### THE IMPROVISATIONAL LANGUAGE OF NIELS-HENNING ØRSTED PEDERSEN:

### A PERFORMANCE STUDY

Craig Butterfield, B.M., M.M.

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### APPROVED:

Jeff Bradetich, Major Professor
Lynn Seaton, Minor Professor
Joseph Klein, Committee Member
Terri Sundberg, Chair of the Division of
Instrumental Studies
Graham Phipps, Director of Graduate Studies in
the College of Music
James C. Scott, Dean of the College of Music
Sandra L. Terrell, Dean of the Robert B. Toulouse
School of Graduate Studies

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Thirteen original transcriptions and subsequent analysis of improvised solos performed by Niels-Henning Ørsted Pedersen. The transcriptions are analyzed in three categories: harmonic vocabulary, technical devices, and motivic use. Pervasive harmonic and melodic themes are presented and compared with phrases from improvisers such as Sonny Rollins and Charlie Parker, as well as compositions by J.S. Bach and Johannes Brahms. Observations from the transcriptions regarding performance practice and techniques unique to Pedersen as well as the influence of the physical characteristics of the double bass are discussed. Pedersen's use of motivic development within a single solo is analyzed.

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### TABLE OF CONTENTS

	Page
Chapters	
1.	INTRODUCTION1
2.	ORIGINAL TRANSCRIPTIONS4
	All the Things You Are
	Beautiful Love
	Blues for Perla
	Falling in Love with Love
	Have You Met Miss Jones
	I Fall in Love too Easily
	I Love You
	Lover Man
	Oleo
	Someday My Prince Will Come
	Stella by Starlight
	There Is No Greater Love
	You Look Good to Me
3.	TRANSCRIPTION ANALYSIS
	Harmonic Analysis
	Technical Devices
	Motivic Use
REFERENC	E LIST68

#### CHAPTER 1

#### INTRODUCTION

Niels-Henning Ørsted Pedersen was one of the most influential jazz bassists in the history of the art form. In addition to possessing an unmatched technical facility on the instrument, he absorbed and utilized the be-bop language, epitomized by Charlie Parker and Dizzy Gillespie, perhaps more eloquently than any other double bassist. Pedersen collaborated with many of the leading jazz artists, including Oscar Peterson, Joe Pass, Dexter Gordon, Sonny Rollins, Bud Powell, Bill Evans, Chet Baker, Kenny Drew, Michel Petrucciani, and Tete Montoliu.

Pedersen was born in 1946 in Osted, Denmark. After briefly studying piano, Pedersen switched to double bass and began his professional career at the age of 14. At the age of 17, Pedersen had become the house bassist at the Club Montmartre in Copenhagen.<sup>2</sup> He was the bassist of choice for jazz artists touring Europe and formed long-lasting musical relationships with Kenny Drew and Oscar Peterson, replacing Ray Brown as Peterson's bassist in the 1970s. Niels-Henning Ørsted Pedersen preferred to remain in his native Denmark throughout his life, and combined be-bop and post-bop genres with Norwegian folk melodies in his own compositions and recordings as a leader.

There have not been any comprehensive studies done regarding his unique vocabulary and performance technique to date. In-depth analyses of a particular artist are invaluable pedagogical tools regardless of the genre, including Samuel Applebaum's Way They Play series and David Baker's Giants of Jazz series. Analysis of multiple performances by Pedersen should be beneficial to all jazz musicians.

<sup>&</sup>lt;sup>1</sup> John Goldsby, *The Jazz Bass Book* (San Francisco: Backbeat Books, 2002), 142.

<sup>&</sup>lt;sup>2</sup> Ibid.142.

Jazz is above all an aural tradition, and recordings are the primary source of research for jazz artists. Great improvisers throughout the history of jazz have thoroughly digested the styles and traditions of previous generations before adding their own significant contributions. The method that these musicians use to absorb the history of the language is known as "transcribing." Classic solos from master improvisers are learned by rote or written out and memorized. Charlie Parker was said to have memorized all of Lester Young's recorded solos. Many volumes have been published filled with nothing but the transcribed solos of artists such as John Coltrane, Sonny Rollins, and Paul Chambers. Transcriptions teach us not only the elements of the jazz language—the "vocabulary"—but also the syntax. A particular idiomatic phrase may recur in hundreds of solos, but it is the context in which that phrase is used and how it is connected to the surrounding ideas that is unique and individual to each improviser. Therefore it is not only the individuality of the melodic ideas—there are after all only 12 notes—but the way in which these individual phrases are used which can provide the careful student great insight into the artistic palette of an improviser.

Most published transcription books offer little in the way of analysis of their content.

While these books are useful to students of the jazz language, their greatest benefit perhaps is to those who transcribed them. The process of transcribing is an important step, but the most critical processes are analysis and integration of completed transcriptions. Most musicians working with pure transcription books memorize a solo or two and therefore have increased their vocabulary over that particular tune or one with very similar harmony in the same key. If a solo is broken down, analyzed, and thoroughly integrated, the musician can apply the new vocabulary in a much wider range of situations because the motive is understood at a much deeper harmonic

level. An example of such an analytical transcription book is noted jazz educator David Baker's publication *The Jazz Style of Sonny Rollins*.<sup>3</sup> In this work Baker transcribes and notates the solos clearly and accurately, but more importantly he dissects each solo and cites motivic development, specific harmonic vocabulary, and chord/scale relationships that all work together to define the overall style of Sonny Rollins. Baker's approach will serve as a model and a guide for the exploration of the specific harmonic language of Niels-Henning Ørsted Pedersen.

Thirteen original transcriptions of recorded solos performed by Pedersen are included in their entirety in chapter 2. These solos are analyzed in chapter 3, which is organized into three sections—harmonic vocabulary, technical devices, and motivic use. Excerpts from the original transcriptions, as well as works from other composers and improvisers, are included in the body of the analysis chapter for clarity.

<sup>&</sup>lt;sup>3</sup> David Baker, *The Jazz Style of Sonny Rollins* (Miami: Warner Bros. Publications, 1980).

#### **CHAPTER 2**

#### ORIGINAL TRANSCRIPTIONS

Thirteen original transcriptions of improvisations recorded by Pedersen are included in this chapter, presented in alphabetical order by song title. A complete list of album titles, dates, and record labels is included in the reference list at the end of this document.

Double bass jazz solos are difficult to transcribe due to the low frequencies and frequently inadequate recording techniques used to capture the performance. In addition, Pedersen's style is particularly painstaking to notate. Pedersen makes extensive use of "ghosted" notes, dampened open strings, percussive right hand articulations, and glissandos. Despite these difficulties, great care was taken to notate every sound as accurately as notation allows. The same devices that create challenges in transcription often reveal fascinating insights into Pedersen's unique technical approach to the double bass, as well as critical information regarding Pedersen's left and right hand fingerings. This information is essential in obtaining an accurate representation of not only Pedersen's improvisational language but how this language was and can be spoken on the double bass. These topics will be explored further in chapter 3 in the section regarding technical devices.

Every attempt was made to accurately represent the chord changes being used in each performance. Every jazz musician has their own preferred chord changes over a given jazz standard. Harmonic analysis is facilitated by accurately representing the harmony that the musician is improvising over. For example, in "Blues for Perla," Pedersen repeatedly implies a standard "turn-around" chord progression in the last four measures of the form while accompanying Tete Montoliu, yet occasionally drifts outside the standard changes during his

own improvisation. It is a subtle yet important distinction to note that this implies Pedersen is playing "outside" the standard chord changes, rather than "inside" a modified set of chord changes agreed upon by the musicians beforehand.

Two important considerations informed the spelling of individual notes within the transcriptions—the "key of the moment" as well as the standard that sharped notes resolve upward and flatted notes resolve downward.<sup>4</sup> It is a regrettable function of notation programs that important decisions regarding note spelling are frequently incorrectly made by the software, resulting in music that is difficult to read. For example, if a work is in the key of D flat major, the progression of a dominant chord resolving down by fifth to the neapolitan is spelled by default with a D flat rather than a C sharp, as A - D flat - E - G. This is no longer a tertian chord, and as a result is difficult to read, in addition to the fact that the D flat is expected to resolve downwards, not up to D as it should resolve to the tonic of the neapolitan. It is hoped that careful attention to note spelling throughout this chapter will result in transcriptions that are easy and logical to read.

<sup>&</sup>lt;sup>4</sup> Kent Wheeler Kennan, Counterpoint, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1972), 53.

## All the Things You Are





### **Beautiful Love**

**Victor Young** Solo begins at 4:15 From Concert Inedits EMIN765 A769 DMIN7 EMIN765 A769 FMAS7 G MIN7 867 EMIN765 GMIN7 A769 DMIN7 EMIN765 A769 DMIN7 **G**7#11 EMIN765 A769 DMIN7 EMIN765 <u>C</u>7 FMAST G MIN7 867 EMIN765 G MIN7 DMIN7 867 DMIN7 A7 DMIN7



## **Blues for Perla**

**Tete Montoliu** Solo begins at 4:03 From Catalonian Fire 867 F7 867 867 07 2 GMIN7 A MIN7 07 G MIN7 <u>0</u>7 867 13 867 07 17 G MIN7 <u>0</u>7 AMIN7 07 G MIN7 <u>C</u>7 21 F7 F7 25 G MIN7 <u>0</u>7 AMIN7 07 GMIN7 **C**73



## **Falling In Love With Love**





### **Have You Met Miss Jones**

solo begins at 0:56

From Chops

Rodgers/Hart





## I Fall in Love too Easily







## I Love You

**Cole Porter** Solo begins at 4:27 From Face to Face GMIN765 C769 07 FMAST G MIN7 <u>C</u> 7 FMAJ7 07 2769 GMIN765 FMAS7 BMIN7 E7 A MAST BMIN7 £7 A MAST G MIN7 FMAS7 27 Amin765 07b9 **G**7 21 AMIN765 GMIN7 5 3 FMAJ7 25 <u>0</u>7 **G**7





## Lover Man

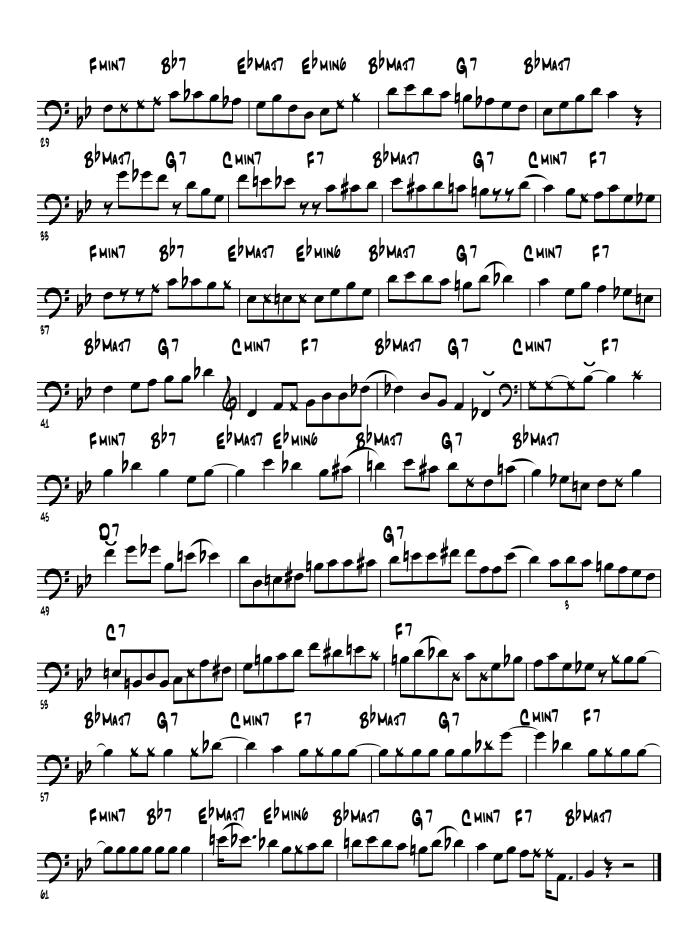






## Oleo

Solo begins at 2:01 **Sonny Rollins** From Chops CMIN7 F7 CMIN7 FMIN7 CMIN7 <u>0</u>7 Bb MAST F7 CMIN7



## **Someday My Prince Will Come**





# Stella by Starlight

**Victor Young** Solo begins at 2:56 From Art of the Duo EMIN765 A769 F7 C MIN7 867 FMIN7 EbMAS7 A67 Bb MAST EMIN765 Bbmin7 Eb7 A769 DMIN7 FMAST Amin765 D769







## There Is No Greater Love





# You Look Good to Me

Solo begins at 5:00

Kennedy

From Norman Granz' Jazz in Montreux presents Oscar Peterson Trio '77





#### CHAPTER 3

### TRANSCRIPTION ANALYSIS

Careful analysis of the transcribed solos can give great insight into the particular vocabulary of Niels Pedersen. Upon analysis of his solos, certain themes, or motives, occur repeatedly throughout the decades that Pedersen was active as a recording artist. Some of these motives are specific pitch selections over a given harmony while others are more general—scale preferences or a basic harmonic outline. Once these motives are discovered and analyzed, the performer can practice these motives over a variety of harmonies and begin to absorb Pedersen's vocabulary.

Pedersen's improvisational language is broken down for analysis into three main sections: harmonic vocabulary, technical devices, and motivic use. The section on harmonic vocabulary demonstrates how Pedersen used a wide variety of harmonic devices to connect chord progressions in a linear and melodic way, and how his vocabulary is similar to and influenced by non-jazz composers such as Bach and Brahms. Pedersen had a unique and agile approach to double bass technique and the various devices he used to reproduce rapid melodies in his improvisations with ease will be examined in the section on technical devices. Motivic repetition and development were common in Pedersen's improvisations, and one solo in particular, on "Have You Met Miss Jones" will be analyzed in the section on motivic use.

## Harmonic Vocabulary

A motive common to Pedersen's improvisatory language is a descending scalar passage with embellishments occurring in between scale steps. The scale pitches provide a framework that provides continuity though the entire phrase, regardless of the twisting lines and

chromaticism in between. Paul Hindemith wrote extensively about this "step progression," stating:

But within a melody there are other main tones whose significance is *primarily melodic*. Among these may be the roots of the chordal groups which are the pearls on the string of the melody, but more important are those tones which are placed at important positions in the two-dimensional structure of the melody: the highest tones, the lowest tones, and tones that stand out particularly because of their metric position or for other reasons. The primary law of melodic construction is that a smooth and convincing melodic outline is achieved only when these important points form a progression in seconds. The line that connects one high point to the next, one low point to the next, and one rhythmically prominent tone to the next, without taking into consideration the less important parts of the melody lying between these points, is called the *step-progression*.<sup>5</sup>

Charlie Parker used this descending line in mm. 15 through 18 of his improvisation on "Ornithology":



In the above example, the line that provides the framework of the phrase is a descending G major scale from C to E. The pitch C on beat one resolves down by step after an arpeggiated embellishment figure to the B on beat three. The next two scale tones, A on beat four and G on beat one of the next measure, are connected to the previous pitches through chromatic passing tones. The pitch G is embellished for most of measure two before resolving downwards to F sharp on the last eighth note. The final resting pitch E is connected to the F sharp by a descending arpeggio as in the first measure.

<sup>&</sup>lt;sup>5</sup> Paul Hindemith, Craft of Musical Composition: theory (New York: Schott & Co., Ltd., 1942), 193.

<sup>&</sup>lt;sup>6</sup> Charlie Parker, "Ornithology," Charlie Parker Omnibook (Lynbrook, NY: Atlantic Music Corp., 1978), 7.

Here is one example of Pedersen utilizing "step progression" from "All the Things You Are," mm. 9 through 11:



In the example above, the descending A flat major scale is clearly visible starting on pitch F on the downbeat of measure 9 and continuing down diatonically one full octave to the F on the downbeat of measure 11. The scale pitches occur most often on the beat and are connected primarily by approach tones, enclosure patterns, or pedal points.

Here is an interesting example of this motive from mm. 3 and 4 of "Lover Man":



This is a notable example because the diatonic "steps"—a descending C major scale—initially occur not on the beat but on the last partial of a group of triplet eighth notes. As in the previous example, a pedal point figure is used in the second measure to connect the first three scale notes in that measure. This phrase is also of interest for the variety of rhythms found in such a relatively short passage. Here is a more straightforward example from m. 45 of the same solo:

<sup>&</sup>lt;sup>7</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>&</sup>lt;sup>8</sup> Tete Montoliu, "Lover Man," *Tootie's Tempo* (Klampenborg, Denmark: SteepleChase Productions, 1987).



An example from mm. 25, 26 and 27 of "I Love You":



Another extended example of this technique using an A flat major scale as the outline of this passage from mm. 38 through 41 of "All the Things You Are":



In the above example, the underlining scale displaces up one octave after beat three of the second measure, yet maintains a continuously descending shape throughout. Hindemith points out, "In the step-progression, octave transposition may take place, so that sevenths and ninths may replace seconds." Here is another example of this idea with an octave displacement from mm. 33 and 34 of the same solo:

<sup>&</sup>lt;sup>9</sup> Tete Montoliu, "Lover Man," *Tootie's Tempo* (Klampenborg, Denmark: SteepleChase Productions, 1987).

<sup>&</sup>lt;sup>10</sup> Tete Montoliu, "I Love You," Face to Face (Klampenborg, Denmark: SteepleChase Productions, 1982).

<sup>&</sup>lt;sup>11</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>&</sup>lt;sup>12</sup> Paul Hindemith, Craft of Musical Composition: theory (New York: Schott & Co., Ltd., 1942), 195.



Another example of this idea with octave displacement, from mm. 69 and 70 of "All The Things You Are":



Here is an example of two diatonic scales creating the framework for a much longer bebop line. G harmonic minor is used as the outline for the first three beats, and then a C major scale outlines the rest of this excerpt from mm. 28 through 31 of "I Love You":



Jazz tenor saxophonist Sonny Rollins used "step progression" with octave displacement in his improvisations, as in this example from mm. 11 of his second improvisation on "On a Slow Boat to China":

<sup>&</sup>lt;sup>13</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Tete Montoliu, "I Love You," Face to Face (Klampenborg, Denmark: SteepleChase Productions, 1982).



Finally, one more example of this technique used twice in succession, with two different scales, from mm. 33 through 36 of "I Love You":

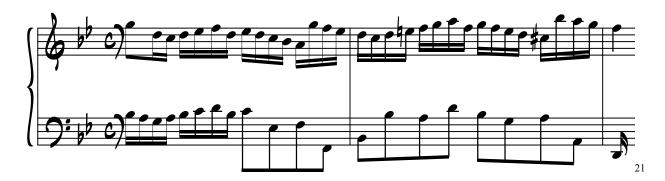


The above example shows just how pervasive this technique was throughout Pedersen's improvisations. The outlining scale creates a melodic pattern which connects the changing harmony in a linear fashion. By itself, this outline would create melodic improvisation, yet this technique is pervasively ornamented using standard musical devices such as neighbor tones, enclosures, and pedal points to create a much more interesting line. The scales to outline the harmony in the examples above are primarily tonic scales in the "key of the moment"—for example in the excerpt above, Gmin7b5, C7b9, and the following FMaj7 chord indicate a deceptive cadence—F minor is implied from the half-diminished ii chord and b9 extension on the V7 chord, yet the resolution is to F major. Pedersen selected the F major scale to form his outline. In the example preceding from "All the Things You Are", the chords Bbmin7 and Eb7 clearly indicate a "key of the moment" of Ab major. This is the scale that forms the outline for Pedersen's improvisation in this excerpt. In both of these examples, Pedersen selected the harmonic rhythm in such a way that he was playing the third of the chord on each chord change

<sup>&</sup>lt;sup>16</sup> Sonny Rollins, "On a Slow Boat to China," Sonny Rollins and the Stars (Prestige Records, 1963).

<sup>&</sup>lt;sup>17</sup> Tete Montoliu, "I Love You," Face to Face (Klampenborg, Denmark: SteepleChase Productions, 1982).

(slightly anticipating the chord change in m. 34 of "All the Things You Are"). While this is not true of the other examples of this outline shape, it does suggest the existence of a sub-category of this "step progression" outline—the use of a descending scale to connect the third of one chord to the third of the next. This specific outline shape is common to the jazz language and is referred to as "outline 1" by Bert Ligon in his book "Connecting Chords with Linear Harmony." David Baker includes this motive in his compilation of improvisational patterns from the be-bop era. As Ligon notes, this device is not exclusive to jazz; it is one of the basic rules in melodic writing in western counterpoint. It ensures a melodically pleasing and harmonically descriptive melody above a given bass line. Bach utilized this exact outline pattern many times in his compositions, including "Invention 11" from his *Two-part Inventions*. In this work, Bach sets up every new key area with "outline 1," beginning with a modulation to B flat major and immediately D minor in mm. 5 and 6:



The next key area of F major followed by C minor is established with the same outline shape in mm. 11 through 13. In m. 12, the outline is found in the left hand:

<sup>&</sup>lt;sup>18</sup> Bert Ligon, Connecting Chords with Linear Harmony (Lebanon, IN: Houston Publishing, INC., 1996), 6.

<sup>&</sup>lt;sup>19</sup> David Baker, *Improvisational Patterns: The Bebop Era* (New York: Charles Colin Music, 1979), 15.

<sup>&</sup>lt;sup>20</sup> Bert Ligon, Connecting Chords with Linear Harmony (Lebanon, IN: Houston Publishing, Inc., 1996), 6.

<sup>&</sup>lt;sup>21</sup> J.S. Bach, "Invention 11," *Two- and Three-Part Inventions*, ed. Howard Aldrich (Sherman Oaks, CA: Alfred Publishing Co., Inc., 1977), 22.



Finally, the key areas of E flat major and G minor are established using "outline 1," both times in the left hand:



Bach utilized this outline profusely in "Minuet II" from his first *Suite for Cello Solo*. In mm. 17 through 22, Bach sequences outline 1 several times, with the initial third of the dominant chord displaced one octave, creating a 3-5-7-9 arpeggio to connect to the remainder of the outline shape (chords added for clarity):



<sup>&</sup>lt;sup>22</sup> J.S. Bach, "Invention 11," *Two- and Three-Part Inventions*, ed. Howard Aldrich (Sherman Oaks, CA: Alfred Publishing Co., Inc., 1977), 23.

<sup>&</sup>lt;sup>23</sup> Ibid. 23.



On Pedersen's final live recording, *The Unforgettable NHØP Trio Live*, Pedersen performs a solo double bass transcription of this movement.<sup>25</sup> It is clear that Pedersen studied the music of Bach and that his harmonic vocabulary was directly influenced by Bach.

Charlie Parker used this line in mm. 43 and 44 in his improvisation on "Anthropology":



Pedersen utilized this common device many times in his improvisations to create melodic phrases that connected changing harmonies. Here is one example from mm. 45 and 46 of "Have You Met Miss Jones":



Note the use of the F major parent scale to connect the third of the Gmin7 chord to the third of the C7 chord, using a straight descending line. If the pitch F in m. 45 resolved

<sup>&</sup>lt;sup>24</sup> J.S. Bach, "Minuet II," *Six Suites for Cello Solo*, ed. Hugo Becker (New York: International Music Company, 1946), 7.

<sup>&</sup>lt;sup>25</sup> Niels Pedersen, "The Bach Piece," *The Unforgettable NHØP Trio Live* (München, Germany: ACT Music, 2007).

<sup>&</sup>lt;sup>26</sup> Charlie Parker, "Anthropology," Charlie Parker Omnibook (Lynbrook, NY: Atlantic Music Corp., 1978), 12.

<sup>&</sup>lt;sup>27</sup> Joe Pass, Niels Pedersen, "Have You Met Miss Jones," *Chops* (Original Jazz Classics, 1993).

immediately to the E on beat four, the harmonic change would be anticipated. To avoid this, Pedersen inserted two double approach tones from below to resolve the F to the E on the downbeat of measure 46. In the next example from measures 12 and 13 from "Falling in Love with Love," Pedersen's rhythmic subdivision is at the eighth note level throughout, so more added notes are needed to ensure arrival on the F sharp on the downbeat of m. 13.



In the next example, Pedersen uses this device to voice lead through three successive chord changes—in this instance mm. 7 and 8 from "Oleo":



In this example from mm. 20 and 21 of "Stella by Starlight," Pedersen completes the phrase melodically by resolving the third of the Dmin7 chord to tonic:



<sup>&</sup>lt;sup>28</sup> Oscar Peterson, "Falling in Love with Love," *Oscar in Paris: Oscar Peterson Live at the Salle Pleyel* (Cleveland, Ohio: Telarc, 1997).

<sup>&</sup>lt;sup>29</sup> Joe Pass, Niels Pedersen, "Oleo," *Chops* (Original Jazz Classics, 1993).

<sup>&</sup>lt;sup>30</sup> Philip Catherine, Niels Pedersen, "Stella By Starlight," Art of the Duo (Munich, Germany: Enja Records, 1993).

In this example from mm. 67 through 69 of the same solo, Pedersen uses a much wider range of pitches to compensate for the slower harmonic rhythm. The third of the Cmin7 chord in this instance is resolved to the fifth:



In this example from mm. 33 and 34 of "Someday My Prince Will Come" Pedersen uses triadic rather than scaler shapes to connect the thirds of these chords:



In this example, mm. 73 and 74 from "I Love You," Pedersen uses "ghosted" notes on the open D string to separate the notes of the scalar outline. Pedersen's use of this technique will be discussed later in this chapter.



Pedersen uses a sequential pattern with upper neighbor tones to connect the notes in this descending scale from third to third in mm. 21 and 22 of "Falling in Love with Love":

<sup>&</sup>lt;sup>31</sup> Philip Catherine, Niels Pedersen, "Stella By Starlight," Art of the Duo (Munich, Germany: Enja Records, 1993).

<sup>&</sup>lt;sup>32</sup> Michel Petrucciani, Niels Pedersen, "Someday My Prince Will Come," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>&</sup>lt;sup>33</sup> Tete Montoliu, "I Love You," Face to Face (Klampenborg, Denmark: SteepleChase Productions, 1982).



Finally, Pedersen demonstrates how this pattern can be used to connect many chord changes, across a span of four measures in this example from mm. 62 through 65 of "All the Things You Are":



The descending scale pattern is clearly visible in the example above, with an octave displacement in the first beat of m. 63. Pedersen is able to connect thirds to thirds easily throughout this example in part because of the sequence of the chord progression. Each chord descends by a fifth, meaning that the thirds are all a fifth apart as well. With four beats to a measure, Pedersen can connect thirds to thirds using descending quarter notes as the outline of his phrase, and embellish from there.

Another pattern utilized by Pedersen throughout his improvisations is similar in concept to the previous examples. This motive consists of a descending 5-3-1-7 arpeggio on the first chord, with the seventh resolving stepwise to the third of the second chord. Ligon refers to this

<sup>&</sup>lt;sup>34</sup> Oscar Peterson, "Falling in Love with Love," *Oscar in Paris: Oscar Peterson Live at the Salle Pleyel* (Cleveland, Ohio: Telarc, 1997).

<sup>&</sup>lt;sup>35</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

common harmonic shape as "outline 3."<sup>36</sup> Parker utilized this outline shape in mm. 3 through 5 of his improvisation on "Anthropology":



Brahms used this same outline shape in mm. 79 through 83 of the first movement of his *Fourth Symphony*<sup>38</sup>:



David Baker lists this example as a standard pattern from the be-bop era:



<sup>&</sup>lt;sup>36</sup> Bert Ligon, Connecting Chords with Linear Harmony (Lebanon, IN: Houston Publishing, INC., 1996), 65.

<sup>&</sup>lt;sup>37</sup> Charlie Parker, "Anthropology," *Charlie Parker Omnibook* (Lynbrook, NY: Atlantic Music Corp., 1978), 10-11.

<sup>&</sup>lt;sup>38</sup> Bert Ligon, *Preparing Strings for Jazz Improvisation*, unpublished manuscript, 53.

<sup>&</sup>lt;sup>39</sup> Johannes Brahms, Symphony No. 4 in E minor, Op. 98, score (New York: M. Baron, Inc., n.d.), 6.

<sup>&</sup>lt;sup>40</sup> David Baker, *Improvisational Patterns: The Bebop Era* (New York: Charles Colin Music, 1979), 20.

Sonny Rollins used this pattern beginning in mm. 9 of his fifth chorus of improvisation on "Tenor Madness":



This is one example of Pedersen using this motive connecting seventh to third then ninth to fifth from mm. 1 through 3 of "Beautiful Love":



The pitch A in measure 3 is resolved downwards through the D minor triad to resolve completely on tonic. In the next example, from mm. 8 and 9 of the same solo, Pedersen delays the resolution to the third of the dominant chord by starting the motive one eighth note late, and preceding the resolution to the third with a chromatic approach tone from below:



<sup>&</sup>lt;sup>41</sup> Sonny Rollins, "Tenor Madness," *Tenor Madness* (Prestige Records, 1956).

<sup>&</sup>lt;sup>42</sup> Michel Petrucciani, Niels Pedersen, "Beautiful Love," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>43</sup> Ibid.

Note the diminished seventh interval between the third and flat ninth on the dominant chord. This interval is commonly connected with a fully diminished arpeggio as in this example from mm. 21 through 23 from "Have You Met Miss Jones":



This outline shape is used twice in successive measures in this example from mm. 31 and 32 from "Have You Met Miss Jones":



Pedersen performs the same figure again in his second chorus of improvisation, mm. 53 through 55. Notice the use of the B natural—indicating a D major parent scale instead of the D harmonic minor scale encountered in previous examples. This creates a half diminished rather than fully diminished arpeggio from third to ninth over the dominant chord:



Another commonly occurring harmonic pattern throughout Pedersen's improvisations is a sequence which involves a group of pitches forming an enclosure around the third of a chord,

<sup>&</sup>lt;sup>44</sup> Joe Pass, Niels Pedersen, "Have You Met Miss Jones," Chops (Original Jazz Classics, 1993).

<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

followed by an enclosure around the tonic note of the chord. An enclosure is the preceding of a specific pitch with both the upper and lower neighbor tones. A prime example of this phrase is found in m. 5 of "There Is No Greater Love":



And later in the same solo, mm. 28 and 29:



Again in the same solo, mm. 37 and 38:



Here is a similar yet slightly different example from mm. 9 and 10 of "All the Things You Are":

<sup>&</sup>lt;sup>47</sup> Ray Brown, Niels Pedersen, Oscar Peterson, "There Is No Greater Love," *Norman Granz' Jazz in Montreux presents Oscar Peterson Trio '77*, DVD, produced by Jean-Marc Bel (New York: Eagle Rock Entertainment, 2004).

<sup>48</sup> Ibid.

<sup>&</sup>lt;sup>49</sup> Ibid.



In this example, the enclosure around the tonic is in actuality an enclosure of the fifth of the Fmin7 chord due to the harmonic change occurring on the downbeat of the second measure, yet the idea is almost exactly the same as the occurrences in "There Is No Greater Love" except for the use of the minor mode. The shift in harmony to Fmin7 changes the resolution of this idea from tonic to fifth, yet the idea itself still works. Pedersen performs this motive with the same resolution, to the fifth of the chord, in this same solo, mm. 38 and 39:



As well as this example from mm. 61 and 62 of "You Look Good to Me":



In the next example, taken from "Someday My Prince Will Come" mm. 37 and 38, a different harmony sounds even earlier in this motive. The third of the C minor chord doesn't occur until the G7 chord, creating a different variation still—instead of an enclosure around third

<sup>&</sup>lt;sup>50</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>51</sup> Ibid.

<sup>&</sup>lt;sup>52</sup> Ray Brown, Niels Pedersen, Oscar Peterson, "You Look Good to Me," *Norman Granz' Jazz in Montreux presents Oscar Peterson Trio* '77, DVD, produced by Jean-Marc Bel (New York: Eagle Rock Entertainment, 2004).

and tonic, we hear an enclosure around the flat thirteenth and fourth scale degrees, yet this is still clearly the same motive as the previous examples:



All of the above examples indicate how a relatively simple idea revolving around two chord tones can be used to create a large variety of melodic material. Six of the seven examples displayed above involve enclosures around the third and tonic notes of a C major or C minor harmony. The other example, from "There Is No Greater Love" mm. 38 and 39, is performed over a B flat minor chord. This suggests that Pedersen felt more comfortable with this motive in the key of C than other keys. Perhaps Pedersen favored practicing this motive primarily in this key, or this motive in the key of C fit his particular technique better than others. Pedersen clearly spent the majority of his improvisations on the G string of the double bass, and enclosing around the E and C notes of the G string is technically very simple—there are no string crossings or awkward position changes to be made. For example, if this motive were to be performed down a fifth in the key of F, the enclosure around tonic would have to be performed on a different string than the enclosure around the third, unless the entire motive were to be played on the darker D string. If the motive were to be performed up a fifth in the key of G, the performer would have an awkward shift out of thumb position to play the lower neighbor tone to the tonic, unless this one note or surrounding notes were to be performed on the D string. It is clear both from

<sup>&</sup>lt;sup>53</sup> Michel Petrucciani, Niels Pedersen, "Someday My Prince Will Come," *Concert Inedits* (New York: Dreyfus Records, 2000).

watching video of Pedersen performing<sup>54</sup> as well as from repeated listenings that Pedersen performed this motive in the examples above solely on the G string, using a "ghosted" note to cover his position change from the third to the tonic. These factors could explain why Pedersen seemed to prefer this motive in the key of C. It should also be noted that the lone example above not in C major can be performed in exactly the same way as the motive would be played in C, simply down one step. No string crossings or difficult shifts out of thumb position are necessary for this key either.

Another idea of a pervasive harmonic motive in Pedersen's improvisations can be analyzed as a descending scale connecting the third or fifth of one chord to the third or fifth of the following chord, using the dominant of the first chord as a pedal point. Here is one example occurring in mm. 9 and 10 of "There Is No Greater Love":



As well as this example from mm. 16 and 17 of the same solo:



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<sup>&</sup>lt;sup>54</sup> Ray Brown, Niels Pedersen, Oscar Peterson, *Norman Granz' Jazz in Montreux presents Oscar Peterson Trio '77*, DVD, produced by Jean-Marc Bel (New York: Eagle Rock Entertainment, 2004).

<sup>&</sup>lt;sup>55</sup> Ray Brown, Niels Pedersen, Oscar Peterson, "There Is No Greater Love," *Norman Granz' Jazz in Montreux presents Oscar Peterson Trio '77*, DVD, produced by Jean-Marc Bel (New York: Eagle Rock Entertainment, 2004).

<sup>56</sup> Ibid.

This phrase also appears in Pedersen's solo on "All the Things You Are", initially in mm. 35 and 36:



And again in mm. 62 and 63:



Pedersen makes frequent use of both the major and minor pentatonic scales throughout his improvisation. These pentatonic scales are almost always performed across the fingerboard rather than up or down one string, and pentatonic patterns are selected that are easily facilitated on the fourths tuning of the double bass. One common occurrence of the major pentatonic scale is based on the fifth scale degree of the parent scale of the chords. In this example from mm. 19 and 20 of "All the Things You Are" all of the pitches are from the D major pentatonic scale, used over a G major harmony. This gives slightly more interesting note choices than using the G pentatonic major scale over this harmony. The resulting pitches are the fifth, sixth, seventh, ninth, and third of the G major seven chord:

<sup>&</sup>lt;sup>57</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>58</sup> Ibid.



The same relative pitches are used in mm. 37 and 38 of "Falling in Love with Love." In this instance, the harmonic progression is a ii-V7-I progression in the key of C major. Since these chords all share the parent scale of C major, the G major pentatonic scale fits over all three chords:



A similar approach is taken over this excerpt from mm. 9 through 14 of "Stella by Starlight." B flat pentatonic major is used over a ii-V7-1 progression in the key of E flat major:



<sup>&</sup>lt;sup>59</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>&</sup>lt;sup>60</sup> Oscar Peterson, "Falling in Love with Love," *Oscar in Paris: Oscar Peterson Live at the Salle Pleyel* (Cleveland, Ohio: Telarc, 1997).

<sup>&</sup>lt;sup>61</sup> Philip Catherine, Niels Pedersen, "Stella by Starlight," Art of the Duo (Munich, Germany: Enja Records, 1993).

In two examples from "I Love You," Pedersen uses the major pentatonic based on the root of the chord. These examples are from the same place in the form—the first example from the first chorus and the second example from the third chorus. Mm. 15 and 16:



And mm. 79 and 80:



The minor pentatonic is used to produce colorful notes in this example from m. 58 of "Someday My Prince Will Come." The C minor pentatonic scale is used over a D7 flat 13 chord, producing the seventh, flat ninth, sharp ninth, fourth, and flat thirteenth:



**Technical Devices** 

Pedersen's ability to perform technically challenging improvisations at rapid tempos separated him from the majority of more traditional bassists. He was able to trade phrases back

<sup>62</sup> Tete Montoliu, "I Love You," Face to Face (Klampenborg, Denmark: SteepleChase Productions, 1982).

<sup>63</sup> Ibid.

<sup>&</sup>lt;sup>64</sup> Michel Petrucciani, Niels Pedersen, "Someday My Prince Will Come," *Concert Inedits* (New York: Dreyfus Records, 2000).

Peterson, Joe Pass and Tete Montoliu. While this was due in large part to his extremely efficient technique, there are several devices that Pedersen utilized that enabled him to execute these flurries of notes. Rather than working both left and right hands for every note, Pedersen was able to alternate note execution between the hands. At times in his improvisations, Pedersen is producing pitches only with his left hand, alternating "hammer-ons," which create a pitch above an open string or stopped note simply by pressing the left hand fingers firmly onto the fingerboard, with "pull-off" techniques either to an open string or to a note stopped with a finger on a lower pitch. This allows his right hand to relax momentarily, as he may only be plucking every other or every third pitch. This example from mm. 11 and 12 of "There Is No Greater Love" illustrates both "hammer-ons" as well as "pull-offs." Only the first pitch under each slur is articulated with the right hand—the other notes under the slur are performed only with the left hand by alternating "hammer-ons" and "pull-offs" in m. 11 and exclusively "hammer-ons" in m. 12:



Pedersen uses "hammer-ons" in this excerpt from m. 44 of "Blues for Perla":

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<sup>&</sup>lt;sup>65</sup> Ray Brown, Niels Pedersen, Oscar Peterson, "There Is No Greater Love," *Norman Granz' Jazz in Montreux presents Oscar Peterson Trio '77*, DVD, produced by Jean-Marc Bel (New York: Eagle Rock Entertainment, 2004).



As well as in m. 40 of "Someday My Prince Will Come":



Pedersen also frequently uses a "glissando" technique to slide into a second pitch from another pitch that was articulated with the right hand. In the example below, from m. 3 of "All the Things You Are," Pedersen articulates an E flat pitch and immediately slides into the F, creating the effect of two notes with only one right hand articulation:



Pedersen frequently uses the right hand in a type of "perpetual motion." The basic subdivision of the improvisation (typically eighth notes) is continuously articulated in the right hand while the left hand either stays in position or shifts to a new position. The right hand articulates either the same string the left hand is shifting on, creating a "ghosted" note at the approximate pitch that the left hand is over, or plucks an open string, which is usually partially

<sup>&</sup>lt;sup>66</sup> Tete Montoliu, "Blues for Perla," Catalonian Fire (Klampenborg, Denmark: SteepleChase Productions, 1991).

<sup>&</sup>lt;sup>67</sup> Michel Petrucciani, Niels Pedersen, "Someday My Prince Will Come," *Concert Inedits* (New York: Dreyfus Records, 2000).

<sup>&</sup>lt;sup>68</sup> Michel Petrucciani, Niels Pedersen, "All the Things You Are," *Concert Inedits* (New York: Dreyfus Records, 2000).

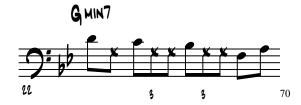
dampened by the left hand, creating a "ghosted" note at the approximate pitch of the open string. This technique is highly effective at creating the illusion that both left and right hand are playing pitches at an extremely rapid tempo, while the reality is that the left hand might be playing at half speed, with every other note being a "ghosted" note on the same string the left hand is pressing or an adjacent open string. Pedersen's unique facility with this "perpetual motion" stems from his unusual technique of using three fingers on the right hand to pluck the strings rather than two. In this example from m. 3 of "There Is No Greater Love," Pedersen is essentially playing quarter notes with the left hand. The pitch D is sustained for one whole beat with the left hand, while the right hand plucks the adjacent open D string, creating the "ghosted" pitch D. This is repeated on beat two, with the pitch C held for a full quarter with another "ghosted" open D. In essence, the left hand is only working half as much as it would be if distinct pitches were fingered at the eighth note level:



In this example from m. 22 from the same solo, Pedersen plucks two eighth notes followed by six extremely rapid eighth note triplets on beats 2 and 3. The left hand is yet again only moving at the quarter note level until beat 4:

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<sup>&</sup>lt;sup>69</sup> Ray Brown, Niels Pedersen, Oscar Peterson, "There Is No Greater Love," *Norman Granz' Jazz in Montreux presents Oscar Peterson Trio '77*, DVD, produced by Jean-Marc Bel (New York: Eagle Rock Entertainment, 2004).



In mm. 58 through 60 of "I Love You," Pedersen connects a long sequence of ascending pitches pressed with the left hand with alternating "ghosted" notes on the adjacent open D string. The illusion is created of rapid left hand movement:



Pedersen uses this "perpetual motion" technique extensively in "Blues for Perla." In this excerpt, the familiar technique of plucking the open D string in between pitches pressed with the left hand is used in m. 41. In the last beat of m. 42, Pedersen articulates eighth note triplets with the right hand while shifting up the G string to the pitch E flat. This generates a series of "ghosted" approximate pitches where the left hand is gliding along the string but not pressing it firmly against the fingerboard. Without this "perpetual motion" right hand technique, the phrase would be interrupted by one beat of rest while this shift is made:



<sup>&</sup>lt;sup>70</sup> Ray Brown, Niels Pedersen, Oscar Peterson, "There Is No Greater Love," *Norman Granz' Jazz in Montreux presents Oscar Peterson Trio '77*, DVD, produced by Jean-Marc Bel (New York: Eagle Rock Entertainment, 2004).

<sup>&</sup>lt;sup>71</sup> Tete Montoliu, "I Love You," *Face to Face* (Klampenborg, Denmark: SteepleChase Productions, 1982).

<sup>&</sup>lt;sup>72</sup> Tete Montoliu, "Blues for Perla," Catalonian Fire (Klampenborg, Denmark: SteepleChase Productions, 1991).

Pedersen demonstrates the opposite of the previous example in m. 25 from "Falling in Love with Love." In this example, the right hand articulates eighth note triplets while the left hand shifts downward from the pitch E on the G string to half position where the rest of the measure is played:



M. 21 of "Lover Man" demonstrates Pedersen "ghosting" the open G string while he shifts to a lower position. Once in the lower position, the D string is used as the "ghosted" note in between pitches G and F in beat three:



A more extreme example of using the right hand articulations to disguise position changes in the left hand is found in m. 25 from "Stella by Starlight." Here, Pedersen shifts one full octave with the left hand over the course of 3 beats, while the right hand continuously articulates the G string. The left hand is not articulating clear pitches as it shifts between positions, yet the right hand is plucking the string. The result is a "ghosted" note of a pitch approximating the location of the left hand:

<sup>&</sup>lt;sup>73</sup> Oscar Peterson, "Falling in Love with Love," *Oscar in Paris: Oscar Peterson Live at the Salle Pleyel* (Cleveland, Ohio: Telarc, 1997).

<sup>&</sup>lt;sup>74</sup> Tete Montoliu, "Lover Man," *Tootie's Tempo* (Klampenborg, Denmark: SteepleChase Productions, 1987).



At times, a surprising long sequence of pitches is not completely articulated with the left hand, while the right hand employs the "perpetual motion" technique. The result is more of a sonic effect than any particular systematic order of pitches. Here is one example of this technique from mm. 21 through 23 of "Stella by Starlight":



And a similar example from mm. 54 through 56 of "I Love You":



## Motivic Use

Any discussion of Niels-Henning Ørsted Pedersen's improvisational vocabulary would not be complete without drawing attention to motivic continuity throughout a solo. Pedersen's improvisation on "Have You Met Miss Jones" demonstrates how he established a simple three-

<sup>&</sup>lt;sup>75</sup> Philip Catherine, Niels Pedersen, "Stella by Starlight," *Art of the Duo* (Munich, Germany: Enja Records, 1993).

<sup>76</sup> Ibid.

<sup>&</sup>lt;sup>77</sup> Tete Montoliu, "I Love You," Face to Face (Klampenborg, Denmark: SteepleChase Productions, 1982).

note motive and continued its use throughout both choruses of his solo. The three note motive is a series of descending half steps resolving on either the tonic or fifth of the chord. This motive first appears at the very beginning of his solo, as shown here in measure one of "Have You Met Miss Jones," resolving one eighth note early to the fifth of the C7 chord:



The next occurrence of this motive is in m. 6, resolving again to the fifth of C7:



And again in m. 10:



In the bridge of the first chorus, Pedersen plays the motive twice in mm. 20 and 21:



<sup>&</sup>lt;sup>78</sup> Joe Pass, Niels Pedersen, "Have You Met Miss Jones," *Chops* (Original Jazz Classics, 1993).

<sup>79</sup> Ibid.

<sup>80</sup> Ibid.

<sup>81</sup> Ibid.

In the second chorus, the motive is found in m. 40:



In mm. 47 and 48, the motive appears first in inversion then in prime form, yet resolves one eighth note early to the C minor seven chord:



Again in m. 53, the bridge of the second chorus:



The final use of the motive is in the last two bars of his improvisation, where it appears twice. Interestingly, Pedersen ends his solo with the motive in augmentation—a series of descending diatonic notes resolving to tonic rather than chromatic notes:



<sup>82</sup> Joe Pass, Niels Pedersen, "Have You Met Miss Jones," Chops (Original Jazz Classics, 1993).

<sup>83</sup> Ibid.

<sup>84</sup> Ibid.

<sup>85</sup> Ibid.

This motive was immediately comprehended by guitarist Joe Pass on this recording, and forms the beginning of his improvisation immediately following Pedersen's, demonstrating the high level of communication occurring in this duo:



Attempting to describe the language of an improvising musician is a daunting task. Musical phrases from a particular improviser may be analyzed, integrated, and performed by another musician, but the essence of the individual is impossible to notate. A successful and beautiful improvisation is much more than a string of "correct" pitches—there are subtleties of expression, technique, rhythm and sound that can never be fully copied. Writers who share a common language do not write alike; there exists huge differences in style, even among contemporaries. Given a shared body of common vocabulary, no two improvisers will ever sound alike. It should not be the intention of the student of improvisation to imitate an artist to the point of supressing their own creativity, but rather to use their new knowledge to expand their creative palette and expressive abilities. Therefore it is not the intention of this work to provide a path towards copying the style of Niels-Henning Ørsted Pedersen, but rather to deconstruct his language so that it could be readily assimilated and used to create expressive and original works of art.

<sup>&</sup>lt;sup>86</sup> Joe Pass, Niels Pedersen, "Have You Met Miss Jones," Chops (Original Jazz Classics, 1993).

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