (28) is marked "Bb7". The twenty-ninth measure (29) is marked "F7". The thirtieth measure (30) is marked "Cm". The thirty-first measure (31) is marked "F7". The thirty-second measure (32) is marked "Bb7". The thirty-third measure (33) is marked "Bb7". The thirty-fourth measure (34) is marked "Bb7". The thirty-fifth measure (35) is marked "Bb7". The thirty-sixth measure (36) is marked "Bb7". The thirty-seventh measure (37) is marked "Bb7". The thirty-eighth measure (38) is marked "Bb7". The thirty-ninth measure (39) is marked "Bb7". The fortieth measure (40) is marked "Bb7". The forty-first measure (41) is marked "Bb7". The forty-second measure (42) is marked "Bb7". The forty-third measure (43) is marked "Bb7". The forty-fourth measure (44) is marked "Bb7". The forty-fifth measure (45) is marked "Bb7". The forty-sixth measure (46) is marked "Bb7". The forty-seventh measure (47) is marked "Bb7". The forty-eighth measure (48) is marked "Bb7". The forty-ninth measure (49) is marked "Bb7". The fiftieth measure (50) is marked "Bb7".

# BAG'S GROOVE

SOLO BY GARY BURTON

MILT JACKSON

FROM "VIBES SUMMIT 1995 LIVE"

TRANSC. YU CHIH CHERRY CHEN

START AT 28:34

F PEDAL [1st Chorus] /F /Ab Bb PEDAL

6  $B^{\circ}$  C7 D7 F7 C7

11 F7  $G_m$  C7 F7 [2nd Chorus]

14  $Bb7$  F7  $Bb7$   $B^{\circ}$

18  $Bb7$   $B^{\circ}$  C7 F7 D7

21  $G7$  C7 F7 D7

24  $G_m$  C7 F7 [3rd Chorus]  $Bb7$  F7

28  $Bb7$   $B^{\circ}$  C7

32 F7  $G7$  C7

35 F7 D7  $G_m$  C7

2

37 F7 [4th Chorus] F7/Eb 8b/D /Db 3 F7/C 3 3

40 F7 8b7 8° C7

44 F7 D7 G7 C7 F7

48 C7 F7 [5th Chorus] C7 F7 3 3 3 3

52 8b7 8°7 F7 3

56 D7 3 3 3 3 Gm 3 3 C7 3 3

59 F7

61 F7 [6th Chorus] 8b7 F7

64 3 3 3 3 8b7 3 3 8°7

67 F7 D7 Gm 3

70 C7 F7 D7 Gm C7

The image displays a musical score for guitar, consisting of ten staves of music. The score is written in a key signature of one flat (B-flat major or F minor) and a 4/4 time signature. The music features a variety of chords, including F7, F7/Eb, 8b/D, /Db, F7/C, F7, 8b7, 8°, C7, D7, G7, C7, F7, C7, F7, 8b7, 8°7, F7, D7, Gm, C7, F7, 8b7, F7, F7, D7, Gm, C7, and F7. The score includes several triplet markings (indicated by a '3' over a group of notes) and a double bar line at the end of the piece. The staves are numbered 37, 40, 44, 48, 52, 56, 59, 61, 64, 67, and 70, corresponding to the first measure of each line.

## BAG'S GROOVE

SOLO BY JOE LOCKE

MILT JACKSON

FROM "HOMAGE TO MILT JACKSON 2007 LIVE"

TRANSC. YU CHIH CHERRY CHEN

START AT 1:10:00

8<sup>b</sup>7 [1st Chorus] F<sup>7</sup> 8<sup>b</sup>7 8<sup>o</sup>7 3 3

6 F<sup>7</sup> Am D<sup>7</sup> Gm

9 C<sup>7</sup> F<sup>7</sup> D<sup>7</sup>

11 Gm C<sup>7</sup> [2nd Chorus] F<sup>7</sup> 8<sup>b</sup>7 F<sup>7</sup> 5

15 8<sup>b</sup>7 F<sup>7</sup> Am D<sup>7</sup>

20 Gm C<sup>7</sup>

22 F<sup>7</sup> D<sup>7</sup> D<sup>b</sup>7 C<sup>7</sup> F<sup>7</sup> [3rd Chorus] 8<sup>b</sup>7

26 F<sup>7</sup> 8<sup>b</sup>7 8<sup>o</sup>7 F<sup>7</sup>

31 Am D<sup>7</sup> Gm C<sup>7</sup> 3 3 F<sup>7</sup> D<sup>7</sup>

35 Gm C<sup>7</sup> F<sup>7</sup> [4th Chorus] 8<sup>b</sup>7 F<sup>7</sup>

2

39  $B^b7$   $B^o7$   $F7$

43  $A_m$   $D7$   $G_m$

45  $C7$   $F7$   $D7$

47  $G_m$   $C7$   $F7$  [5th Chorus]

49  $B^b7$   $F7$

51

53  $B^o7$   $F7$   $A_m$   $D7$   $G_m$

57  $C7$   $F7$   $D7$   $G_m$   $C7$   $F7$

## 2. Interview with Joe Locke

Phone interview with Mr. Locke by author, March 16, 2018.

J = Joe Locke; C = Author

C: On you and Mr. Bobby Hutcherson's recording of "Homage to Milt Jackson" concert, is it a coincidence that you guys played the same vamp after the solos just like Mr. Milt Jackson and Mr. Gary Burton did on their 1995 "Vibe Summit" concert?

J: First of all, it's a shout chorus.

C: Oh, because I listened to the early records of Milt Jackson. It didn't have the shout chorus.

J: It is a shout chorus for *Bags' Groove*. You can play with the shout chorus or without the shout chorus, but we vibraphone players like to add it in our playing. After you heard it once you would realize, wow, the song is much better with the shout chorus. It makes you want to play like that every time, you know. If you listen to Milt Jackson's playing, he, maybe the recordings that you know that he didn't. In all the concerts, he always played the shout chorus. And I played that (tune) before with Gary Burton. And also Gary and I, we played the shout chorus. And I played with Warren Wolf. Warren and I, we always played the shout chorus. With Stefon Harris, with Bobby, we all, I think we vibes players, the most vibes players, we like to play the shout chorus.

C: And I transcribed your solo.

J: You did?!

C: Yeah, of course!

J: Wow!

C: Yes, and also Mr. Bobby Hutcherson, Mr. Milt Jackson and Mr. Gary Burton's solos. And I found there are some similarities in you guys' playing. So I have the hypothesis like, maybe you are influenced by them?

J: Absolutely! And I love, on the recording of myself and Bobby, I love Bobby's solo so much. So beautiful and has such a beautiful blues feeling, you know. It's beautiful, beautiful. And yes, I am very influenced by Bobby, and also by

Milt Jackson. And Gary Burton too, in a way. Yes.

C: Have you ever meet them in your life? And maybe there are some stories that you can tell me?

J: Oh, well, yes of course. I know all of them. And I spent time with all of them, of course. Yeah, they were my friends. And of course my heroes, you know. They are my heroes. But I'm very honored, I'm very happy that, with Milt Jackson, not so much, I was not very close with Milt Jackson. Only spent time with him a couple of times, but after Mr. Jackson died, I became friends with his wife, Sandy, his wife, Sandy Jackson. She was very kind to me, very nice person. And then I think in the early 2000s, I forget exactly, maybe you can discover this, but I toured to play many concerts with Milt Jackson's band, with Mikey Rocker, Bob Cranshaw and Mike LeDonne. We did many concerts together. That was Milt Jackson's group. And we did some tours in Europe and also many concerts in United States, playing all of the music of Milt Jackson. And the name of the group was the Milt Jackson Tribute Band. And that's why I really became a very good friend with Milt Jackson's wife, Sandy. And I was very good friend of Bobby Hutcherson, very good friend with Bobby. He was my biggest hero. And we became very good friends. And for me, it was a big honor to be, to be his friend, you know. And also I am friendly, very friendly with Gary Burton also. He is a very nice, nice man. We've known each other for many years. And he's always been very kind and very generous, with me. So yeah, it's an honor for me to know these great great musicians.

C: Oh, I remembered you share S.K.J., the title.

J: S.K.J. is Sandy K. Jackson. Yes, it's Milt Jackson's wife. And when I discovered it, I was so, oh my god, YOU are S.K.J. (Laughs). Like you remembered the story, I said "Sandy, may I send you an email?" and she said "Yes, yes, please send me an email." I said "What is your email address?" she said "Skj@aol.com." and I said "Ah, oh my god. YOU ARE S.K.J.!" It's fantastic. It's really fantastic (Laughs).

C: (Laughs) Yeah, the title. And Professor Richie Vitale tells me, you guys grow up in Rochester.

J: How do you know Richie Vitale?

C: He is my professor at school.

J: Oh my god, you know, Richie Vitale to me, is one of the greatest trumpet players on the planet earth. He is an incredible, incredible musician. And I have so, I have great great respect for Richie Vitale. Please, please tell him I send my love and my best wishes and big big respect to him.

C: Of course, he said you guys played a lot. So, can you please tell me, how did you start your career? And why do you pick to be a musician?

J: Me?

C: Yes.

J: Well, I'll tell you, one of my heroes, one of my heroes was Richie Vitale. Because he is a couple of years, Richie, he is only a few years older than me. But Richie moved to New York City. We both grew up in the city of Rochester, New York. And many of the musicians in Rochester, New York, they stay their lifetime. They stay in Rochester. They stay in one place for their entire life. But Richie, when he was still a teenager, he moved to New York. He said "I'm going to New York. I'm going to find the Jazz. I'm going to the city where Jazz is happening." And he was working very hard. Practicing, practicing, practicing, practicing. And he would come, he would return back home to Rochester. And we would play at jam session or I would hear him, hear him played at the jam session, or we would play together at jam session. And I said "Oh my god, this guy's playing is so incredible!" I have to, I must also go to New York. And so, Richie for me was a big inspiration.

C: Got you.

J: Yeah, he was a big inspiration. Because he made me want to take my music all the way, not stay in Rochester but go to New York City. And really get my ass kicked.

C: (Laughs) Ok.

J: And so, I moved. I was playing professionally, playing jazz from the time I was fifteen, fifteen years old, playing with older musicians and jazz clubs in Rochester, in Buffalo, New York. And then I was touring with a group when I

still in high school, when I was seventeen. And I began touring with a jazz group, touring mainly up and down in the east coast, you know, Philadelphia, Washington, Boston, New York, up and down. And I did this for a couple of years. Then when I was twenty, I moved, I moved to New York City. And then I began my long road to, to gradually, gradually improving, improving, improving, and working hard, playing as much as possible, listening to all the great musicians in New York. And for me, it was a great life, you know, was a great life of slowly, slowly improving, improving, man, and always meeting interesting people and meeting new people and also meeting my heroes, meeting my, ah incredible, meeting the fantastic musicians that I listening to, only in my bedroom, you know, on the record player, haha, you know.

C: Yeah, sure.

J: And then meeting them and then getting a chance to play with them. And was a big, big, big education for me. Really amazing. Really amazing. Wow, I'm so happy that you know Richie Vitale.

C: Haha, yeah. And I read some article that you said you also learned drums when you were young?

J: Yes, I learned drums, I studied drums also. But now, but now I am a terrible drummer (Laughs). Terrible, terrible, terrible drummer. The vibraphone, the vibraphone took the front seat and the drums went into the back seat. And now, and now, I'm the worst drummer (Laughs).

C: So, vibraphone is your first instrument, is it?

J: Well, at the beginning it was piano and drums. And now I still play, I still play piano now. But I'm definitely much better a vibraphonist. Vibraphone is my best instrument, definitely.

C: Ok. And also Professor Tim Horner said you are a great band leader and...

J: Oh, wow, you know Tim Horner also. He's my dear dear friend. Wow, you know all my friends (Laughs). Tim Horner is my very very very dear friend. And yes, I have great respect for Tim. He's an incredible drummer, incredible musician, and incredible composer. I love his music.

C: So as a composer, how do you find your inspiration in your composition?

J: Ah, well, you should, you know this book, Cherry, *Masters of the Vibes*?

C: Yeah.

J: You should read the interview that I did with *Master of the Vibes*, maybe you already did, I don't know.

C: Oh, I haven't. I know this book.

J: You should get the book and read the interview because I talked a lot, in the book, I talked a lot about what inspired me as a composer. There's a big part of the book where I talked about that. So, I'm influenced by, I'm very influenced and inspired by words, words. It could be a book, or it could be a poem, or it could be something you said, Cherry, in a conversation. You may say something, some sentences that make me think, wow, the way she said that was so interesting. It could inspire songs to me, you know, so, but I recommended that if you really want to answer that question, go to the interview, go to the interview in *Masters of the Vibes* where Anthony Smith interviewed me and we talked about that subject of what inspired my compositions. Because I think you could take, you could take some of my words right from that interview, you know.

C: Ok.

J: Great.

C: And when sometimes, you worked with a lot of musicians, right, when sometimes they cannot reach your expectation of your composition, what will you do?

J: Ah, that's really interesting! That's not a usual experience for me. The only time, the only time I would have that experience, it's maybe if I go to some city, to some city where I have to have a quick rehearsal and then a concert. Maybe they can't play mine, they are difficult music. But, first of all, the musicians that I played with, I never have any problem with them playing my music. Because the people that I played with are so smart. They are much smarter than I am (Laughs). And they play, they can really play anything, anything. And what I normally do is, if I see the musicians maybe they cannot come up to the level of my songs, I think the most important thing is to have

fun playing. And to have, and for everyone to have a good time, and a good communication, and I think it's better if you feel like you are afraid the musicians will have, if I am afraid the musicians will have difficulty, I select easier music.

C: Oh, I see.

J: You can do very easy music but still make great, but still have great result, you know. For example, the concert with Bobby Hutcherson from YouTube, we played, we didn't play difficult music, the music that we played was easy music. But it gives us a chance to, because we didn't have a rehearsal, we just had a conversation about "what you want to play." We just had a conversation "let's play this, let's play that." No rehearsal, so we want to use music that is easy that we had a good communication, you know. Does it make sense?

C: Yes.

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