

2013

Joe Henderson's harmonic approach to improvisation within the duo setting in his 1992 quintet album, *Lush Life: the music of Billy Strayhorn*

Patrick van der Moezel
Edith Cowan University

Follow this and additional works at: https://ro.ecu.edu.au/theses_hons



Part of the [Composition Commons](#), and the [Music Performance Commons](#)

Recommended Citation

van der Moezel, P. (2013). *Joe Henderson's harmonic approach to improvisation within the duo setting in his 1992 quintet album, Lush Life: the music of Billy Strayhorn*. Edith Cowan University.
https://ro.ecu.edu.au/theses_hons/114

This Thesis is posted at Research Online.
https://ro.ecu.edu.au/theses_hons/114

Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement.
- A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Use of Thesis

This copy is the property of Edith Cowan University. However the literary rights of the author must also be respected. If any passage from this thesis is quoted or closely paraphrased in a paper or written work prepared by the user, the source of the passage must be acknowledged in the work. If the user desires to publish a paper or written work containing passages copied or closely paraphrased from this thesis, which passages would in total constitute an infringing copy for the purpose of the Copyright Act, he or she must first obtain the written permission of the author to do so.

Joe Henderson's harmonic approach to improvisation
within the duo setting in his 1992 quintet album, Lush
Life: the Music of Billy Strayhorn

by
Patrick van der Moezel

Student No: 10143139

Bachelor of Music (Honours)

Western Australian Academy of Performing Arts
Edith Cowan University

November 2013

Supervised by Dr. Matthew Styles

Use of Thesis Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) Incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
- (ii) Contain any material previously published or written by another person, except where due reference is made in the text; or
- (iii) Contain any defamatory material.

Signed:.....

Dated:

Acknowledgements

I used to think that I was good at writing. Dr Matt Styles' guidance has helped me to become far better at it. I am very grateful to Dr Styles for this.

Many thanks to Jamie Oehlers for putting up with my perpetual nonsense and for understanding that it is all in good humour. His hand in cultivating my musicality cannot be understated and to him I am very grateful.

Thank you to my parents and six siblings. They've been listening to me practise the saxophone for years and years and they never complain. I bet they love it.

Abstract

Jazz improvisation can be greatly influenced by the combination of instrumentation, influencing the role of the instruments and the way they relate to each other. Notably, the stripped-back nature of the duo emphasises these differences. Musicians such as Sonny Rollins, Stan Getz and Joe Henderson are three of many saxophonists who have employed this particular combination to explore different ways of improvisation.

This paper will draw on Joe Henderson's 1992 album *Lush Life: The Music of Billy Strayhorn*, which uses the duo setting on three tracks. Each of these three tracks has a slightly different combination (saxophone with bass, with piano and with drums), and will each be used to extract knowledge of how Henderson's harmonic approach varies in response to the instrumentation of each duo. Through the transcription of each duo, Henderson's approach will be analysed, enabling common devices and significant differences to be identified.

It is hoped that through studying his approaches, insight will be gained into how one could employ particular musical devices to enhance performance practice within varied duo combinations. Primarily, it is the aim of this paper to examine how Henderson's approach varies with instrumentation, which in turn, will equip the performer with improvisational devices that may be used as a basis for their own performance practice in the duo setting and beyond.

Table of Contents

Use of Thesis Declaration	2
Acknowledgements	3
Abstract	4
Table of Contents	5
List of Figures	6
Chapter One – Introduction	8
<i>Methodology</i>	9
Chapter Two – Literature Review.....	10
<i>Published Literature</i>	10
<i>Dissertations</i>	11
<i>Other Sources</i>	13
Chapter Three – Analysis.....	14
Treatment of ii-V7 harmony.....	14
<i>Treating ii-V7 as V7</i>	14
<i>Alternative approaches</i>	17
Anticipated Harmony and Delayed Resolution.....	19
Diatonic Reharmonisation	22
A Puzzle: E7(b5) or something else?.....	26
Bebop Traits.....	29
<i>Chromaticism</i>	29
<i>Surrounding</i>	32
<i>Other bebop traits</i>	34
Chapter Four – Summary	35
Appendix A – <i>Lotus Blossom</i> lead sheet	37
Appendix B – <i>Isfahan</i> lead sheet.....	38
Appendix C – <i>Take the ‘A’ Train</i> lead sheet	39
Appendix D – <i>Lotus Blossom</i> transcription.....	40
Appendix E – <i>Isfahan</i> transcription.....	41
Appendix F– <i>Take the ‘A’ Train</i> transcription	44
References.....	47

List of Figures

Figure 1: Bars 13-14, <i>Isfahan</i>	14
Figure 2: Bars 45-46 <i>Isfahan</i>	15
Figure 3: Bar 16, <i>Take the 'A' Train</i>	15
Figure 4: Bars 37-38, <i>Take the 'A' Train</i>	15
Figure 5: Bars 61-62, <i>Take the 'A' Train</i>	16
Figure 6: Bars 69-71, <i>Take the 'A' Train</i>	16
Figure 7: Bars 93-94, <i>Take the 'A' Train</i>	16
Figure 8: Bar 58, <i>Isfahan</i>	17
Figure 9: Bar 53, <i>Take the 'A' Train</i>	17
Figure 10: Bars 29-31, <i>Isfahan</i>	18
Figure 11: Bars 48-50, <i>Take the 'A' Train</i>	18
Figure 12: Bar 4-5, <i>Lotus Blossom</i>	19
Figure 13: Bar 26-27, <i>Take the 'A' Train</i>	19
Figure 14: Bar 14, <i>Take the 'A' Train</i>	20
Figure 15: Bar 101-102, <i>Take the 'A' Train</i>	20
Figure 16: Bar 88-89, <i>Take the 'A' Train</i>	20
Figure 17: Bar 57-59, <i>Take the 'A' Train</i>	21
Figure 18: Bar 8-9, <i>Lotus Blossom</i>	21
Figure 19: Bar 16-17, <i>Isfahan</i>	21
Figure 20: Bar 33-34, <i>Take the 'A' Train</i>	22
Figure 21: Bar 104-106, <i>Take the 'A' Train</i>	22
Figure 22: Bar 29, <i>Take the 'A' Train</i>	23
Figure 23: Bars 7-8 and bars 46-47, <i>Take the 'A' Train</i>	23
Figure 24: Bar 54, <i>Isfahan</i>	24
Figure 25: Bars 8-9, <i>Isfahan</i>	24
Figure 26: Bars 41-42, <i>Isfahan</i>	24
Figure 27: Bars 43-44, <i>Isfahan</i>	25
Figure 28: Bar 12-13, <i>Lotus Blossom</i>	25
Figure 29: Bar 20-21, <i>Lotus Blossom</i>	26
Figure 30: Bar 11-12, <i>Take the 'A' Train</i>	27

Figure 31: Bars 43-44, <i>Take the 'A' Train</i>	27
Figure 32: Bars 67-68, <i>Take the 'A' Train</i>	27
Figure 33: Bars 35-36, <i>Take the 'A' Train</i>	28
Figure 34: Bar 3, <i>Take the 'A' Train</i>	28
Figure 35: Bars 99-100, <i>Take the 'A' Train</i>	28
Figure 36: Bar 11, <i>Lotus Blossom</i>	29
Figure 37: Bars 6-7, <i>Lotus Blossom</i>	30
Figure 38: Bars that contain chromatic passing tones in <i>Take the 'A' Train</i> , Figure 38(a) bar 13; Figure 38(b) bar 16; Figure 38(c) bar 23; Figure 38(d) bar 104.....	30
Figure 39: Bar 79, <i>Take the 'A' Train</i>	31
Figure 40: Bar 27, <i>Isfahan</i>	31
Figure 41: Surrounding used in bar 2 of (a) <i>Isfahan</i> and (b) <i>Take the 'A' Train</i>	32
Figure 42: Bars 1-3, <i>Lotus Blossom</i>	32
Figure 43: (a) bars 14-15; (b) bar 18 of <i>Lotus Blossom</i>	33
Figure 44: Bar 31, <i>Isfahan</i>	33
Figure 45: Bar 34, <i>Isfahan</i>	33
Figure 46: Bar 17, <i>Take the 'A' Train</i>	34

Chapter One – Introduction

The history of jazz is decorated with a diverse array of recorded saxophone duos, from the Don Byas/Slam Stewart *I Got Rhythm* duo in 1945, to the more recent Walt Weiskopf recording of *When Your Lips Meet Mine* in 2001 with pianist Brad Mehldau. The nature of the duo format is unique, in that through the absence of a fuller ensemble, the traditional instrumental roles are challenged. Studying this format provides a unique opportunity to dissect these roles by examining how the instrumentation of a duo affects the improvisatory approach adopted by the musicians. Despite its prevalence in jazz history there exists only a small amount of critical literature on jazz duos, as will be discussed in the *Literature Review*.

Joe Henderson has been chosen as the subject for this paper as he is seen as “...one of the greatest improvisers and composers that jazz has ever known...” (White, 2008, p. 9), gaining critical reception as “...close to artistic genius as jazz gets nowadays...” (NY Times, 1992). By selecting three duos of varied instrumentation from the saxophonist’s 1992 album *Lush Life: the Music of Billy Strayhorn*, this dissertation proposes to gain insight into Henderson’s harmonic approach to improvisation within the duo setting and how this approach is affected by its instrumental makeup. Transcriptions provided by the writer will be used to identify the devices employed by Henderson and to draw conclusions about how they contribute to defining this improvisational approach.

In studying the duos on this album, it is hoped that ascertaining Henderson’s harmonic approach will equip the improviser with a more versatile palette from which to quarry ideas in their own improvisations within this format.

Whilst Joe Henderson has recorded duos at various stages of his thirty-year career, this study is limited to examining those appearing in *Lush Life: the Music of Billy Strayhorn*. The fact that the album was recorded over a three-day period provides a solid foundation from which to perform this analysis of three contrasting songs.

This, together with Henderson’s critical reception (receiving the 1992 Grammy Award for Best Instrumental Jazz Performance) and recognition, *Lush Life: the Music of Billy*

Strayhorn provides an ideal framework with which to explore a harmonic approach to improvising in the duo setting.

Methodology

Determining Henderson's harmonic improvisational approach will be achieved through the transcription and subsequent analysis of three duos from *Lush Life: the Music of Billy Strayhorn*, a tribute to Billy Strayhorn recorded in 1992 for Verve Music Group. The duos are:

- *Lotus Blossom* – a piano duo with Stephen Scott. The arrangement of this ballad is unique in that the melody played by the piano runs concurrently with Henderson's improvisation rather than assuming a traditional accompanying role.
- *Isfahan* – a duo with double-bassist Christian McBride. It is recorded at a slow-medium swing tempo. Henderson improvises for 64 bars.
- *Take the 'A' Train* – a drum duo with Greg Hutchinson. It is an up-tempo swing, 32-bar AABA form. Henderson improvises for eight choruses, though only the first four will be analysed as enough harmonic ground is covered in these to sufficiently convey Henderson's approach.

The transcription of each song was produced by the writer through an aural process. Indistinguishable pitches were estimated relative to the intended underlying harmony, as provided in *Appendices A, B and C*. Each completed transcription was compared to the same version contained in *Joe Henderson's Transcribed Solos for Tenor Sax* (Farrell, 1994). By investigating discrepancies that occurred between the two versions, necessary amendments were made, ensuring a more accurate final version.

Chapter Two – Literature Review

The two main areas that necessitate an assessment of the available literature are: harmonic and transcriptive analysis, and Joe Henderson's improvisational style. The literature on both aspects are varied in both size and format. Whilst there are multiple books on jazz harmony and transcription (J. White, Nettles, Pease), very few specifically address Henderson's improvisational style. This void is partially addressed through two dissertations on Joe Henderson's improvisational style (Viswanathan, A. White). This review attempts to examine the literature availability within each area and how it might assist in alleviating any void.

There are many aspects of harmony that hold potential relevance for the analysis. An initial problem in the study was discerning which of them were pertinent and able to shed light on Henderson's improvisational practices.

Published Literature

Perhaps one of the most comprehensive lists of harmonic devices is contained in Bert Ligon's 1996 book *Connecting Chords with Linear Harmony*. It contains a chapter on what Ligon calls "embellishing devices", techniques that one can employ in order to implement a particular harmonic approach. Those devices listed by Ligon that are most pertinent to this study are:

- Passing Tones – either chromatic or diatonic
- Neighbour Tones – diatonically surrounding a note.
- Arpeggiated Tones
- Chromatic Approaches
- Anticipated harmony
- Delayed Resolution
- Sawtoothing

Ligon describes these in the context of three 'outlines' that he has identified through "...hundreds of musical examples..." (Ligon, 1996, p. 6). According to Ligon, these outlines are fundamental frameworks, the building blocks from which most musical phrases can be constructed. The above list provides a useful launching point in identifying which devices Henderson uses.

Other books seem to only ‘scratch the surface’ in their study of harmonic devices. One such book is *Jazz Transcription: Developing jazz improvisation skills through solo transcription and analysis* (Doky, 1992). Doky discusses the transcriptions presented in light of scales, arpeggios/leaps, delayed resolution and pentatonics/patterns. The brevity of this list provides a useful starting point for this analysis, as it allows additional harmonic devices to be deduced. For example, although no mention is made of anticipated harmony (a device that will be discussed in *Chapter Three - Analysis*), it naturally arises as a consequence of Doky’s discussion of delayed resolution.

Chord Scale Theory and Jazz Harmony (Nettles & Graf, 1997) contains in-depth exploration of jazz harmony. Of the numerous harmonic devices that Henderson utilises in his improvisation, this book provides brief but substantial insight into their mechanics. The section on substitute dominants (p. 57) - termed “tritone substitutes” in this study - gives a simple and understandable explanation of why a tritone substitution using dominant chords is an effective harmonic device.

Dissertations

A handful of dissertations have proved beneficial in forming an analytical approach appropriate for this study. Their discussions seem to delve, in some detail, into the effects produced by particular harmonic devices.

An Analysis of the Development of Kenny Dorham's Jazz Improvisational Vocabulary (Weir, 2006) maps the chronological development of trumpeter Kenny Dorham’s improvisational approach. Though quite broad in its focus, the paper is one of only a small number that discusses vertical and horizontal improvisational approaches. Weir notes that in his so-called “Joe Henderson Years”, Dorham moves away from vertical improvisation with “...a shift towards a more melodic or horizontal style...” implying that “horizontal” and “melodic” styles are synonymous. (Weir, 2006, p. 54). Whilst the author treats horizontal and vertical approaches simultaneously as both a harmonic and melodic property, this study performs analysis solely from a harmonic perspective.

In his dissertation *Blue Hayes: an analysis of the performance style of jazz saxophonist Tubby Hayes*, Orgill makes no mention of horizontal or vertical approach. However, a valuable basis for analysis can be extracted from his varied study of harmonic

anticipation, chordal substitution, treatment of ii-V7, bebop influence and Hayes' use of whole tone and $\frac{1}{2}$ -whole scales on V7 chords (Orgill, 2008). In the initial analysis of Joe Henderson's three improvisations, it became clear that all of these were exhibited to some degree in each duo.

Two papers that directly address the improvisational approach of Joe Henderson: *Joe Henderson: an analysis of harmony in selected compositions and improvisations* (White, 2001) and *An analysis of the jazz improvisation and composition in selected works from the Blue Note Records period of tenor saxophonist Joe Henderson from 1963 to 1966* (Viswanathan, 2004).

White pays particular attention to Henderson's anticipation and delay of harmonic resolution. He does this by identifying instances of each, noting that in his 1963 recording *Recorda Me*, Henderson more regularly employs delayed harmonic resolution than anticipated, and "...to much greater effect..." (White, 2001, p. 63). To which effect he is referring, White does not reveal. Comparing the said harmonic devices to the duos from *Lush Life: the Music of Billy Strayhorn* reveals that Henderson uses both anticipated and delayed resolution indiscriminately, and the effect is a delicate sense of mastery in tension and release.

White's paper performs lengthy discussion on Henderson's "*bebop tendencies*" (White, 2001, p.74). He makes the assertion that "...Henderson was aware of, and steeped in, traditions of bebop..." (White, 2001, p.68). This is further supported in an interview published by *Saxophone Journal* where Henderson says "...I spent most of my time listening to bebop..." (Martin, 1991). Henderson's firm foundation in bebop is also displayed in *Lush Life: the Music of Billy Strayhorn*, particularly through the use of surrounding and chromaticism. Although surrounding is not explored in White's paper, he makes substantial discussion on how Henderson uses each device to convey a bebop approach, but highlights that he is "...not bound to it..." (White, 2001, p.68).

The improvisational analysis contained in Viswanathan's paper does not venture to offer insight into Henderson's approach, but instead provides a literal description of each musical phrase, note-for-note. In the study, the author places heavier harmonic focus on Henderson's compositional devices than his improvisational approach.

Both papers on Henderson study the 1960's, which might be considered the early period in his career. Whilst their contributions are significant in helping to understand Henderson's improvisational approach, no mention is made of his late-career recording output for Verve Music Group, which *Lush Life: the Music of Billy Strayhorn* is a part.

Other Sources

The contribution towards harmonic analysis from other sources is less substantial than from books and dissertations, but valuable information is contained nonetheless. Mel Martin's 1991 interview of Joe Henderson paints a picture of Henderson's demeanour and temperament. To question whether or not this permeates Henderson's improvisations is beyond the scope of this research, but it impressed sufficiently upon the researcher to prompt a more personal connection with the study. More specifically, Henderson expresses disdain at the usage of fake books: "*I don't remember using those kinds of things*", continuing that they "*...tend to become crutches...*" (Martin, 1991). This knowledge is crucial in determining from where Henderson sources the harmonic framework of the three duos studied. Since "fake books" must not have been used, this study assumes that the chords were extracted from the original Billy Strayhorn composition. Without this knowledge, it is likely that the analysis would have been founded on erroneous harmonic information.

Chapter Three – Analysis

In this section, Henderson's harmonic approach will be analysed under the headings of certain devices and particular traits exhibited through his improvisations. The devices and traits have been either sourced directly from texts covered in the *Literature Review* (Doky, Ligon, White et al), or discussed at length in these texts. The way that Henderson employs them in each duo will be analysed, enabling conclusions of his harmonic approach to be formed.

Treatment of ii-V7 harmony

The ii-V7 progression appears frequently in the harmonic structure of each duo being studied. It is natural therefore that Henderson devises certain ways of treating the progression in his improvisations.

Treating ii-V7 as V7

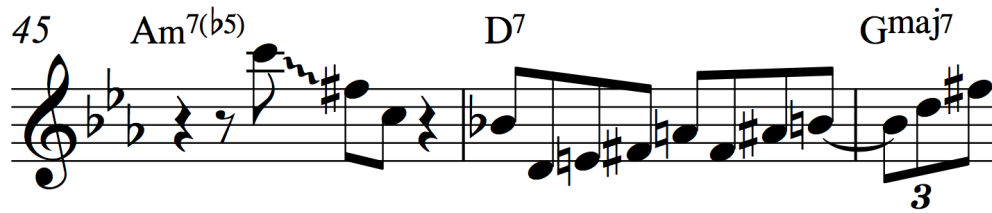
The most common approach Henderson takes is to ignore the ii chord by treating ii-V7 as just V7. An example of this can be found in bars 13-14 of *Isfahan* where, instead of outlining Am7(b5) then D7, he treats the entire ii-V7 as D7 with a descending chromatic line that evolves into D mixolydian, before resolving at bar 15.

Figure 1: Bars 13-14, *Isfahan*



The same approach is taken at bar 45 (i.e. bar 13 of *Chorus 2*), where D7 is outlined in place of the prescribed Am7(b5).

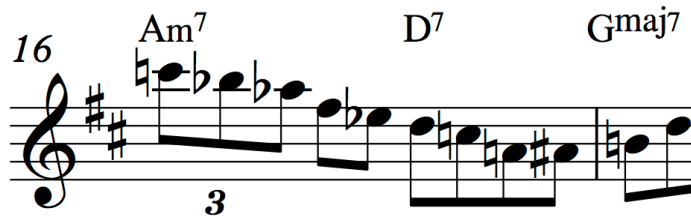
Figure 2: Bars 45-46 *Isfahan*



Henderson's treatment of ii-V7 in this way is not restricted to *Isfahan*, but appears frequently in *Take the 'A' Train*.

Its first application is in the turnaround to the *B-section*¹ at bar 16, where a descending D altered scale is played over Am7-D7.

Figure 3: Bar 16, *Take the 'A' Train*



The doubled harmonic rhythm that is characteristic of turnarounds often calls for a simpler treatment of the ii-V7. Yet Henderson's application of this treatment in *Take the 'A' Train* is not restricted to the turnaround. At bar 37, Henderson outlines A7 in place of Em7.

Figure 4: Bars 37-38, *Take the 'A' Train*



The Em7-A7 at bars 61-62 is treated as A7 in its use of A altered through bar 61, which is anticipated by two beats at the end of bar 60.

¹ See Appendix C

Figure 5: Bars 61-62, *Take the 'A' Train*



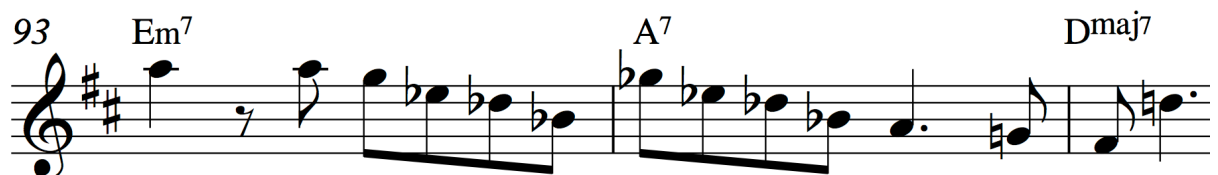
Again at bar 69, Em7-A7 is treated as A7 by arpeggiating Eb7 and Em7(b5) over A7, functioning as a tritone substitution.

Figure 6: Bars 69-70, *Take the 'A' Train*



Another instance of using a tritone substitution occurs in bars 93-94. Here it is employed to tackle A7 via descending Eb7 and Ebm7 arpeggios, before completing the phrase with a bebop-flavoured minor 6th leap.

Figure 7: Bars 93-94, *Take the 'A' Train*



As can be seen, the tension created by Henderson's use of a tritone substitution is prolonged by extending the substitution over the ii chord. In fact, regardless of the manner in which the V7 is outlined - be it with a tritone substitution, an altered scale, a chromatic run or by simply using mixolydian - the extension of the V7 over the ii chord has the effect of adding harmonic colour and prolonging tension that is typically built by the V7.

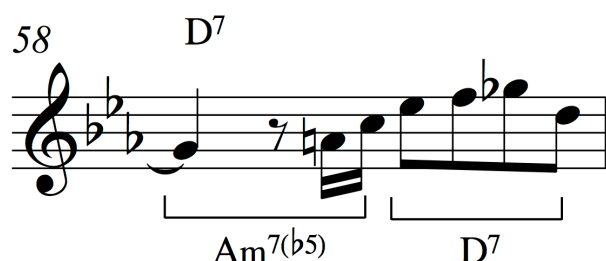
Henderson's frequent manner of treating ii-V7 as V7 might be interpreted as a simplification of the prescribed harmony. Deceptively however, this probably not the case. Although it is impossible to know Henderson's thought processes with certainty,

V7 chords typically possess a wider palette of potential substitutions than ii chords, as discussed throughout *Connecting Chords with Linear Harmony* (Ligon, 1996). By extending the V7 in place of the ii chord, Henderson opens up a broader variety of possibilities, resulting in greater harmonic freedom.

Alternative approaches

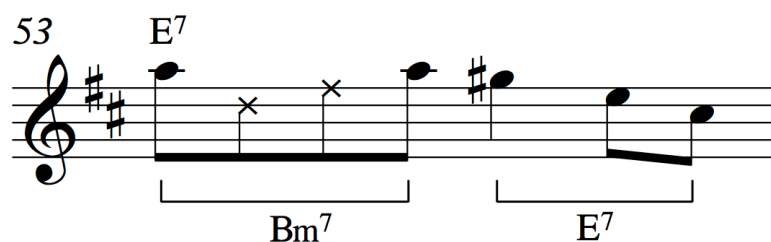
Whilst Henderson treats most ii-V7 progressions as V7, he seems to adopt the opposite approach in bar 58 of *Isfahan*.

Figure 8: Bar 58, *Isfahan*



Here, colour is added by replacing D7 with Am7b5-D7. This is not noteworthy in itself as it is a commonly used substitution in wider practice, but it is one of only two occasions that Henderson takes this approach within the duos on *Lush Life: the Music of Billy Strayhorn*. The other is in *Take the 'A' Train* in bar 53 where Bm7-E7 is substituted in place of E7.

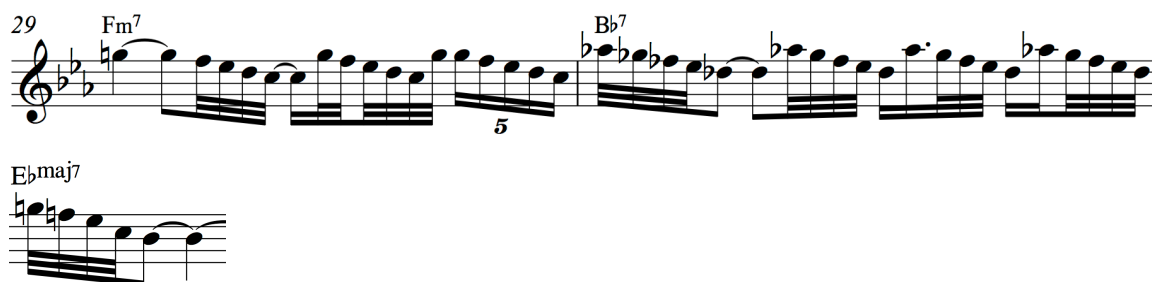
Figure 9: Bar 53, *Take the 'A' Train*



Another way that Henderson creates tension through the ii-V7 progression occurs at bars 29-30 of *Isfahan*. Bar 29 contains a repeated five-note descending sequence outlining Fm9 against the underlying Fm7 harmony. It is then raised a semitone at bar

30 producing Dbm over Bb7. The aural strength of the sequence in its own right is enough to lead the listener towards the line and away from the underlying harmony provided by the bass. The tension created by this is allayed at its resolution to Ebma7 in bar 31 with Eb major pentatonic.

Figure 10: Bars 29-31, *Isfahan*



Interestingly, this is an isolated instance of this ii-V7 treatment within all of the duos being studied.

One other isolated treatment occurs over the Am7-D7 turnaround at bar 48 of *Take the 'A' Train*.

Figure 11: Bars 48-50, *Take the 'A' Train*



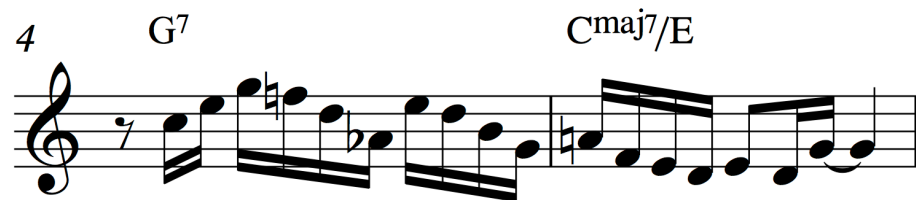
Henderson plays the notes from F# major pentatonic over Am7-D7. This pentatonic scale is quite unrelated to the G major key centre conveyed by Am7-D7. However, since the line resolves on Gma7 in bar 49, it may be thought of as an extension of the chromatic approach prevalent in bebop language. That is, rather than a note-wise chromatic approach that is characteristic of bebop, Henderson treats it as a key-wise chromatic approach from F# major to G major.

Anticipated Harmony and Delayed Resolution

Henderson employs a common approach to ii-V7 harmony in *Isfahan* and *Take the 'A' Train*, yet this does not extend to *Lotus Blossom*. However, in his use of anticipated harmony and delayed resolution, this is not the case. The quasi-rubato feel of *Lotus Blossom* is perhaps conducive to their frequent usage.

The first appearance of anticipated harmony and delayed resolution in *Lotus Blossom* is in the two-bar phrase at bars 4-5. Henderson starts by outlining *C, E, G* over *G7*, possibly indicating an anticipation of the *Cma7* occurring one bar later. More probably, it is a delayed resolution of the *Dm7(b5)* at bar 3.

Figure 12: Bar 4-5, *Lotus Blossom*



By delaying the resolution in playing *C*, a G7sus4 quality is created. The second bar of this same phrase contains a more clearly identifiable use of delayed resolution, where beat one outlines G9 from the previous bar, before resolving to Cma7 on beat two.

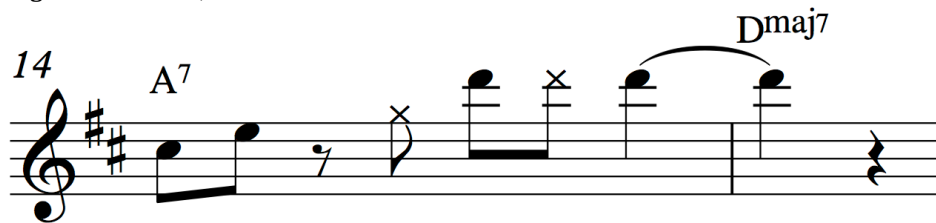
At bar 26 of *Take the 'A' Train*, the phrase begins with a major 6th leap from *G* to *E*. This frames the two-bar anticipation of bar 27, where chromaticism is used to ‘muddy’ the intended harmony.

Figure 13: Bar 26-27, *Take the 'A' Train*



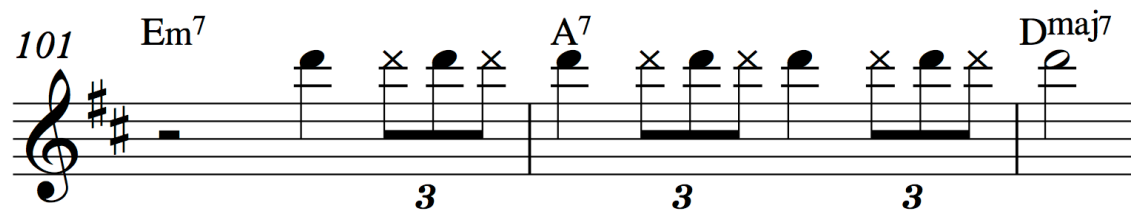
Henderson uses a high-*D* alternate fingering² over A7 in bar 14 to strengthen the anticipated Dma7 chord at bar 15. The unique tonal quality of the alternate fingering outweighs the harmony, hence reinforcing the outline it conveys.

Figure 14: Bar 14, *Take the 'A' Train*



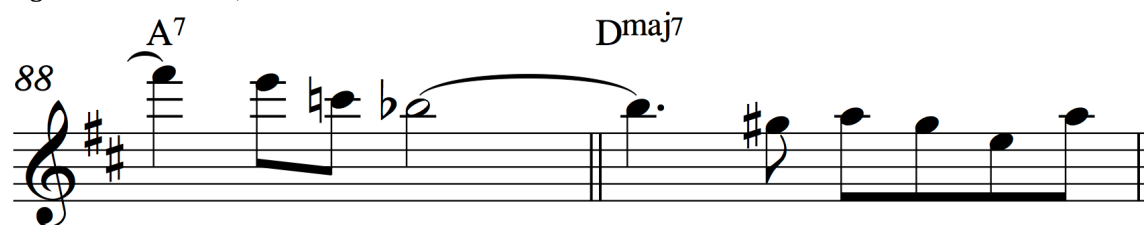
This is not the only case of Henderson using alternate fingering to strengthen his harmonic approach in *Take the 'A' Train*, as it also occurs at bar 101. The aural strength of the same D alternate fingering as Figure 14 outweighs the prescribed harmony and hence does not create considerable tension.

Figure 15: Bar 101-102, *Take the 'A' Train*



There are instances of delayed resolution occurring in *Take the 'A' Train* such as bar 89, where tension is built through holding the *Bb* from bar 88, hence delaying the resolution of A7 to Dma7.

Figure 16: Bar 88-89, *Take the 'A' Train*



² Alternate fingering is where a note is produced through applying a non-standard fingering in order to add "...variety and extra expression to a phrase..." (Brown, 1998).

A primary purpose of implementing anticipated harmony and delayed resolution is to create tension, to “...*build intensity in (one’s) improvised solo...*” (Orgill, 2008, p. 76). This is particularly evident in bars 57-59 of *Take the ‘A’ Train*. As a tension-building device, Henderson uses notes from A altered in the preceding bar to set up the rhythmically jilted note pairs. Resolution is delayed in this manner for 1½ bars until the *E_b* eventually drops to the tonic *D*.

Figure 17: Bar 57-59, *Take the ‘A’ Train*



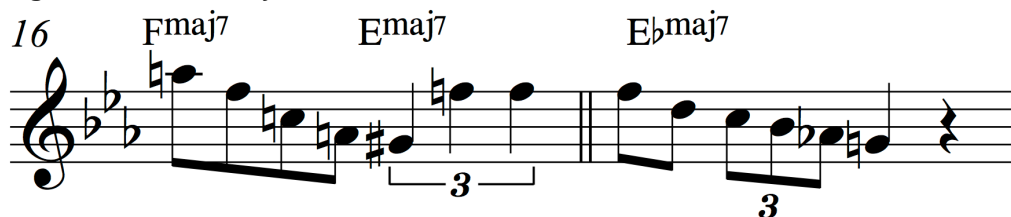
Orgill goes on to suggest that delayed resolution and anticipated harmony do not necessarily function as tension-building devices, but can aid in “...*illuminating the chord changes...*” (Orgill, 2008, p. 76). In bar 8 of *Lotus Blossom*, the Dm7 of bar 9 is slightly anticipated by playing *C natural* at the very end of A7(#5), invoking a D dorian sound. Instead of creating tension, the effect is rather one of resolution as it sets up the impending Dm7, which operates as a temporary resting-point.

Figure 18: Bar 8-9, *Lotus Blossom*



The harmonic approach used in *Isfahan* does not contain delayed resolution. It has just one case of anticipated harmony, where a slight tension arises at the end of bar 16 by anticipating *E_bmaj7* for almost two beats of *F* over *E_mmaj7*.

Figure 19: Bar 16-17, *Isfahan*



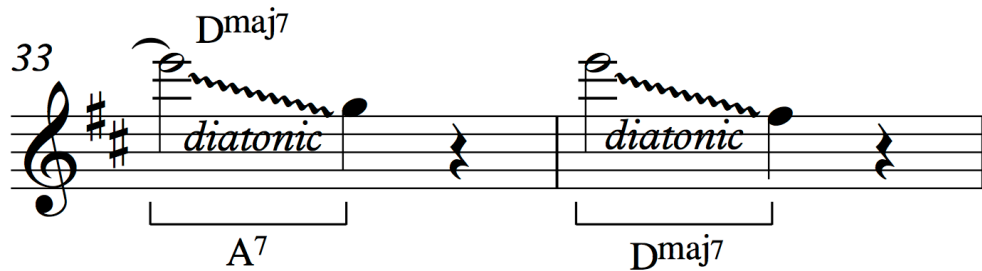
Aside from this case, Henderson's use of anticipated harmony in *Isfahan* is more suitably classed as diatonic reharmonisation.

Diatonic Reharmonisation

Diatonic reharmonisation, to paraphrase Nettles & Graf, is the temporary outline of a chord that differs from the prescribed harmony without departing from the present key area (Nettles & Graf, 1997). Henderson's usage of this device typically involves outlining the dominant in place of the tonic.

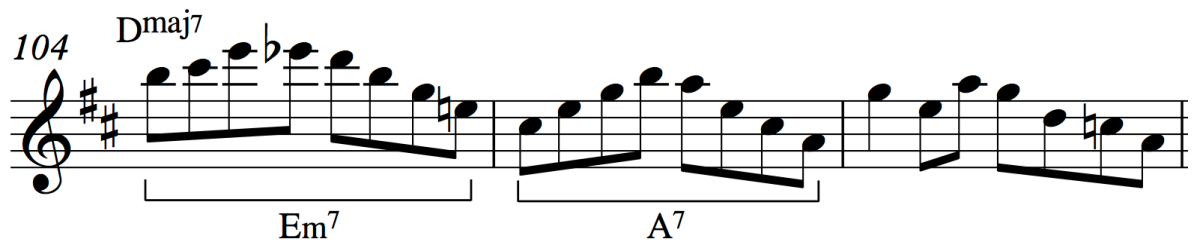
This occurs in bar 33 of *Take the 'A' Train*, where Henderson treats the Dma7 prescribed chord as A7 through a descending glissando from *E* to *G*. This adds harmonic interest to bars 33-34 which would have otherwise been two bars of Dma7.

Figure 20: Bar 33-34, *Take the 'A' Train*



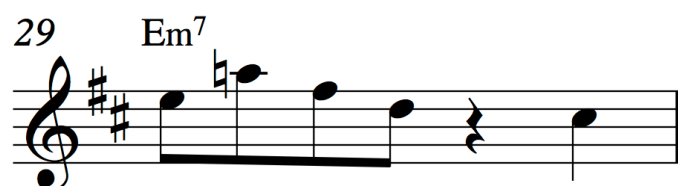
A similar approach is applied to the static harmony at bars 104-106. Instead of playing the Dma7 chord, Henderson outlines Em7-A9 vertically, choosing not to resolve on Dma7 in bar 106 but rather to maintain an A-based structure before E7(b5) arrives in bar 107.

Figure 21: Bar 104-106, *Take the 'A' Train*



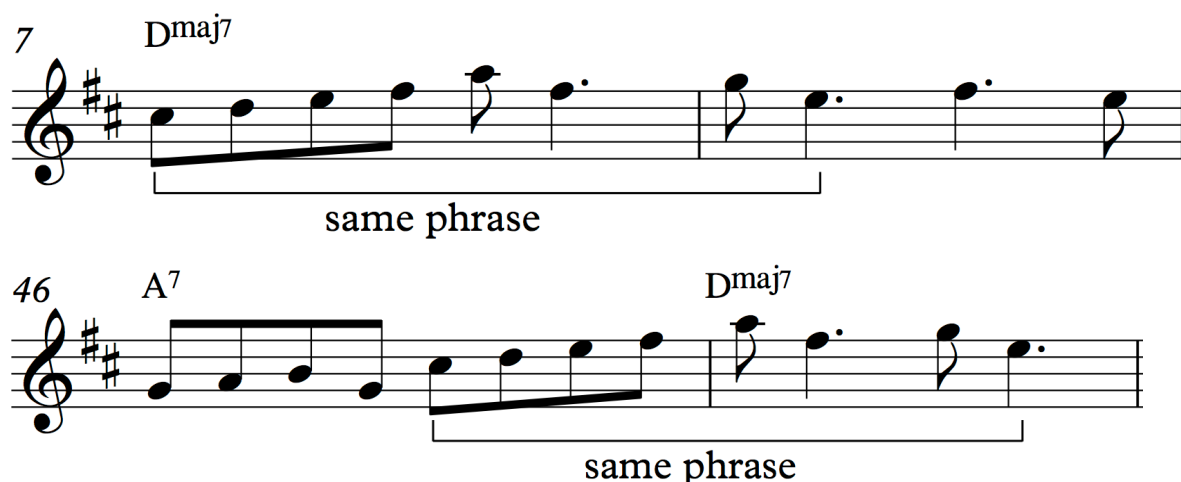
Whilst the device can be used to create harmonic interest as demonstrated, Henderson uses it also to alleviate tension, as is the case at bar 29. The absence of a harmonic instrument in *Take the 'A' Train* causes the phrase to aurally convey Dma7 in place of Em11, as would be the case if, say, a piano were present. The effect is a definite sense of release since it directly follows a harmonically dense three bars.

Figure 22: Bar 29, *Take the 'A' Train*



Another consequence of the instrumentation's effect on diatonic reharmonisation can be seen in the phrase at bars 7-8, which is repeated at bars 46-47.

Figure 23: Bars 7-8 and bars 46-47, *Take the 'A' Train*

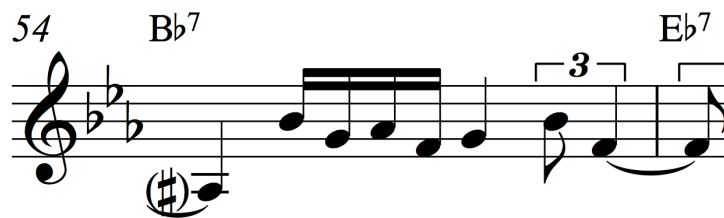


The *G, E* in bar 8 creates an A7 sound in place of Dma7, thus causing the following *F#* to sound like the 13th of A7 rather than the 3rd of Dma7. When the phrase is repeated at bars 46 – 47, the *G, E* figure is again played during Dma7, but its occurrence is on beat three- a weaker beat than beat one. This lessens the impact of the reharmonisation, as the resulting sound is not strong enough to entirely convert bar 47 to A7, as was the case in bar 8.

The prolific use of diatonic reharmonisation in *Take the 'A' Train* is likely due to the instrumentation of saxophone and drums, where the absence of a supporting harmonic instrument allows Henderson more freedom to reinterpret the harmony.

The instrumentation of *Isfahan* also seems to contribute to Henderson's quite extensive use of diatonic reharmonisation. The G occurring on beat three of bar 54 would be, with fuller accompaniment, a 13th on the Bb7 chord. However, with only a bass present, the effect is an intermittent resolution to Eb major. This is particularly due to the descending thirds leading to it.

Figure 24: Bar 54, *Isfahan*



Diatonic reharmonisation is also used in *Isfahan* to lead into the stark key change at bar 9 where the Am7(b5) is approached through a four-note segment contained on the third beat of Ebma7. Though the prescribed chord is Ebma7, the line conveys Abma7 and is at odds with Ebma7.

Figure 25: Bars 8-9, *Isfahan*



Henderson develops the tension in his improvisation by increasing the subdivision to semi-quavers at bars 41-44, where there is extensive application of diatonic reharmonisation.

Figure 26: Bars 41-42, *Isfahan*



In Figure 26, the brackets convey the outlined harmony. The Gm resolution at bar 42 is anticipated by one beat, with a descending G dominant bop. Then in bar 42, Henderson plays beat three as D major over G minor. With a fuller accompaniment, this might sound like Gm/ma7, but the single-line nature of the bass (who plays Bb underneath) creates tension in D7 over Gm. The prescribed harmony is not approached literally but rather as a guide that Henderson uses to weave in-and-out of resolution.

The same approach is taken as the phrase continues through bars 43 and 44.

Figure 27: Bars 43-44, *Isfahan*

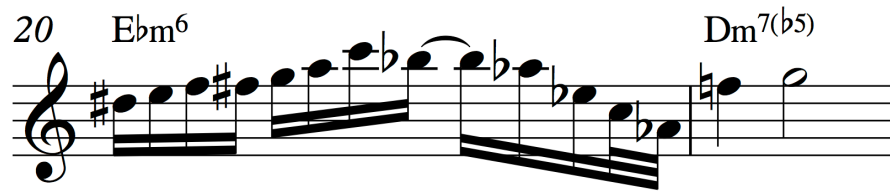
Although in this instance the ii is outlined, it is momentary. By cutting off Bm7(b5) one beat early, E7 becomes anticipated. Yet this is then also cut short to anticipate the resolution at Am. Em and E7 are then interspersed with Am creating a similar tension to the one experienced two bars prior (Figure 26), though with a faster harmonic rhythm. It is interesting to note that the tension created by this harmonic device is released rhythmically by returning from semiquaver- to triplet-based rhythms at the end of the phrase.

On only two occasions does Henderson uses diatonic reharmonisation in *Lotus Blossom*. At bar 12, he outlines Ab major on beats two and three over Ebm6. Ab is related to Ebm6 as they are both drawn from the key of Db major.

Figure 28: Bar 12-13, *Lotus Blossom*

The same approach is taken at bar 20 where an Ab major triad is played over Ebm6.

Figure 29: Bar 20-21, *Lotus Blossom*



Bars 11-12: clear outline of Eb major in its descending sawtooth pattern, as per *Connecting Chords with Linear Harmony* (Ligon, 1996, p.16), discussed in the *Literature Review*.

Figure 30: Bar 11-12, *Take the 'A' Train*



Bar 43-44: is outlined by a descending Ebma7 scale, followed by a Bb7 scale, both mingled with two points of chromaticism: *G, F#,F* and *Bb, A, Ab*.

Figure 31: Bars 43-44, *Take the 'A' Train*



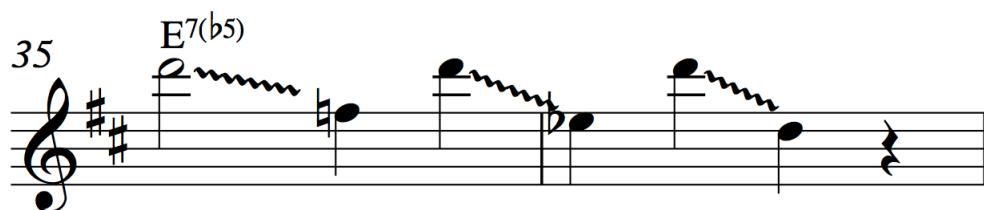
Bar 67-68: though not Ebma7, the related Bb pentatonic is outlined.

Figure 32: Bars 67-68, *Take the 'A' Train*



In each of these examples, Ebma7 (or a diatonically related mode) is outlined. To further ‘muddy’ the issue, bars 35-36 on the surface appears to outline Eb major through the descending scale implied by each bottom note. Yet the scale used in the three glissandi is E whole-tone.

Figure 33: Bars 35-36, *Take the 'A' Train*



Two other instances of E whole-tone exist, one at bar 3 (

Figure 34) and the other at bars 99-100 (

Figure 35).

Figure 34: Bar 3, *Take the 'A' Train*

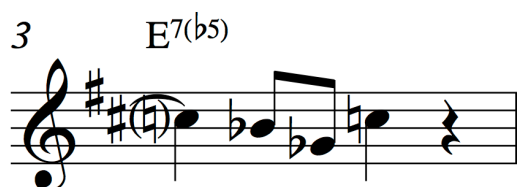


Figure 35: Bars 99-100, *Take the 'A' Train*



E whole-tone has a dominant b5 quality, rendering it 'suitable' for use over E7(b5).

Why, then, is Eb major used so prolifically? One way to interpret this approach might be to regard it as Bb mixolydian, which would then class it a tritone substitution of E7(b5).

In any case, the primary point is that in the absence of a piano (or some other harmonic accompaniment), Henderson is at liberty to outline whatever he likes without invoking too hefty a harmonic tension.

Bebop Traits

“Henderson was an improviser strongly influenced by bebop” (White, 2008)

White makes this claim in reference to Joe Henderson’s improvisational style of the 1960’s. In his 1991 interview with Mel Martin, Henderson speaks of the same period *“...I spent most of my time listening to bebop...”* and that *“...I was in this environment that was about bebop...”* (Martin, 1991). In analysing *Lotus Blossom*, *Isfahan* and *Take the ‘A’ Train* it is evident that this bebop influence still permeated his improvisation as can be seen through two harmonic devices: chromaticism and surround notes.

Chromaticism

“... music from the bebop period was also characterised by an increase in chromaticism...” (Viswanathan, 2004)

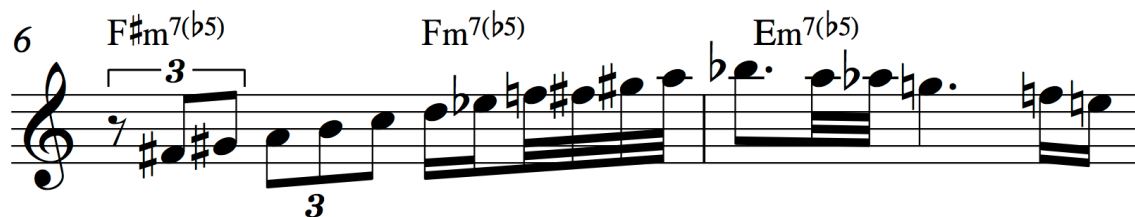
Henderson makes frequent use of chromaticism in the three duos, particularly as a way of approaching target tones. In bar 11 of *Lotus Blossom*, Henderson approaches the *F* with a three-note ascending chromatic run. This run has the effect of placing stronger aural emphasis on the *F*. Though the piano’s harmony is *Cma7/E*, the presence of *F* does not result in significant dissonance, but rather creates an altered sound similar to *E7b9*.

Figure 36: Bar 11, *Lotus Blossom*



A similar instance occurs at bars 6-7. The *Bb* on beat one of bar 7 is both approached and departed from chromatically. Whilst the effect of the approach seems to highlight the *Bb*, the departure functions more as a descending approach to the *G* on beat one of bar 7.

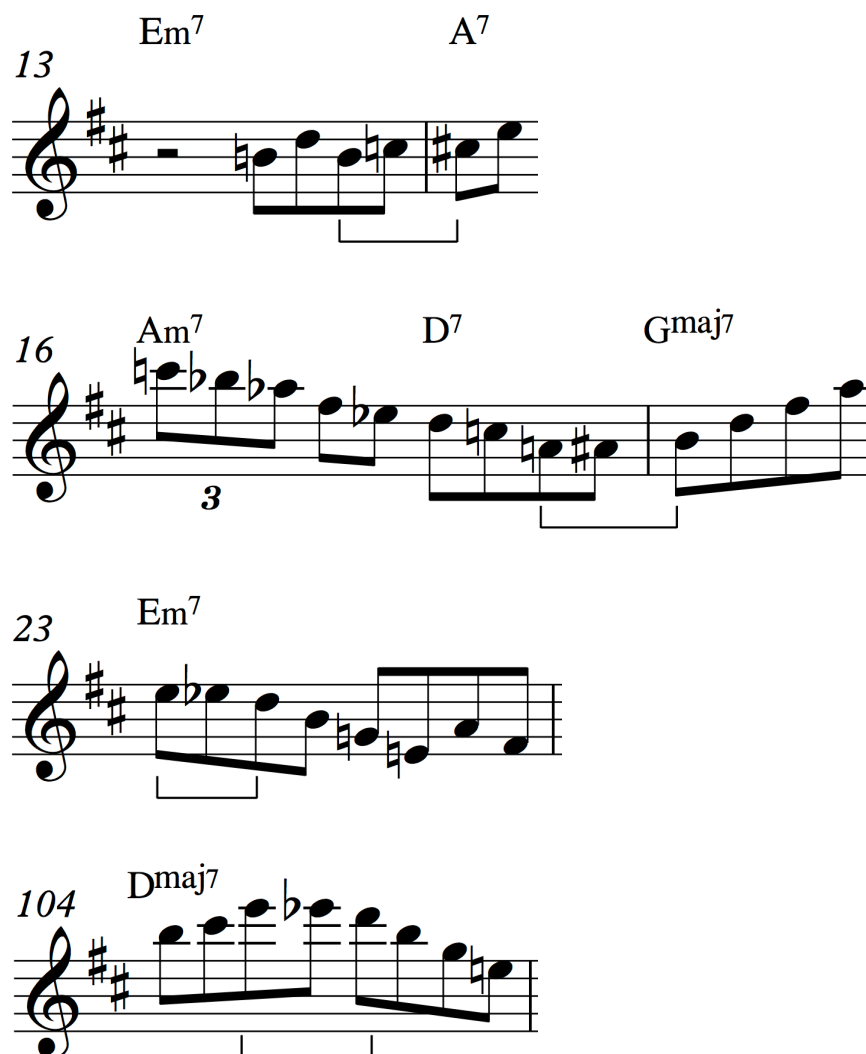
Figure 37: Bars 6-7, *Lotus Blossom*



In his discussion of Henderson's bebop tendencies, White claims that "...he combines arpeggios with chromatic tones to create the bebop sound..." (White, 2008, p. 58).

This can be found in at least four spots in *Take the 'A' Train*, where chromatic passing tones are applied in numerous cases.

Figure 38: Bars that contain chromatic passing tones in *Take the 'A' Train*, (a) bar 13; (b) bar 16; (c) bar 23; (d) bar 104



In comparison to *Lotus Blossom* where chromatic approach usually takes the form of a ‘run’ of three or more notes, most cases of chromaticism in *Take the ‘A’ Train* are found in the form of one-note passing between chord tones. An isolated treatment occurs in Figure 39 in *Take the ‘A’ Train* at bar 79, where instead of a short passing note, Henderson plays a descending chromatic line of one bar’s length.

Figure 39: Bar 79, *Take the ‘A’ Train*



Isfahan receives a similar treatment in that the note *C* at bar 14 in *Isfahan* is approached through a three-beat descending chromatic line (see Figure 1) that echoes the shape of bar 79 of *Take the ‘A’ Train*. The difference is the harmonic context in which it is played. The line occurs over a ii-V7 progression in *Isfahan*, whereas in *Take the ‘A’ Train* it is over a Ima7. One might expect the chromatic line’s contrast to the Ima7 chord to have the effect of prolonged dissonance. However, the absence of a harmonic instrument playing Ima7 results in less tension than otherwise might be the case if a harmonic instrument were present.

Henderson’s use of C dominant-bop in bar 27 could be seen as indicative of his bebop influence in its chromatic passing from *C* to *Bb*. As the semi-quaver line continues, he plays *Db*, *B* feigning to lead the listener to hear a resolution on *C*, where instead he lands on *Bb*. In doing this, Henderson alludes to another characteristic bebop device called *surrounding*.

Figure 40: Bar 27, *Isfahan*

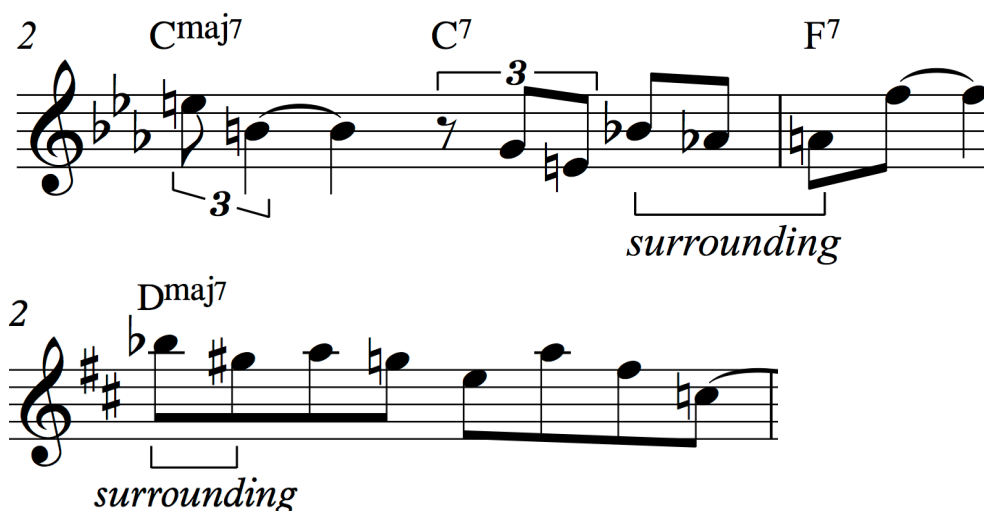


Surrounding

Most indicative of Henderson's bebop heritage, as displayed in the three duos, is his use of surrounding. Surrounding occurs when the targeted pitch is preceded by each adjacent note, either diatonically or chromatically.

By bar 2 of both *Isfahan* and *Take the 'A' Train*, Henderson has employed chromatic surrounding.

Figure 41: Surrounding used in bar 2 of (a) *Isfahan* and (b) *Take the 'A' Train*



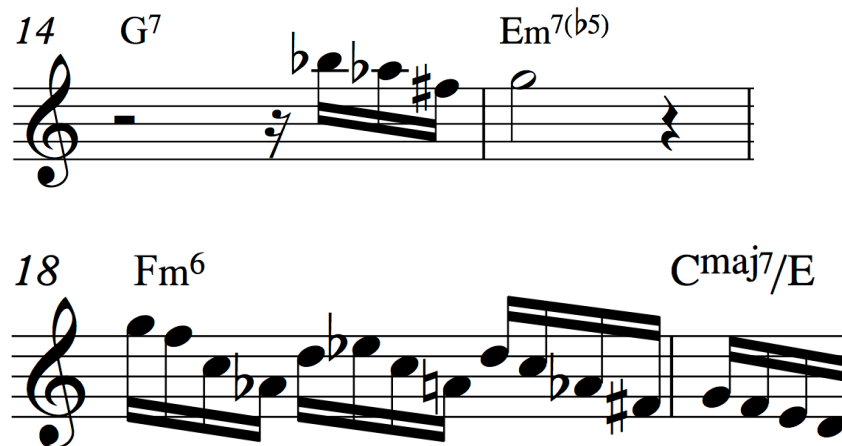
This also happens in bar 2 of *Lotus Blossom*. After starting the improvisation with a bar of space, Henderson initiates a descending Eb diminished arpeggio by diatonically surrounding the C with B and D. This, together with the short chromatic run that ends the phrase, his bebop influence is evident at the very start of his improvisation.

Figure 42: Bars 1-3, *Lotus Blossom*



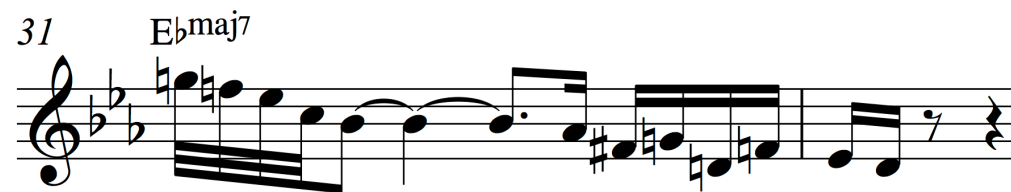
Beat one of bars 15 and 19 of *Lotus Blossom* each contain a G that is targeted through chromatically surrounding with Ab and F#. The arpeggiatic lead-up to bar 19 is reminiscent of White's comment that Henderson combines "...arpeggios with chromatic tones...".

Figure 43: (a) bars 14-15; (b) bar 18 of *Lotus Blossom*



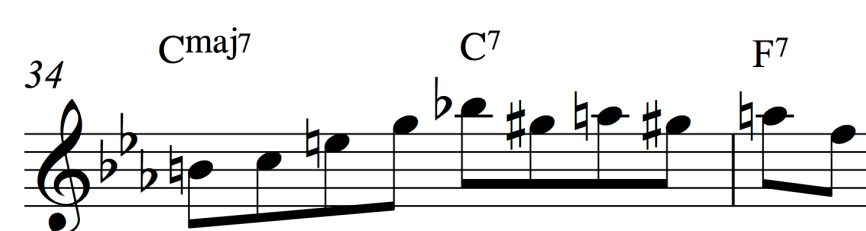
Interest lies in beat four of bar 31 of *Isfahan* through its combination of a chromatic surround with a diatonic surround.

Figure 44: Bar 31, *Isfahan*



The resulting effect is one of ‘snaky’ chromaticism. This is particularly due to the chromatic component of the line, as can be observed in other phrases containing the same technique such as beats three and four of bar 34.

Figure 45: Bar 34, *Isfahan*

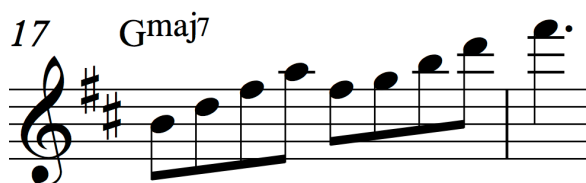


It can also be seen in *Take the ‘A’ Train* where the chromatic surround at bar 2 (Figure 41b) aurally possesses the same ‘snaky’ quality.

Other bebop traits

Henderson's bebop influence is apparent in other approaches. For example, the arpeggiatic nature of outlining Gma7 in bar 17 of *Take the 'A' Train* is typical of bebop phrasing.

Figure 46: Bar 17, *Take the 'A' Train*



However, those devices most prevalent and telling of his bebop influence are the use of chromaticism and surrounding.

Chapter Four – Summary

The aim of this study was to gain insight into Henderson's harmonic approach to improvisation within the duo format and how his approach is influenced by the instrumentation. Through identifying harmonic devices prevalent in Henderson's improvisations, this study has examined his application of these in how each was applied and to what extent.

The analysis undertaken strongly suggests that indeed, the duos' instrumentation affects Henderson's harmonic approach. This can be seen through his application of various devices.

Where anticipated harmony and delayed resolution are used frequently in both *Take the 'A' Train* and *Lotus Blossom*, there is just one case of its application in *Isfahan*. An explanation for this is in the single-line nature of the bass. In anticipating or delaying the harmony, the two-voice bass/saxophone counterpoint does not create the necessary contrast that defines anticipated harmony or delayed resolution. Comparing this to *Lotus Blossom*, the piano harmony provides a fuller harmonic contrast to convey the effect, and *Take the 'A' Train* where the resolution point is more malleable due to the absence of a harmonic backdrop.

The evidence of Henderson's approach being dependent upon instrumentation is perhaps even clearer in his use of diatonic reharmonisation. Its frequent usage in *Take the 'A' Train* might be explained by the absence of a supporting harmonic instrument, enabling Henderson greater freedom to reharmonise. Its use in *Isfahan* could be also explained through the same reasoning, that is, there is a degree freedom with a bass accompaniment in its limited capability in covering the harmony to the same extent as a piano might.

The similarity in approach exhibited by *Isfahan* and *Take the 'A' Train* in diatonic reharmonisation extends to Henderson's treatment of ii-V7 harmony. Although he takes various approaches, the most common in both duos is to ignore the ii chord by treating ii-V7 as just V7. Discussion in the *Analysis* section ventured to speculate that, although this treatment could be interpreted as a simplification of the prescribed harmony, it probably is not. By replacing the ii chord with V7, a wider palette of possible

substitutions is made available, giving Henderson greater harmonic freedom to improvise. It is difficult to ascertain why Henderson does not use this device in *Lotus Blossom* and is therefore precarious to make any conclusions on the influence of instrumentation by his ii-V7 approach.

In the same way as his ii-V7 treatment, Henderson's extensive display of bebop traits throughout all three duos does not offer insight into his harmonic dependence on instrumentation. His display of strong bebop influence was predominantly through the use of chromaticism and surrounding. By Henderson's own admission, he is strongly influenced by bebop as his musical development occurred in that "...environment..." (Martin, 1991). In this lies this question: can Henderson's bebop traits be considered a device that is applied, or is it an inherent part of his performance style? Whilst beyond the scope of the study, it presents an interesting line of thought for future research.

Perhaps the most revealing aspect of Henderson's harmonic freedom occurs in *Take the 'A' Train* where he only intermittently outlines the prescribed E7(b5). In most occurrences, Eb major (and modal derivatives) are outlined. The revealing point is that by the harmonic freedom associated with the drums in this duo, Henderson is at liberty to outline whatever he likes without invoking too considerable a harmonic tension.

Although not every harmonic device analysed assists in determining whether or not Henderson's approach is dependent upon a duo's instrumentation, there is enough evidence to support that a dependence does exist. This knowledge adds to the performer's understanding of the relationship between the saxophone and other instruments of varied harmonic function. Though it might be possible to draw upon specific devices that Henderson utilises in one's own performance, perhaps the greater benefit lies in the increased understanding of instrumental relationships in order to develop one's own approach to improvisation in the duo setting – and beyond.

Appendix A – *Lotus Blossom* lead sheet

Lotus Blossom

Lead Sheet

Billy Strayhorn

Lead sheet for *Lotus Blossom* in 3/4 time, featuring a treble clef and a key signature of one flat (B-flat).

The sheet is divided into four systems, each containing four measures of music. The notes are represented by diagonal slashes, indicating a lead sheet format. Chord symbols are provided above the measures.

System 1:

- Measure 1: Cmaj7/E
- Measure 2: Ebm6
- Measure 3: Dm7(b5)
- Measure 4: G7

System 2:

- Measure 5: Cmaj7/E
- Measure 6: F#m7(b5)
- Measure 7: Fm7(b5)
- Measure 8: Em7(b5)
- Measure 9: A7(#5)

System 3:

- Measure 10: Dm7
- Measure 11: Fm6
- Measure 12: Cmaj7/E
- Measure 13: Ebm6

System 4:

- Measure 14: Dm7(b5)
- Measure 15: G7
- Measure 16: 1.2. Em7(b5)
- Measure 17: A7
- Measure 18: 3.
- Measure 19: cadenza

Appendix B – *Isfahan* lead sheet

Isfahan

Lead Sheet

Billy Strayhorn

A

5 *E \flat maj7* *Cmaj7* *C7* *F7*

9 *Bmaj7* *B \flat 7* *E \flat maj7*

13 *A m ^{7(b5)}* *D7* *G m* *B m ^{7(b5)}* *E7* *A m*

17 *A m ^{7(b5)}* *D7* *Gmaj7* *F \sharp 7* *Fmaj7* *E m aj7*

B

21 *E \flat maj7* *Cmaj7* *C7* *F7*

25 *Bmaj7* *B \flat 7* *E \flat 7*

29 *A \flat maj7* *D7* *G m 7* *C7*

33 *F m 7* *B \flat 7* *E \flat maj7*


Appendix C – *Take the 'A' Train* lead sheet

Take the 'A' Train


Lead Sheet

Billy Strayhorn


A Dmaj7 E7(b5)




5 Em7 A7 Dmaj7




A 9 Dmaj7 E7(b5)




13 Em7 A7 Dmaj7 Am7 D7




B 17 Gmaj7




21 E7 Em7 A7



A 25 Dmaj7 E7(b5)



29 Em7 A7 Dmaj7



Appendix D – *Lotus Blossom* transcription

Lotus Blossom

as played by Joe Henderson

Chord progression and notation details:

- Measures 1-5: Cmaj7/E, Ebm6, Dm7(b5), G7
- Measures 6-10: Cmaj7/E, F#m7(b5), Fm7(b5), Em7(b5), A7(#5)
- Measures 11-15: Dm7, Fm6, Cmaj7/E, Ebm6
- Measures 16-20: Dm7(b5), G7, Em7(b5), A7
- Measures 21-25: Dm7(b5), G7, Em7(b5), A7, Dm7, Fm6, Cmaj7/E, Ebm6, Dm7(b5), G7

Specific notation features:

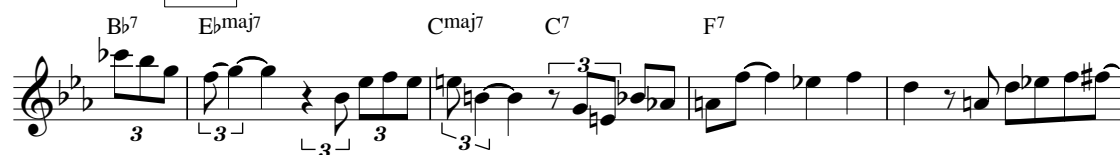
- Measure 10: A triplet of eighth notes.
- Measure 13: A triplet of eighth notes.
- Measure 17: A triplet of eighth notes.
- Measure 21: A triplet of eighth notes.
- Measure 24: A trill on the Eb note, marked "trm" and "trill to Db".

Appendix E – *Isfahan* transcription

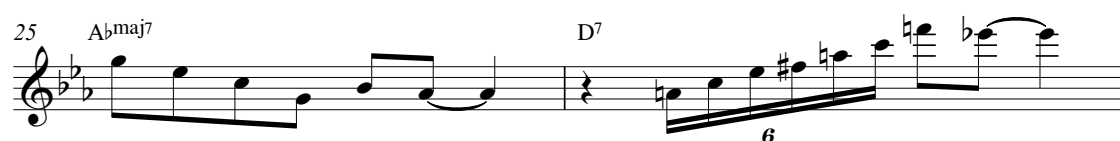
Isfahan

A1

as played by Joe Henderson

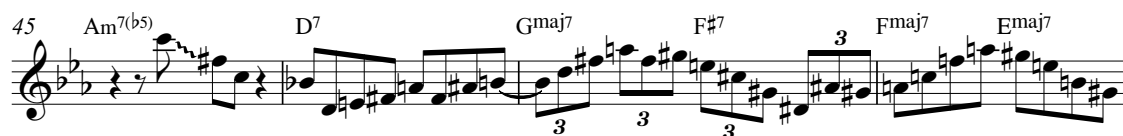


B1





A2



B2

49 Ebmaj7 Cmaj7 C7 F7

53 Bmaj7 Bb7

55 Eb7

57 Abmaj7 D7 Gm7 C7

61 F7 Fm7 Bb7 Ebmaj7

The musical score for B2 consists of five staves of music. The first staff (measures 49-52) starts with Ebmaj7, followed by Cmaj7, C7, and F7. The second staff (measures 53-54) features Bmaj7 and Bb7. The third staff (measures 55-56) begins with Eb7. The fourth staff (measures 57-60) includes Abmaj7, D7, Gm7, and C7. The fifth staff (measures 61-64) contains F7, Fm7, Bb7, and Ebmaj7. The piece concludes with a whole note and a repeat sign.

Appendix F– *Take the ‘A’ Train* transcription

Take the 'A' Train

A

as played by Joe Henderson

Dmaj7 E7(b5)
 5 Em7 A7 Dmaj7
 9 Dmaj7 E7(b5)
 13 Em7 A7 Dmaj7 Am7 D7
 17 Gmaj7
 21 E7 Em7 A7
 25 Dmaj7 E7(b5)
 29 Em7 A7 Dmaj7
 33 **B** Dmaj7 Dmaj7 E7(b5)
 diatonic diatonic whole tone whole tone whole tone
 37 Em7 A7 Dmaj7

41 Dmaj7 E7(b5)

45 Em7 A7 Dmaj7 Am7 D7

49 Gmaj7

53 E7 Em7 A7

57 Dmaj7 E7(b5)

61 Em7 A7 Dmaj7

65 **C** Dmaj7 E7(b5)

69 Em7 A7 Dmaj7

73 Dmaj7 E7(b5)

77 Em7 A7 Dmaj7 Am7 D7

81 Gmaj7

85 E⁷ Em⁷ A⁷

89 Dmaj⁷ E⁷(b5)

93 Em⁷ A⁷ Dmaj⁷

97 **D** Dmaj⁷ E⁷(b5)

101 Em⁷ A⁷ Dmaj⁷

105 Dmaj⁷ E⁷(b5)

109 Em⁷ A⁷ Dmaj⁷ Am⁷ D⁷

113 Gmaj⁷

117 E⁷ Em⁷ A⁷

121 Dmaj⁷ E⁷(b5)

125 Em⁷ A⁷ Dmaj⁷

References

- Adams, Phillip (Writer). (2013). Politics and Jazz: Christian McBride, *In Conversation*: ABC.
- Ansell, Derek. (2008). *Workout: The Music of Hank Mobley*: Northway Publications.
- Arau, Javier. (1996). Joe Henderson's solo on "Lush Life". *Jazz Educators Journal*, March, 3.
- Barrie Nettles, Richard Graf. (1997). *The Chord Scale Theory & Jazz Harmony*. Rottenburg, Germany: Advanced Music.
- Brown, John R. (1998). False Fingerings for Saxophone. Retrieved from <http://www.john-robert-brown.com/false-fingering.htm>
- Canberra, University of. (2013). Writing a Literature Review. Retrieved from <http://www.canberra.edu.au/studyskills/writing/literature>
- Dahlke, Andrew Richard. (2003). *An analysis of Joe Lovano's tenor saxophone improvisation on "Misterioso" by Thelonius Monk: an exercise in multidimensional thematicism*. (D.M.A), University of North Texas.
- Doky, Niels Lan. (1992). *Jazz Transcription: Developing jazz improvisation skills through solo transcription and analysis*. Rottenburg, Germany: Advance Music.
- Drewek, Doug Alexander. (2009). *It Could Happen to You: a study of the first unaccompanied solo improvisation. Recorded by Theodore Walter "Sonny" Rollins*. (D.M.A), University of Kentucky, Lexington, Kentucky.
- Foster, Christopher N. (2011). *Using Clare Fischer's solo piano approach in Yesterdays to reinterpret Jazz standard repertoire*. (Bachelor of Music (Honours)), Edith Cowan University, Western Australia.
- Heen, Carol Louise. (1981). *Procedures for style analysis of jazz: a beginning approach*. (Ph.D), University of Minnesota, Minneapolis.
- Henderson, Joe. (1992) *Lush Life: The Music of Billy Strayhorn*: Polygram
- Klee, Joe. (2004, July 2004). Joe Lovano on Joe Henderson. *Downbeat*, 71.7.
- Levy, Brian. (2012). *Harmonic and Rhythmic Interaction in the Music of John Coltrane*. (PhD), Brandeis University Waltham, Massachusetts.
- Liebman, Dave.). Jazz Rhythm. Retrieved 10/06/2013, from http://www.daveliebman.com/Feature_Articles/JazzRhythm.htm
- Ligon, Bert. (1996). *Connecting Chords with Linear Harmony*. Lebanon, Indiana: Houston Publishing, Inc.
- Long, Barry. (2006). Blues in Bebop: the Composite Jazz Vocabulary of Kenny Dorham. Retrieved 19/09/13, from

http://faculty.msmmary.edu/long/KD_BluesinBebop.pdf

- Martin, Mel. (1991). Joe Henderson. Retrieved 3/5/2013, from http://melmartin.com/html_pages/Interviews/henderson.html
- Mishkit, Bruce. (1994). *Sax/flute lessons with the greats*: CPP Media.
- Orgill, Edward Roy. (2008). *Blue Hayes: an analysis of the performance style of jazz saxophonist Tubby Hayes*. (D.A.), University of Northern Colorado, Greeley, Colorado.
- Palmer, Richard. (2006). Record Reviews: Joe Henderson - "Lush Life: The Music of Billy Strayhorn". *Jazz Journal International*, 59.10.
- Pease, Ted. (2013). *Jazz Composition Theory and Practice*.
- Porter, Lewis. (1988). Some Problems in Jazz Research. *Black Music Research Journal*, 8.
- Potter, Chris. (2001). *Shadow Gratitude*. New York.
- Reid, Graham. (1994). Joe Henderson Interviewed (1994): A star to guide them. *Elsewhere*. Retrieved from <http://www.elsewhere.co.nz/jazz/3112/joe-henderson-interviewed-1994-a-star-to-guide-them/>
- Trezona, Jeremy. (2013). *Utilizing classical saxophone articulation techniques in jazz performance*. (Honours), Edith Cowan University.
- Vernon, Farrell. (1994). *Joe Henderson's Transcribed Solos for Tenor Sax*: Houston Publishing.
- Viswanathan, Sundar. (2004). *An analysis of the jazz improvisation and composition in selected works from the Blue Note Records period of tenor saxophonist Joe Henderson from 1963 to 1966*. (Ph.D), New York University, New York.
- Weir, Timothy Malcolm. (2006). *An Analysis of the Development of Kenny Dorham's Jazz Improvisational Vocabulary*. (D.M.A), University of Miami, Coral Gables, Florida.
- White, Arthur Lynn. (2008). *Joe Henderson: an analysis of harmony in selected compositions and improvisations*. (D.M.A), University of North Carolina, Greensboro.
- White, John David. (1984). *The Analysis of Music*. Metuchen, N.J Scarecrow Press.
- Witt, Woodrow. (2000). *Sonny Stitt: His Life and Music*. (D.M.A), University of Houston.
- Yanow, Scott. (2013). Review: Joe Henderson, Lush Life: the Music of Billy Strayhorn. Retrieved from <http://www.allmusic.com/album/lush-life-the-music-of-billy-strayhorn-mw0000678427>