

Phrasing and Polyrhythm in Contemporary Jazz Guitar: A Portfolio of Recorded Performances and Exegesis

Volume One

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Table of Contents

List of Figures	viii
Abstract	xii
Declaration	xiii
Acknowledgments	xv
Introduction	1
Introduction	1
Thesis Structure and Key Terms	4
Theoretical Framework.....	8
Literature Review	10
Chapter One: Phrasing	14
Phrase Displacement	14
Off Beat Syncopation.....	19
On/Off Phrasing.....	24
Obscuring Hierarchical Structures	30
Hierarchical Polyrhythms.....	34
General Asymmetry in Phrasing	37
Chapter One Summary	41
Chapter Two: Polyrhythm	42
Metric Modulation	42
Compositional Metric Modulations	43
Improvised Metric Modulations	45
Implied Metric Modulations	47
Note Groupings	57
Odd Groupings	58
Mixing Groupings to Create Larger Structures.....	60
Augmentation and Diminution of Groupings.....	62
Triplet Groupings.....	66
Superimposing Other Meters.....	70
Superimposition Using On/Off Phrasing	70
Superimposition Using a Rhythmic Motif	76
Superimposition Through Phrase Structure	76

Multi-Layered Polyrhythms	80
The Grouping Structure of a Superimposed Meter	80
The Melodic Sequence of a Note Grouping	81
Augmentation and Diminution.....	86
Augmentation/Diminution of Note Values	87
Augmentation/Diminution of Note Groupings	90
Augmentation/Diminution of On/Off Phrasing	91
Augmentation/Diminution into a Polyrhythm	92
Augmentation/Diminution of Superimposed Meters	96
Chapter Two Summary.....	97
Chapter Three: Other Considerations.....	98
Instrument Specific Explorations	98
Open Strings (Campanella)	99
Same note on an Adjacent String	102
Polyphony	105
Devices Employed Over or Under a Melody	106
Devices Employed Over or Under an Ostinato	107
Devices Employed in Each Individual Line.....	107
Where to Use the Devices.....	109
Reference Points.....	110
Connection of Devices.....	114
Interaction.....	115
Chapter Three Summary	117
Conclusion	118
Appendices.....	122
List of Appendices.....	122
Appendix One: CD Recording Information.....	123
CD1: Retrieval Structure.....	123
CD2: Abercrombie and Hekselman Duets	124
CD3: Perception	124
CD4: Abercrombie and Hekselman Repertoire/Ari Hoenig Session.....	125
Disc One: Abercrombie and Hekselman Repertoire.....	125
Disc Two: Ari Hoenig Session.....	125

Appendix Two: Recorded Extracts of Hekselman Transcriptions	126
CD.....	126
Statement of Authorship.....	127
Track Listing.....	128
Appendix Three: Glossary	129
Appendix Four: Practical Application List	132
Appendix Five: Edited Transcripts of Interviews	135
John Abercrombie.....	135
Gilad Hekselman.....	143
Ari Hoenig.....	148
Bibliography/Reference List	154

Table of Contents (Volume Two)

The Submission Recordings	1
CD1: Retrieval Structure.....	1
CD2: Abercrombie and Hekselman Duets.....	1
CD3: Perception.....	2
CD4: Abercrombie and Hekselman Repertoire/Ari Hoenig Session.....	2
Disc One: Abercrombie and Hekselman Repertoire.....	2
Disc Two: Ari Hoenig Session.....	2

Table of Contents (Volume Three)

List of Figures (Volume Three)	v
Appendices	1
List of Appendices.....	1
Appendix Six: Drum Legend	2

Appendix Seven: Transcriptions	3
Explanatory Notes	3
Legend	4
List of Transcriptions Provided	7
Statement of Authorship	9
Gilad Hekselman	10
Split Life	10
Purium	11
Hello Who Is It?	17
My Ideal.....	21
I Fall In Love To Easily	24
Suite for Sweets	28
When will the Blues Leave?	32
The Summer of Laughs and Tears	35
I Should Care	38
My Second Childhood	43
Statement of Authorship	46
Words Unspoken.....	47
Ga'agua.....	48
New York Angels.....	52
April In Paris	58
Words Unspoken	63
Countdown	66
Someone to Watch Over Me	71
Yo Mama's Blues.....	74
Time After Time.....	79
How Long Has This Been Going On.....	83
Will The Song Ever End?.....	87
Statement of Authorship	90
Hearts Wide Open.....	91
Hazelnut Eyes	92
One More Song	98
Flower	104
Brooze.....	108
Hearts Wide Open	111
The Bucket Kicker	114
Understanding	119
Statement of Authorship	123
This Just In.....	124

Above	125
This Just In	132
The Ghost of the North	137
March of the Sad Ones	138
Nothing Personal	145
Eye in the Sky	151
Dreamers.....	155
Bert's Playground (Hekselman Recordings as a Sideman).....	158
The Way You Look Tonight	159
John Abercrombie	164
Straight Flight	164
There is No Greater Love	165
Bessie's Blues	170
In Your Own Sweet Way.....	179
Statement of Authorship	180
Lionel Loueke	180
Original Compositions (Mel Bay Publications)	181
Farafina	182
Griot	189
Karibu.....	199
Full Band Transcriptions	206
When Will The Blues Leave?	206
Suite for Sweets	208
I Should Care	210
Hello Who Is It?	212
Statement of Authorship	214
Polyphony DVD Transcriptions for Jazz Heaven	215
Appendix Eight: Lead Sheets of the Repertoire Performed	232
List of Lead Sheets Provided.....	232
CD1: Retrieval Structure.....	234
Coltrane Matrix	235
Retrieval Structure.....	238
Level 21	242
The Heights	245
The First Fall	247
Phrygia	248
Five Ahead	250
What the Future Holds.....	252
Sentient	256

CD2: Abercrombie and Hekselman Duets	258
Den Haag	259
CD3: Perception	261
Particular, Peculiar	262
Perception	265
Nardis.....	269
Red and Yellow	272
Chernobyl.....	276
Restoration	286
Den Haag	291
Bounce	310
CD4: Abercrombie and Hekselman Repertoire/Ari Hoenig Session.....	313
Disc One: Abercrombie and Hekselman Repertoire	313
Countdown	314
You Don't Know What Love Is	316
The Bucket Kicker	318
Ralph's Piano Waltz.....	320
All the Things You Are.....	323
Suite for Sweets (Guitar Part).....	324
Suite for Sweets (Lead Sheet).....	329
Yo Mamma's Blues.....	332
One More Song.....	333
Disc Two: Ari Hoenig Session	337
Happy.....	338
How Deep Is The Ocean	343
Outro	345
Falling Guitar Part.....	348
Falling Piano Part	351
Falling Bass Part	354
Dreamscape	357
Juncture	360
Appendix Nine: Transcriptions of my own Improvisations.....	364
One More Song.....	365

List of Figures

Chapter One: Phrasing	14
Phrase Displacement	14
Figure 1.1	15
Figure 1.2	16
Figure 1.3	18
Off Beat Syncopation and On/Off Phrasing	19
Figure 2.1	19
Figure 2.2	20
Figure 2.3	21
Figure 2.4	22
Figure 2.5	23
Figure 2.6	24
Figure 2.7	24
Figure 2.8	25
Figure 2.9	25
Figure 2.10	25
Figure 2.11	26
Figure 2.12	26
Figure 2.13	26
Figure 2.14	27
Figure 2.15	28
Figure 2.16	29
Figure 2.17	29
Obscuring Hierarchical Structures	30
Figure 3.1	30
Figure 3.2	31
Figure 3.3	31
Figure 3.4	32
Hierarchical Polyrythms	34
Figure 4.1	34
Figure 4.2	34
Figure 4.3	35
Figure 4.4	36
General Asymmetry in Phrasing	37
Figure 5.1	38
Figure 5.2	39
Figure 5.3	40

Chapter Two: Polyrhythm	42
Metric Modulation	42
Figure 6.1	44
Figure 6.2	46
Figure 6.3	47
Figure 6.4	48
Figure 6.5	48
Figure 6.6	48
Figure 6.7	49
Figure 6.8	49
Figure 6.9	50
Figure 6.10	52
Figure 6.11	52
Figure 6.12	53
Figure 6.13	54
Figure 6.14	55
Note Groupings	57
Figure 7.1	57
Figure 7.2	59
Figure 7.3	59
Figure 7.4	60
Figure 7.5	60
Figure 7.6	61
Figure 7.7	62
Figure 7.8	63
Figure 7.9	63
Figure 7.10	64
Figure 7.11	65
Figure 7.12	66
Figure 7.13	66
Figure 7.14	67
Figure 7.15	67
Figure 7.16	69
Superimposing Other Meters.....	70
Figure 8.1	71
Figure 8.2	71
Figure 8.3	72
Figure 8.4	72
Figure 8.5	73

Figure 8.6	74
Figure 8.7	76
Figure 8.8	76
Figure 8.9	77
Figure 8.10	77
Figure 8.11	78
Figure 8.12	79
Multi-Layered Polyrhythms	80
Figure 9.1	81
Figure 9.2	82
Figure 9.3	83
Figure 9.4	84
Figure 9.5	84
Figure 9.6	85
Augmentation and Diminution.....	86
Figure 10.1	87
Figure 10.2	87
Figure 10.3	89
Figure 10.4	90
Figure 10.5	91
Figure 10.6	92
Figure 10.7	93
Figure 10.8	94
Figure 10.9	94
Figure 10.10	95
Figure 10.11	95
Figure 10.12	96
 Chapter Three: Other Considerations.....	 98
Instrument Specific Explorations	98
Figure 11.1	100
Figure 11.2	101
Figure 11.3	102
Figure 11.4	103
Figure 11.5	104
Polyphony	105
Figure 12.1	105
Figure 12.2	106
Figure 12.3	107
Figure 12.4	108

Figure 12.5	108
Figure 12.6	109
Where to Use the Devices	109
Figure 13.1	111
Figure 13.2	114
Figure 13.3	116

List of Figures (Volume Three)

Appendix Six: Drum Legend	2
Drum Legend	2
Figure 14.1	2
Figure 14.2	2
Figure 14.3	2
Figure 14.4	2
Figure 14.5	2
Figure 14.6	2
Figure 14.7	2
Figure 14.8	2
Figure 14.9	2
Figure 14.10	2
Figure 14.11	2
Appendix Seven: Transcriptions.....	3
Legend.....	4
Figure 15.1	4
Figure 15.2	4
Figure 15.3	4
Figure 15.4	4
Figure 15.5	4
Figure 15.6	5
Figure 15.7	5
Figure 15.8	5
Figure 15.9	5
Figure 15.10	5
Figure 15.11	5
Figure 15.12	6
Figure 15.13	6

Abstract

This dissertation examines, through transcription, analysis, and performance, the use of rhythmic devices by two pivotal contemporary jazz guitarists, John Abercrombie and Gilad Hekselman. An in depth examination of phrasing (Chapter One) and polyrhythm (Chapter Two) are underpinned by transcriptions by the author of Abercrombie's *Straight Flight* (1979), Hekselman's entire discography as a leader, *Splitlife* (2006), *Words Unspoken* (2008), *Hearts Wide Open* (2011), and *This Just In* (2013), along with selections of Ari Hoenig's *Bert's Playground* (2008) (Volume Three: Appendix Seven: pp. 3-231). Interviews with Abercrombie, Hekselman, and Hoenig are also integral to the research (Appendix Five: pp. 135-153).

The transcription and analysis culminated in a comprehensive list of various devices relating to phrasing and polyrhythm (Appendix Four: pp. 132-134). This list was used as a practical application guide, including expansions of concepts and personal explorations that are discussed throughout this exegesis.

The focal point of this performance based dissertation is four CD recordings (Volume Two), a total of four hours of music, in which the findings of the research are applied: CD1: *Retrieval Structure*, CD2: *Abercrombie and Hekselman Duets*, CD3: *Perception*, and CD4: Disc One: *Abercrombie and Hekselman Repertoire*/Disc Two: *Ari Hoenig Session*. These recordings include performances with Gilad Hekselman, John Abercrombie, and Ari Hoenig, all of whom provided the initial focus of the research in the transcription and analysis phase.

Declaration

NAME: _____ PROGRAM: _____

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Publications

Original Compositions: Lionel Loueke (Mel Bay Publications, Inc)

Polyphony for Jazz Guitar: Gilad Hekselman (Jazz Heaven)

Gilad Hekselman Transcriptions: Splitlife (Aurora Sounds)

Gilad Hekselman Transcriptions: Words Unspoken (Aurora Sounds)

Gilad Hekselman Transcriptions: Hearts Wide Open (Aurora Sounds)

Gilad Hekselman Transcriptions: This Just In (Aurora Sounds)

Retrieval Structure (Aurora Sounds)

Perception (Aurora Sounds)

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When embarking on this endeavour I was simply a fan of both Gilad Hekselman and John Abercrombie's guitar playing and compositions. I am extremely happy to say that over the years I have developed a strong rapport with both of them and now consider them close friends, colleagues and collaborators. Their impact on both the intellectual research and resulting CD recordings has been invaluable. I am genuinely humbled by this, and look forward to the future of these professional working relationships.

The many, many different musicians involved with the recordings are a constant inspiration and make the entire process of music making worthwhile. A big thanks to: Jo Lawry, Will Vinson, Chad Lefkowitz-Brown, Shai Maestro, Matthew Sheens, Alon Tayar, Linda Oh, Scott Colberg, Or Bareket, Bambam Rodriguez, Kenneth Salters, Ari Hoenig, Yanni Burton, Sarah Koenig-Plonskier, Lavinia Pavlish, Jack Stulz, and Leanna Rutt. I would also like to express my appreciation and gratitude to Jon Gordon, for helping with the artistic framework and production of *Perception*, the third CD submitted in the second volume of this thesis. Thanks is also extended to the outstanding recording,

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Introduction

The past two decades have seen rhythmic innovations move to the forefront of jazz performance (Hoenig/Weidenmueller, 2009: 3). This trend is apparent in the work of many contemporary artists, including Avishai Cohen, Ari Hoenig, Vijay Iyer, Dave Holland, Gilad Hekselman, Bobby Avey, Tigran Hamasyan, Jean-Michel Pilc, Miles Okazaki, and Marc Hannafor. This performance based research project examines this trend by exploring phrasing and polyrhythm in the music of Gilad Hekselman and, equally importantly, his precursor John Abercrombie. It does so through the transcription and analysis of Hekselman's entire discography as a leader, in conjunction with selected improvisations of Abercrombie, and the application of the findings made through performance. As such, the main product of the study is four hours of recordings (Volume Two) that were directly informed by the research process. All of the CDs are live studio recordings made in New York, and feature many of the world's most prominent voices in contemporary jazz. This includes performances with Shai Maestro, Linda Oh, Will Vinson, Ari Hoenig, Jo Lawry, and Hekselman and Abercrombie themselves.

The first CD *Retrieval Structure* consists of entirely original compositions, and represents a snapshot of my compositional and improvisational language towards the beginning of the research project. The second CD is a series of guitar duets featuring Hekselman, Abercrombie, and me, with jazz standards being the main repertoire presented. *Perception*, the third CD, is an album of almost entirely original compositions. It features fifteen different musicians with varied instrumentation, including two works with a string quintet. The final CD (split over two discs) is comprised of Hekselman and Abercrombie compositions and arrangements which explore the rhythmic devices discussed within this submission (Disc One), along with some original works and arrangements that feature Ari Hoenig (Disc Two).

The study takes as its point of departure the following insight from Hoenig, who cites Jeff 'Tain' Watts as his gateway into rhythmic development:

I remember when he [Jeff 'Tain' Watts] was playing with Wynton [Marsalis], the *Standard Time* records [Vol. 1, 1987, Vol. 2, 1991]. Those and *Live At Blues Alley* [1988] were extremely influential to me in terms of displacements and different rhythmic ideas (Hoenig, 2013: personal communication).

As a framework for this study, some insights into rhythmic development with regard to jazz guitar will be discussed. Abercrombie cites Jim Hall (in particular his work in the 1960s with Sonny Rollins, Bill Evans and Art Farmer) as a major innovator:

Now you hear a lot of players using more sophisticated rhythmic vocabulary. When I was growing up there was Pat Martino, George Benson, Tal Farlow, and Wes [Montgomery]. They played in a very straight way, beautiful though, but if you grew up back then and then you heard Jim Hall you would have been blown away... I think he was the first to start hinting at the new direction of jazz guitar.

[He showed that] you don't have to play long lines of eighth notes, and you can play different chord voicings. They were linked to the tradition, but more modern. A lot of it was rhythmic concepts.

There were some other guitarists who were pushing in other directions like this: Larry Coryell, and Gabor Szabo, but Jim was the first that was heading in a new direction without playing rock jazz or Hungarian gypsy scales. He took the language and found a new way of expressing it. He arrived to show us the way forward (Abercrombie, 2010: personal communication).

Abercrombie cites Jim Hall as a major influence, and was chosen for this study as his sound and approach to improvising provides a natural extension of Hall's innovations, which he in turn carried through to the following generation of jazz guitarists:

I was always trying to hear melodies and intervallic motions, and rhythm to be the basis of what I played, not lines. I think it's a more natural way of playing. You have to use your ear and compositional talents and it's also more interactive (Abercrombie, 2010: personal communication).

This more interactive way of playing is argued to be one of the primary outcomes of contemporary developments towards more complex rhythmic language. It has created a new improvisatory platform for communication to take place. Abercrombie elaborates this point with particular reference to his trio from *Straight Flight*.¹

I need to be able to play with the right people. When no one is completely laying it down, that's when it's the most interesting. When bass and drums are not doing their usual roles [bass walking and drums keeping time], you have enough room to explore. You don't feel boxed in to needing to play constant eighth notes all the time.

We took a lot of risks, but we always kept to the form. For a lot of jazz musicians it has been a game that we play. I have always liked that. Seeing how much you can bend it, twist it, leave it behind, and get away with, but still be able to come back, and know where it is (Abercrombie, 2010: personal communication).

Although Abercrombie is still a major voice in jazz guitar, with a career spanning more than 40 years and 50 albums, his place in the history of the music is firmly established (DiGirolamo, 2009: n.p.).

Since the scope of the research is based around more contemporary developments, it was essential to look to the current generation of jazz guitarists. Gilad Hekselman was chosen, and it is argued that he provides a direct link from Abercrombie's generation as a current innovator of the more rhythmically sophisticated improvisational style suggested by Abercrombie's former comments. As the study shows, Hekselman has taken the innovations of Hall and Abercrombie to the next level, helping to establish the most recent paradigm of jazz guitar. This comes as no surprise when discussing the topic with Hekselman, as rhythm has always been the most important part of his approach and musical aesthetic.

You know before I played the guitar I wanted to be a drummer. I couldn't because my neighbours would get annoyed with the sounds and so I wasn't allowed to

¹ Abercrombie's rhythm section for *Straight Flight* (1979) was Jeff Donaldson (Bass), and George Mraz (Drums)

practise drums. My second instrument was guitar, and in a way I still want to be a drummer... I'm more interested in rhythm and I've always been more into rhythm than anything else (Hekselman, 2012: personal communication).

Although Abercrombie and Hekselman are referring in broader terms to the concept of rhythmic innovations, this study – in both performance and the current exegesis – breaks the concept down into its component parts, as identified in the title: phrasing and polyrhythm.²

Thesis Structure and Key Terms

The thesis is made up of three volumes, the first of which comprises the current introduction, three chapters (as outlined below), the resulting conclusions and outcomes, and appendices subdivided into notes on the submission recordings (Appendix One), recorded extracts from the transcriptions discussed (Appendix Two), glossary of terms (Appendix Three), practical application list (Appendix Four), edited transcripts of interviews with Ari Hoenig, Abercrombie, and Hekselman (Appendix Five), and a bibliography/reference list (pp. 154-159). The four CDs: *Retrieval Structure*, *Abercrombie and Hekselman Duets*, *Perception*, and *Abercrombie and Hekselman Repertoire/Ari Hoenig Session* are found in Volume Two. Volume Three includes a drum notation legend for the transcriptions discussed (Appendix Six), 228 pages of transcriptions (Appendix Seven), lead sheets of the repertoire performed on the recordings (Appendix Eight), and finally, a full transcription of my own improvisation from the submission recordings (Appendix Nine).

The three chapters which represent the main discussion of the exegesis present the results of the research through the transcription, analysis, performance and exploration of approaches to phrasing and polyrhythm. **Chapter One** addresses **phrasing**.

² A complete list of terms and definitions are included in Appendix Three (pp. 129-131)

Phrasing plays a large part in the way that Abercrombie conceptualizes his rhythmic vocabulary, stating in an interview that 'it's all about phrasing' (Abercrombie, 2010: personal communication). As this study will examine, many of the rhythmically inspired devices are better conceptualized as various approaches to phrasing. As to the definition of what a 'phrase' actually is, many draw the link between music and language. This includes the *Harvard Dictionary of Music (Second Edition)* definition of 'a division of the musical line, somewhat comparable to a clause or a sentence in prose' (Apel, 1970: 668), or 'borrowed by analogy from the terminology of linguistic syntax. Musical phrases combine to form larger, more complete units' by the *Grove Dictionary Online* (Bellingham, 2013: n.p.). As to a definition of 'phrasing', the *Oxford Companion to Music* describes it as 'the way in which a performer interprets both individual phrases and their combination in the piece as a whole' (Latham, 2002: 953).

For the purpose of this study, a 'phrase' will be any structure or idea which can be seen as containing a clear beginning and ending, whether it conforms to the underlying structure of the work or not. 'Phrasing' will be the collection of these shorter fragments into larger, more elaborate musical statements. Chapter One explores phrasing according to the subheadings listed below:

- 1) Phrase displacement
- 2) Off beat syncopation and on/off phrasing
- 3) Obscuring hierarchical structures
- 4) Hierarchical polyrhythms
- 5) General asymmetry in phrasing

The above are explored through the transcription and analysis of Hekselman, Abercrombie, and selections of my own performances.

Chapter Two explores aspects related to **polyrhythm**, which is defined by the *Oxford Companion to Music* as the ‘simultaneous use of different rhythms in separate parts of the musical texture’ (Latham, 2002: 979), and the *Grove Dictionary Online* as ‘the superimposition of different rhythms or meters’ (Grove Dictionary Online, 2013: n.p.). While Hoenig’s book *Intro to Polyrythms: Contracting and Expanding Time Within Form* (2009) uses the term in the title, the discussion of terms (p. 4) does not include a definition of polyrhythm. Many other studies relating to rhythmic analysis in jazz use the term in a very broad sense (for example, Cynthia Folio’s article: ‘An Analysis of Polyrythm in Selected Improvised Jazz Solos’ [1995]. See bibliography [pp. 154-159] for other related sources).

The term ‘polyrhythm’ is used here as a general description for the devices listed below, as distinct from the elements of phrasing addressed in Chapter One. Chapter Two explores polyrhythm according to the following subheadings:

- 1) Metric modulation
 - Compositional metric modulations
 - Improvised metric modulations
 - Implied metric modulations
- 2) Note groupings
 - Odd groupings
 - Mixing groupings to create larger structures
 - Augmentation and diminution of groupings
 - Triplet groupings
- 3) Superimposing other meters
 - Superimposition using on/off phrasing
 - Superimposition using a rhythmic motif
 - Superimposition through phrase structure

- 4) Multi-layered polyrhythms
 - The grouping structure of a superimposed meter
 - The melodic sequence of a note grouping

- 5) Augmentation and diminution
 - Augmentation/diminution of note values
 - Augmentation/diminution of note groupings
 - Augmentation/diminution of on/off phrasing
 - Augmentation/diminution into a polyrhythm
 - Augmentation/diminution of superimposed meters

Although transcriptions of Hekselman and Abercrombie are used to help explain the intellectual framework behind each device, transcribed extracts from my recordings (Volume Two) are the main focus of the chapter. This includes the general application of devices to performances, extensions of concepts, and personal explorations.

While phrasing and polyrhythm are the focus of the research, presented in this exegesis through specific examples at the micro level, it should be noted that the examples are almost always extracts of a larger conversational rhetoric. What precedes and follows each example, and their impact on an improvisation as a whole are important considerations.

As such, a broader spectrum of various related considerations are dealt with in **Chapter Three**. This includes examining the research in relation to my chosen instrument, insights into use within polyphony, along with exploring how the devices are used in relation to the overall structure of an extended improvisation.

The subheadings of Chapter Three are:

- 1) Instrument specific explorations
 - Open strings (campanella)
 - Same note on an adjacent string
- 2) Polyphony
 - Devices employed over or under a melody
 - Devices employed over or under an ostinato
 - Devices employed in each individual line
- 3) Where to use the devices
 - Reference points
 - Connection of devices
 - Interaction

Theoretical Framework

The above parameters, which are consolidated in Appendix Four (pp. 132-134), are explored according to the study's theoretical framework, which is loosely based on the jazz pianist and scholar Walter Bishop Junior's observation of how jazz musicians develop throughout their careers: 'it all goes from imitation to assimilation to innovation' (Berliner, 1994: 120). As such, each of the three chapters identified previously address the research questions according the following parameters:

- Analysis and definition
- Incorporation of devices
- Exploration
- Impact on performances

Analysis and definition

This consideration was motivated by a fundamental question: What polyrhythmic and phrasing devices do Abercrombie and Hekselman employ? This was the primary aim of the research, and began with the collation of data through transcriptions, followed by an analysis of that data. After analysing the transcriptions of each individual improvisation, the various devices relating to phrasing and polyrhythm listed at pp. 5-8 were uncovered and categorised. Some of these devices are already well established and documented in jazz literature, some are extensions of these ideas, and others are new observations.

Incorporation of devices

Here the question turned to: How can I incorporate the devices into my performances? The comprehensive list of devices compiled through the 'analysis and definition' process (Appendix Four) was used as a basis for practical application.

Exploration

To ensure the study's exploration beyond Walter Bishop Junior's 'imitation and assimilation', it was important to consider the following two questions: Are there any ways in which the devices can be further developed? Can these devices be used as a framework for a personal exploration? The aim of the 'exploration' phase was to expand upon the devices, using the significantly increased understanding of phrasing and polyrhythm (gained through the previous phases) as a basis for personal developments.

Impact on performances

The primary aim of the research was intended to inform and further enhance my performance practice. As such, the first three chapters include detailed discussions of applications to my submission recordings (Volume Two), while the conclusion of this exegesis includes an examination of the question: How has the research impacted the performances on the submission recordings?

Literature Review

As a performance based study, a thorough examination of the broader genre and historical outline of the devices discussed within this exegesis is beyond the scope of the research undertaken. That being said, a broad yet selective spectrum of literature and publications were considered in relation to the research project. This included PhD dissertations, DMA and DA projects from the US, various Masters research projects, instructional books, articles and other publications. While performance based dissertations, such as Chris Martin's *A Radical Reconsideration of European Classical Dodecaphonic Principles, Applied to the Extension of a Personal Jazz Style* (2005), and Marc Hannaford's *Elliott Carter's Rhythmic Language: A Framework for Improvisation* (2012), helped the broader conceptualization of the research, the main literature consulted involved discussions of phrasing and polyrhythm. Studies of particular relevance to this research project have been examined below, and a more complete list of relevant literature is included in the bibliography/reference list (pp. 154-159).

Although many instructional books cover rudimentary approaches (including Greg Fishman's *Jazz Phrasing for Beginners* [2008]), phrasing is a subject seldom discussed within jazz literature. Haruko Yoshizawa, in her PhD dissertation entitled *Phraseology: A Study of Bebop Piano Phrasing and Pedagogy* made the assertion that 'although jazz

has been a subject for extensive musicological research, none of the studies have been exclusively devoted to a detailed analysis of phrasing techniques in jazz performance' (Yoshizawa, 1999: 17). Thomas Owens' PhD dissertation, *Charlie Parker: Techniques of Improvisation* (1974) discusses the phrasing of Charlie Parker. His study catalogued Parker's phrases (referred to as 'motifs'), concluding that he had approximately 100 different motifs which he used as a basis for improvisation (Owens, 1974: 269). Robert Hodson in his book *Interaction, Improvisation and Interplay in Jazz* (2007) is a more recent study which does briefly discuss phrasing, with particular reference to both Miles Davis and John Coltrane (Hodson, 2007: 75-90). This exegesis expands on the available knowledge in this area by discussing approaches to phrasing that appear to be undocumented (such as phrase displacement, pp. 14-18, and hierarchical polyrhythms, pp. 34-36), while also providing new insights and concepts (such as on/off phrasing, pp. 24-29).

Unlike phrasing, polyrhythm is a subject which has been well documented in jazz literature. Although many of the studies focus on previous generations of jazz, the recent shift of the genre towards rhythmic innovations (the past 15-20 years) is largely undocumented (Hoenig/Weidenmueller, 2009: 3). Relevant literature on the topic includes Keith Waters' *Blurring the Barline: Metric Displacement in the Piano Solos of Herbie Hancock* (1996), *Polyrhythmic Superimposition in Jazz Hemiola and Implied Meters Before 1965*, by Brian Levy (2006), 'An Analysis of Polyrhythm in Selected Improvised Jazz Solos' from *Concert Music, Rock, and Jazz since 1945: Essays and Analytical Studies*, by Cynthia Folio (1995), and *Polyrhythm and Meter in Modern Jazz—A Study of the Miles Davis' Quintet of the 1960'ies (Danish)*, by Peter Vuust (2000). While these publications provided a background and clear framework for approaches to analysis, the only recent publications which properly informed the study were Ari Hoenig/Johannes Weidenmueller's publications *Intro To Polyrhythms Contracting and Expanding Time Within Form* (2009), *Metric Modulations Contracting and Expanding*

Time Within Form (2011), and Jerad Lippi's Masters thesis *Time Travels: Modern Rhythm Section Techniques as Employed by Ari Hoenig* (2008). These publications helped to further refine the devices and terms of the research, although the ideas presented by Hoenig, Weidenmueller and Lippi are expanded upon, and new considerations have been taken into account.

Publications relevant to the research that included discussions of both phrasing and polyrhythm (among many other considerations) were mainly DMA research projects based around the analysis of specific artists. Examples of this include: *An Analysis of the Development of Kenny Dorham's Jazz Improvisational Vocabulary*, by Timothy Malcolm Weir (DMA) (2006), *An Analysis of Joe Lovano's Tenor Saxophone Improvisation on "Misterioso" by Thelonius Monk: An Exercise in Multidimensional Thematicism*, by Andrew Richard Dahlke (DMA) (2003), and *An Analysis of the Major Aspects of Woody Shaw's Improvisatory Approach*, by Eric O'Donnell (MM [Jazz Performance]) (2009). Since my research is the first study on Hekselman's playing, and the first in-depth analysis of Abercrombie's, the research provides an obvious contribution to the discipline in this regard.

Taken as a whole, the current study draws taut the connection between primary and secondary research, transcription/analysis and performance. More importantly, it exemplifies the importance of performance based research, both at a personal and disciplinary level. The study provides a template for improvisational development, with particular reference to phrasing and polyrhythm, through the comprehensive practical application guide (Appendix Four: pp. 132-134). The publication of the Hekselman transcriptions (Volume Three: Appendix Seven: pp. 9-163), the first publications to examine his work, have also made a contribution to the broader knowledge of the discipline. These points, along with many other considerations are more thoroughly examined in the conclusion (pp. 118-121).

The four CD recordings in Volume Two: *Retrieval Structure, Abercrombie and Hekselman Duets, Perception, and Abercrombie and Hekselman Repertoire/Ari Hoenig Session*, are the main product of the research. The three chapters to follow present the results of the research, through the transcription, analysis, application and exploration of phrasing and polyrhythm, which informed and enhanced my personal performance practice. All devices are discussed within an intellectual framework that relates back to various relevant literature, and/or interviews with Hekselman, Abercrombie and Ari Hoenig. Transcriptions (including transcriptions of my own improvisations/compositions to illustrate the application of the devices), are an integral part of each chapter in the exegesis.

Chapter One: Phrasing

Phrase Displacement

Interestingly, the word 'displacement' does not exist in the *Oxford Companion to Music* (2002), the *Harvard Dictionary of Music (Second Edition)* (1970), or *Grove Music Online* (2013), although, it is a term regularly used in academic texts that analyse jazz improvisation, and a concept that jazz improvisers are well aware of. In fact, in an interview from the September 1994 issue of *Jazz Magazine*, pianist Herbie Hancock cited rhythmic displacement as the primary focus of his improvisations during his years with the Miles Davis Quintet (Waters, 1996: 19). In recent years displacements have been getting more complex, particularly in the way that rhythm sections interact, as the following example will demonstrate.

Figure 1.1 on the following page consists of two, four bar excerpts of Hekselman playing the melody of the A section to Jerome Kern's *The Way You Look Tonight*. When comparing these two A sections, one can clearly see that in the latter example, Hekselman displaces his phrasing of the melody two beats earlier than expected, giving the auditory illusion that beat 3 is the beginning of the phrase.

The image displays two musical examples of 'A' sections from 'The Way You Look Tonight'. Each example consists of two staves: a top staff with a treble clef and a bottom staff with a treble clef. In the first example, 'A Section no. 1', the top staff contains four measures of whole rests. The bottom staff shows a melodic line starting on F4, with a box labeled 'A' above the first measure. Chord transcriptions are placed above the bottom staff: F^Δ (with a downward arrow), Dm⁷ (with a downward arrow), Gm⁷ (with a downward arrow), and C⁷ (with a downward arrow). The second example, 'A Section no. 3', shows a similar structure. The top staff has four measures of whole rests, with a C⁷ chord transcription above the fourth measure. The bottom staff starts with a box labeled 'A' above the first measure, which contains a whole rest. The melodic line begins on F4 in the second measure. Chord transcriptions are placed above the bottom staff: F^Δ (with a downward arrow), Dm⁷ (with a downward arrow), Gm⁷ (with a downward arrow), and C⁷ (with a downward arrow). A slur is placed over the Gm⁷ and C⁷ chords in the bottom staff.

Figure 1.1: A comparison of A sections of *The Way You Look Tonight* (phrase displacement by 2 beats) Transcription by current author (except where indicated all transcriptions are by the current author)

The displacement is continued for the remainder of the form, as illustrated in Figure 1.2 on the following page. Interestingly, both the bass player and drummer pick up on the displacement and join in.

The image shows a musical score for 'The Way You Look Tonight' with three staves: Guitar, Bass, and Drums. The guitar staff at the top shows chords Gm7 and C7. The main score starts at measure 73, marked with a box containing 'A'. The guitar staff has chords FΔ, Dm7, Gm7, and C7. The bass staff shows a melodic line with accents on the first beat of each measure. The drum staff shows a simple pattern with accents on the first and third beats. Vertical arrows point to specific notes in the guitar and bass staves, and 'x' marks on the drum staff, indicating accents or downbeats. A bracket spans across measures 74 and 75 in the guitar staff, and another bracket spans across measures 75 and 76 in the bass staff, highlighting the phrase displacement.

Figure 1.2: *The Way You Look Tonight* (drum and bass interaction of phrase displacement)

As in the previous example, Hekselman begins his phrase displacement in bar 72 (top line). In bars 73 and 74 (the beginning of the third A section), the bass player and drummer are still accentuating beat one. Hekselman continues this idea (bars 74/75), while the bass player cuts out for one and a half bars. In bar 75, the drummer signals an obvious downbeat on three, lining up with the resolution of Hekselman's displaced phrase. By bar 76, the bass player has picked up on the displacement and all players (guitar, bass and drums) continue the displacement for the remainder of the form (albeit performing with a half-time feel), giving the auditory illusion that beat three has become beat one.

In the transcription that follows (Figure 1.3, bars 77-92) the displacement can be followed through for the remainder of the form. All players are obviously well aware of where beat one is, they are just interacting with Hekselman's displacement. This is clearly shown when they reach the interlude melody (bar 85, also included at the beginning of the work). All players come out in exactly the right place—accentuating once again beat one as the downbeat. A time code (hereafter TC), referencing a CD recording included in this submission is included in the footer of Figure 1.3, on the following page, in order to provide an aural representation of selected transcriptions.

The image displays a musical score for guitar, bass, and drums, organized into three systems. The first system (measures 77-81) features guitar parts with chords F^Δ, D⁷, Gm⁷, and C⁷. The bass line consists of quarter notes, and the drum part includes a hi-hat pattern. The second system (measures 81-84) continues with guitar chords Cm⁷, F⁷, B^{bΔ}, Gm⁷, and C⁷. The bass line uses half notes, and the drum part features a hi-hat pattern. The third system (measures 85-88) is labeled 'Interlude Riff' and includes guitar chords F⁶, Dm⁷, Gm⁷, C⁷, F^Δ, Dm⁷, Gm⁷, and C⁷. The bass line uses quarter notes, and the drum part includes a hi-hat pattern. A 'Solo Break' is indicated by a dashed line starting at measure 88. The fourth system (measures 89-92) features guitar chords Gm⁷, C⁷, and F⁶. The bass line uses quarter notes, and the drum part includes a hi-hat pattern.

Figure 1.3: (TC: Appendix Two: Track 1 [0:12-0:25]) Remainder of the form of *The Way You Look Tonight* (guitar, bass and drums)

Off beat syncopation

'Off beat syncopation' provided the genesis for the development of 'on/off phrasing' (pp. 24-29) and was derived from Hekselman's consistent use of long, continuous off beat lines. A crucial element of these lines is that the off beats are not phrased as such. Each note is held for its entire duration, connected seamlessly from one note to the next, giving the aural effect of an eighth note displacement. Figure 2.1 below shows one such example, extracted from Hekselman's performance of Ornette Coleman's *When Will the Blues Leave?*:

The image displays a musical score for the piece 'When Will the Blues Leave?' by Ornette Coleman. It consists of three staves of music, each with a treble clef and a key signature of one flat (B-flat major/D minor). The first staff starts at measure 21 and includes chords Gm7, C7, F7, D7alt., Gm7, and C7. The second staff starts at measure 25 and includes chords F7, Bb7, and F7. The third staff starts at measure 29 and includes chords Bb7, F7, Am7(b5), and D7alt. The music features a continuous line of eighth notes, many of which are placed on off-beats, creating a syncopated effect. The notes are connected by stems, and the overall feel is that of a steady, displaced eighth-note pulse.

Figure 2.1: *When Will the Blues Leave?* (off beat syncopation)

The submission recordings explore this device frequently, including organizing the off beat notes into various groupings. An example of this can be found in Figure 2.2 on the following page, taken from my improvisation (top line) over Hekselman's *Yo Mamma's Blues* (Volume Two: CD4: Disc One), which was constructed as a direct response to the off beat statement from the drums that preceded it (bottom line).

The image displays a musical score for 'Yo Mamma's Blues'. It consists of two systems of music. The first system features a treble clef staff with a key signature of one flat (Bb7) and a bass clef staff. The treble staff begins with a whole rest, followed by a sixteenth rest, and then a series of sixteenth notes grouped in sixes. Chords Eb7, Bb7, Dm7(b5), and G7alt. are indicated above the notes. The bass staff shows a rhythmic pattern of eighth notes and a 'Time:' section with diagonal slashes. The second system continues the six-note groupings in the treble staff with chords Cm7, F7, Bb7, Db7, Cm7, and F7. The bass staff continues with diagonal slashes.

Figure 2.2: *Yo Mamma's Blues* (off beat syncopation in six note grouping)

This device, frequently utilized by Hekselman, usually enhances group interaction and interplay, exciting the rhythm section to join the conversation. The transcription on the following page (Figure 2.3), taken from Hekselman's *Hello Who Is It?*, illustrates an example of this, where bass and drums metrically modulate to the tempo of the dotted quarter note (bars 56-60) in response to Hekselman's off beat syncopation (bars 54-60).

53 A^Δ Bm^7 $C^\sharp m^7$ Dm^7 G^7

57 C^Δ Dm^7 Em^7 $F^\sharp m^7$ B^7

61 E^Δ $B^\flat m^7$ $E^\flat 7$ $A^\flat \Delta$ Dm^7 G^7

65 C^Δ Dm^7 Em^7 $F^\sharp m^7$ B^7

a

Figure 2.3: (TC: Appendix Two: Track 2 [0:05-0:18]) *Hello Who Is It?* (band interaction showing dotted quarter note modulation)

The first example that was presented of Hekselman's off beat syncopation (Figure 2.1, p. 19: *When Will the Blues Leave?*), also includes band interaction, although this example only includes interaction between drums (bottom line) and guitar (top line). Bars 26-29 show the drums complimentary response to Hekselman, by copying the off beat syncopation he is employing (bars 23-39).

The musical score consists of three systems of staves. Each system includes a guitar staff (top), a bass staff (middle), and a drum staff (bottom).
 - **System 1 (Bars 21-24):** Chords are Gm7, C7, F7, D7alt., Gm7, and C7. The guitar part features off-beat syncopation. The drum part shows a complementary response with syncopated rhythms.
 - **System 2 (Bars 25-26):** Chords are F7 and Bb7. The guitar part continues with off-beat syncopation. The drum part mirrors the guitar's syncopation.
 - **System 3 (Bars 27-29):** Chord is F7. The guitar part continues with off-beat syncopation. The drum part continues to mirror the guitar's syncopation.

Figure 2.4: (TC: Appendix Two: Track 3 [0:03-0:16]) *When Will the Blues Leave?* (Ornette Coleman) (drum interaction with guitar)

29 B^b7

31 F⁷ Am^{7(b5)} D^{7alt.}

On closer inspection, it becomes apparent that the drums are not only copying the off beat syncopation, they are providing a slightly contrasting accompaniment, as the off beats are actually a displaced drum groove that outlines a 5/4 pattern.

Figure 2.5 below shows bars 26-30 of the drum part above, displaced back on the beat, in order to more easily display the 5/4 pattern employed.

5/4 5/4

Figure 2.5: *When Will the Blues Leave?* (5/4 displaced drum pattern)

On/off phrasing

As mentioned previously, off beat syncopation gave rise to the concept of on/off phrasing. This is achieved by Hekselman's exploitation of the relationship between on and off beats as a basis for building odd meter phrases. The simplest skeletal examples of this concept (two on, two off [5/4] – three on, three off [7/4] – and four on, four off [9/4]) have been included below:

The figure shows three musical examples of on/off phrasing. Each example consists of a treble clef staff with a time signature and a sequence of notes. Above the staff, a horizontal line indicates the phrasing, with 'on' and 'off' labels above it. The first example is in 5/4 time, with two 'on' beats followed by two 'off' beats. The second example is in 7/4 time, with three 'on' beats followed by three 'off' beats. The third example is in 9/4 time, with four 'on' beats followed by four 'off' beats. The notes are mostly quarter notes, with some eighth notes and rests.

Figure 2.6: On/off phrasing examples

Examples of this can be found throughout Hekselman's improvisations, as the following three figures, transcribed from his *Purium* and *Flower* show:

The figure shows a musical example of 5/4 on/off phrasing. It consists of a treble clef staff with a 5/4 time signature. Above the staff, a horizontal line indicates the phrasing, with 'on' and 'off' labels above it. The notes are mostly quarter notes, with some eighth notes and rests. The phrasing is divided into two 5/4 measures. The first measure has two 'on' beats followed by two 'off' beats. The second measure has two 'on' beats followed by two 'off' beats. The notes are mostly quarter notes, with some eighth notes and rests. The phrasing is divided into two 5/4 measures. The first measure has two 'on' beats followed by two 'off' beats. The second measure has two 'on' beats followed by two 'off' beats. The notes are mostly quarter notes, with some eighth notes and rests. The phrasing is divided into two 5/4 measures. The first measure has two 'on' beats followed by two 'off' beats. The second measure has two 'on' beats followed by two 'off' beats. The notes are mostly quarter notes, with some eighth notes and rests.

Figure 2.7: *Purium* (5/4 on/off phrasing)

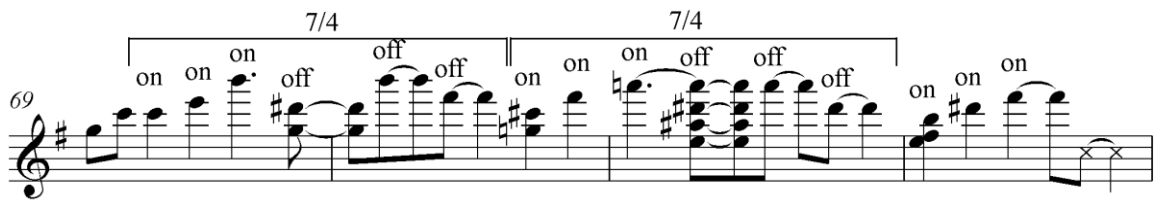


Figure 2.8: *Flower* (7/4 on/off phrasing)

Figure 2.9: *Purium* (9/4 on/off phrasing)

Hekselman uses this device to create more complex phrases by varying the rhythm of each respective on/off fragment. This is achieved through the construction of a specific rhythmic sequence, which is performed on the beat, and then the exact same rhythm repeated off the beat. The following examples, again drawn from improvisations over his own compositions, showcase this:

Figure 2.10: *Summer of Laugh's and Tears* (5/4 on/off phrasing)



Figure 2.11: Rhythmic summary of Figure 2.10

A larger, more complex example of this device can be seen below in Figure 2.12:

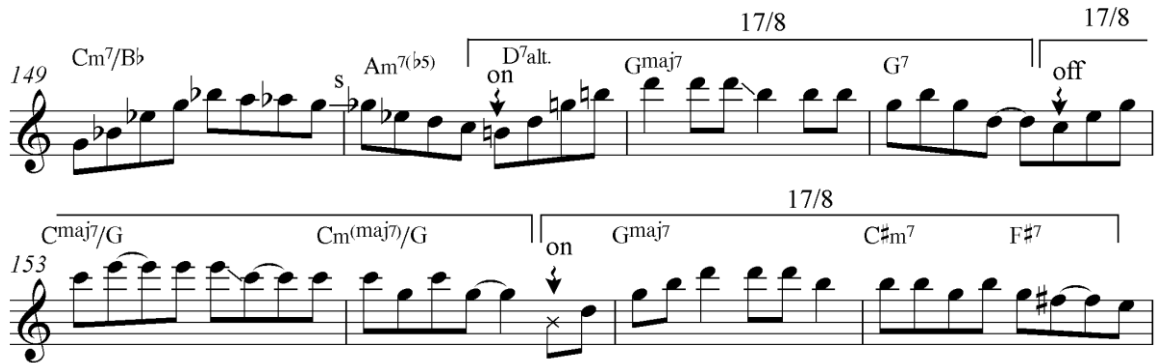


Figure 2.12: *Purium* (17/4 on/off phrasing)



Figure 2.13: Rhythmic summary of Figure 2.12

Though essentially a displacement, this concept is the basis of the phrase structure of many of Hekselman's improvised ideas. It can also be found in use as a compositional device, including the title track to his most recent release, *This Just In* (2013).



Figure 2.14: *This Just In* (bass line)

The same basic idea is used by Hekselman in a more general sense, in his arrangement of John Coltrane's *Countdown*, shown on the following page. A recording of my performance of this arrangement can be found in Volume Two: CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 1. Many other examples of this device can be found throughout the submission recordings, notably on *Particular*, *Peculiar*, from CD3: *Perception*.

Countdown

John Coltrane Arranged Gilad Hekselman

Transcribed Quentin Angus 2012

Fast Jazz ♩ = 240

1 Em7 F7 Bbmaj7 Db7 Gbmaj7 A7alt Dmaj7

5 Dm7 Eb7 Abmaj7 B7 Emaj7 G13 Cmaj7

9 Cm7 Db7 Gbmaj7 A13 D6 F7 Bbmaj7 TO CODA

13 Em7 F7 Bbmaj7(#11) A7(#5)

Drum Solo: Play Twice, then Open

17 Em7 F7 Bbmaj7 Db7 Gbmaj7 A7alt Dmaj7

21 Dm7 Eb7 Abmaj7 B7 Emaj7 G7alt Cmaj7

25 Cm7 Db7 Gbmaj7 A7 Dmaj7 F7alt Bbmaj7

29 Em7

Figure 2.15: (TC: Volume Two: CD4 : Disc One: *Abercrombie and Hekselman Repertoire*, Track 1) *Countdown* arrangement

When asked about my conceptualization of his on/off phrasing, Hekselman stated:

The on/off concept you [Current Author] have developed could be thought of as a displacement, or I also think of it as dividing the bar in half. Then it can also sound like two against the underlying time. My arrangement of *Nothing Personal* does exactly that (Hekselman, 2012: personal communication).

Made famous by Michael Brecker's performances of it, Don Grolnick's *Nothing Personal* is originally in common time.

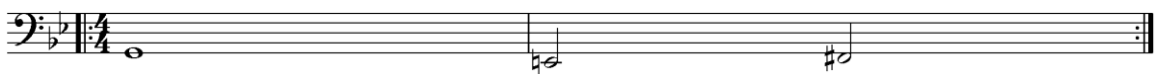


Figure 2.16: *Nothing Personal* (bass line)

Hekselman's arrangement uses the same bass line, but transferred to 5/4, using the concept of dividing the bar in half (on/off phrasing), giving the composition a completely different sound and feel.



Figure 2.17: *Nothing Personal* (bass line of Hekselman's arrangement)

Obscuring Hierarchical Structures

Symmetry

Before discussing this category, some further background information will be presented, beginning with a quote from Leonard Bernstein's *The Unanswered*

Question: Six Talks at Harvard (1976):

Symmetry... is a universal concept, based on our innate symmetrical instincts, which arise from the very structure of our bodies. We are symmetrically constituted, dualistically constituted, in the systole and diastole of our heartbeats, the left-rightness of our walking, the in-and-outness of our breathing... This dualism invades our whole life, on all levels: in our actions (preparation/attack, tension/release) and in our thinking (good and evil, yin and yang)... and all [of] these find musical expression in such oppositions as downbeat versus upbeat, half note versus quarter note, and especially in the elementary musical structure principle of $2+2=4+4=8+8=16$ (Bernstein, 1976: 91)

As suggested by Bernstein, music obeys this symmetrical structure principle (of $2+2=4$, etc) and many studies have been made on the structures present in music. It is common knowledge that in common time, beats 1 and 3 are strong while 2 and 4 are weak (Waters, 1996: 22).



Figure 3.1: Strong and weak beats

This concept can be extended to bars, again 1 and 3 being strong and 2 and 4 being weak. This is the structure of the common four bar phrase, illustrated in Figure 3.2 on the following page.

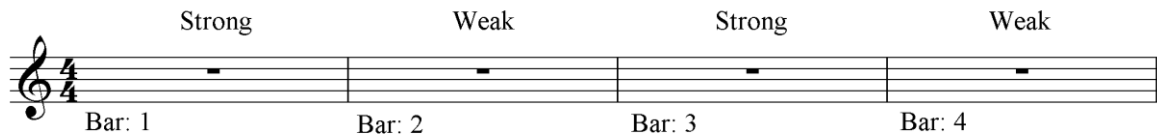


Figure 3.2: Strong and weak bars

Metrical hierarchy

Lerdahl and Jackendoff, in *A Generative Theory of Tonal Music* (1983) take this concept involving macro structures further and discuss how metrical hierarchy is upheld at higher levels. The term 'hypermeter' is used when analysing structures in such a manner, allowing for large structures to be represented by a reduction to a one measure example, coined a 'hypermeasure'. The larger symmetrical bar groupings which make up these extended structures are labelled 'hyperbeats'. This highlights the fact that symmetrical structures operate on far higher levels than the common four and eight bar phrase, as Figure 3.3 below displays (Lerdahl/Jackendoff, 1983: 27).

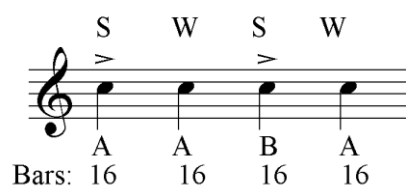


Figure 3.3: Strong and weak 'hyperbeats' for the standard AABA jazz form

Obscuring hierarchical structures

Phrasing in a way that adheres to the aforementioned underlying symmetrical structures is something that Hekselman and Abercrombie certainly do, although interest is created when they do not. This can be achieved through obscuring hierarchical structures by playing over them. The following example shows two choruses of Hekselman's improvisation over his *Yo Mamma's Blues*, clearly obscuring the transition from one chorus to the next (bars 119-123):

The musical score consists of six staves of music in G minor. The first staff (bars 109-112) features chords B^b7, E^b7, B^b7, and (B^b7^{alt}). The second staff (bars 113-116) features chords E^b7, B^b7, D^ø, and G^{7alt}. The third staff (bars 117-120) features chords Cm⁷, F⁷, B^b7, G^{7alt}, Cm⁷, and F⁷. The fourth staff (bars 121-124) features chords B^b7, E^b7, B^b7, and (B^b7^{alt}). The fifth staff (bars 125-128) features chords E^b7, B^b7, D^ø, and G^{7alt}. The sixth staff (bars 129-132) features chords Cm⁷, F⁷, B^b7, G^{7alt}, Cm⁷, and F⁷. The score includes various rhythmic patterns, including triplets and slurs, and a key signature of one flat.

Figure 3.4: (TC: Appendix Two: Track 4 [0:05-0:24])
Yo Mamma's Blues (obscuring hierarchical structures)

In contrast to this example of Hekselman, Timothy Weir, in his DMA dissertation *An Analysis of the Development of Kenny Dorham's Jazz Improvisational Vocabulary* (2006) describes a very different approach to creating improvisatory material that overlaps hierarchical structures:

Although Dorham demonstrates the use of phrases longer than four measures, he continues to delineate the overall form of each chorus. While he may play a phrase that overlaps from one section to the next, he is consistent in presenting material that distinguishes each section. To avoid any possible ambiguity of form he outlines each new section by playing strictly diatonically (Weir, 2006: 48).

The previous example (Figure 3.4, p. 32) not only shows melodic material taken over an important hierarchical structure (as Weir explains in relation to Dorham's playing), Hekselman's improvised line does not outline the underlying harmony, nor does it outline the form melodically or rhythmically. The line (bars 119-123) is based on the interval of a perfect fourth, and is transposed down in tones, with a quite irregular rhythmic pattern. It bears no obvious relationship to the underlying structure, and hence creates an ambiguity of form by obscuring a hierarchical structure.

Hierarchical Polyrhythms

Through the research process, it became apparent that polyrhythms can be constructed with the aforementioned 'hyperbeats', from Lerdahl and Jackendoff's *A Generative Theory of Tonal Music* (1983).

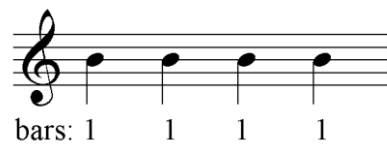


Figure 4.1: 'Hyperbeats' (reducing each bar to a single beat)

The concept of 'hyperbeats' has been used here to conceptualize polyrhythms at larger hierarchical structures. This can be achieved by grouping the 'hyperbeats' themselves into different polyrhythmic patterns. The example below shows a 3/4 over 4/4 polyrhythm at the hierarchical level of bars:

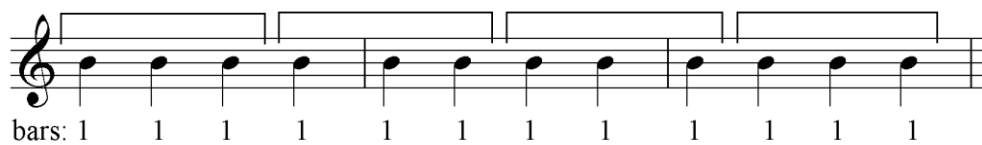


Figure 4.2: 3/4 over 4/4 with 'hyperbeats'

To give another visual representation of this, if the same example (Figure 4.2, p. 34) was presented without the use of 'hyperbeats', it would look like this:

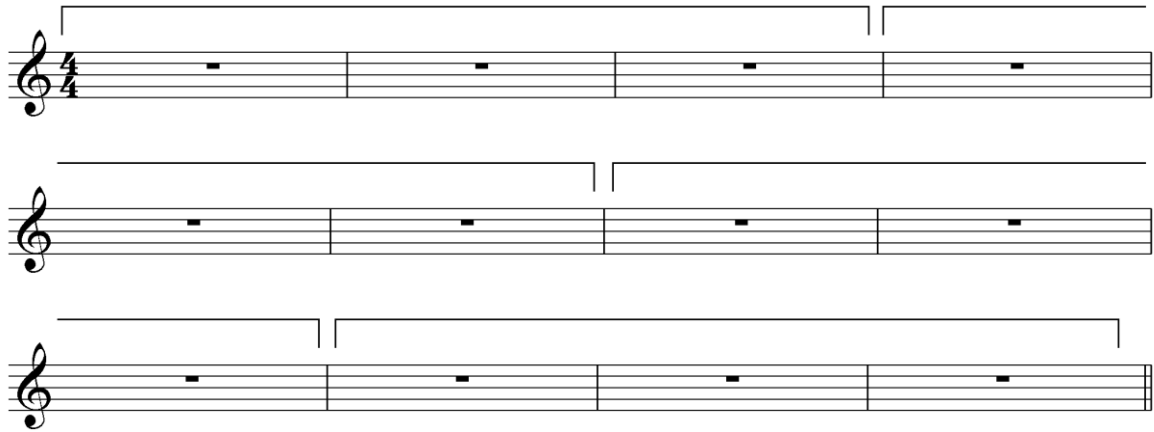


Figure 4.3: 3/4 polyrhythm of 'hyperbeats' re-expressed as bar lengths

At this hierarchical level, rather than a polyrhythm, a better practical conceptualization of this approach would be to think of it as an interesting approach to phrasing. During improvisation, this would mean the organisation of melodic material into large, three bar structures (such as Figure 4.3 above) that do not follow the natural form, phrase structure, or harmony of a song. An example of this in an improvisation of Hekselman's (from his *One More Song*) is provided on the following page.

The image displays a musical score for the song "One More Song" in 3/4 time, featuring a 3/4 hierarchical polyrhythm. The score is divided into four staves, each containing a 3-bar phrase. The first staff (measures 181-183) is marked with a Cm^7 chord. The second staff (measures 185-187) continues the melodic line. The third staff (measures 189-191) is marked with a $C7(b9)$ chord. The fourth staff (measures 193-195) is marked with an Fm/C chord. Each phrase is indicated by a bracket and the text "3 Bar Phrase".

Figure 4.4: (TC: Appendix Two: Track 5 [0:05-0:18]) *One More Song* (3/4 hierarchical polyrhythm)

General Asymmetry in Phrasing

An observation made through the transcription and analysis phase of the research was that Abercrombie and Hekselman, even when not exploiting a specific, categorizable device, improvise with a level of freedom and abandon that previous generations of jazz guitarists simply did not.

Abercrombie shares an insight into how this approach to phrasing may have evolved:

I played a lot of music that had no meter, and that obviously influences the way you play. I started with people like Jack DeJohnette and Dave Holland, and we'd play a little melody, usually just a melody and bass line, and after that you were completely free. You could play in the tempo of the song, or anywhere you wanted. There were no rules. This will also influence the way you play a standard song, or something with a with a structure, one influences the other, and playing structurally influences free playing, because if you improvise freely without any coherent matter, then it would just sound weird (Abercrombie, 2010: personal communication).

Given that this approach to improvisation is a major stylistic development for jazz guitar, it has been included in the study and categorized as a device, simply coined 'general asymmetry in phrasing'.

In order to express this point, the following pages compare the phrase structure of Abercrombie and Kenny Burrell.

Both examples are taken from improvisations over the blues form, with Kenny Burrell's improvisation following a typical antecedent/consequent (question/answer) phrase structure, shown in Figure 5.1 on the following page.

Chitlins Con Carne

Transcribed Quentin Angus 2009

Kenny Burrell

♩ = 130

The musical score is written in 4/4 time with a tempo of 130 beats per minute. It consists of eight staves of music. The first staff shows a 'Question' phrase starting at measure 3. The second staff shows an 'Answer' phrase starting at measure 5, followed by another 'Question' phrase. The third staff shows an 'Answer' phrase starting at measure 9, followed by 'etc.' The fourth staff shows an 'Answer' phrase starting at measure 13, followed by a 'Question' phrase. The fifth staff shows an 'Answer' phrase starting at measure 17, followed by a 'Question' phrase. The sixth staff shows an 'Answer' phrase starting at measure 21, followed by a 'Question' phrase. The seventh staff shows an 'Answer' phrase starting at measure 25, followed by a 'Question' phrase. The eighth staff shows an 'Answer' phrase starting at measure 29. The score includes various musical notations such as rests, eighth notes, sixteenth notes, triplets, and accidentals. Chord symbols (C7, F7, G7) are placed above the staff. Measure numbers (5, 9, 13, 17, 21, 25, 29) are placed at the beginning of each staff. Labels 'Question' and 'Answer' are placed above the staff to indicate the structure of the improvisation. The word 'etc.' is used to indicate a continuation of the pattern.

Figure 5.1: *Chitlins Con Carne* (Kenny Burrell)

If this improvisation were to be represented to showcase the underlying phrase structure, as provided on the following page (Figure 5.2), the symmetry is obvious and easily recognizable.

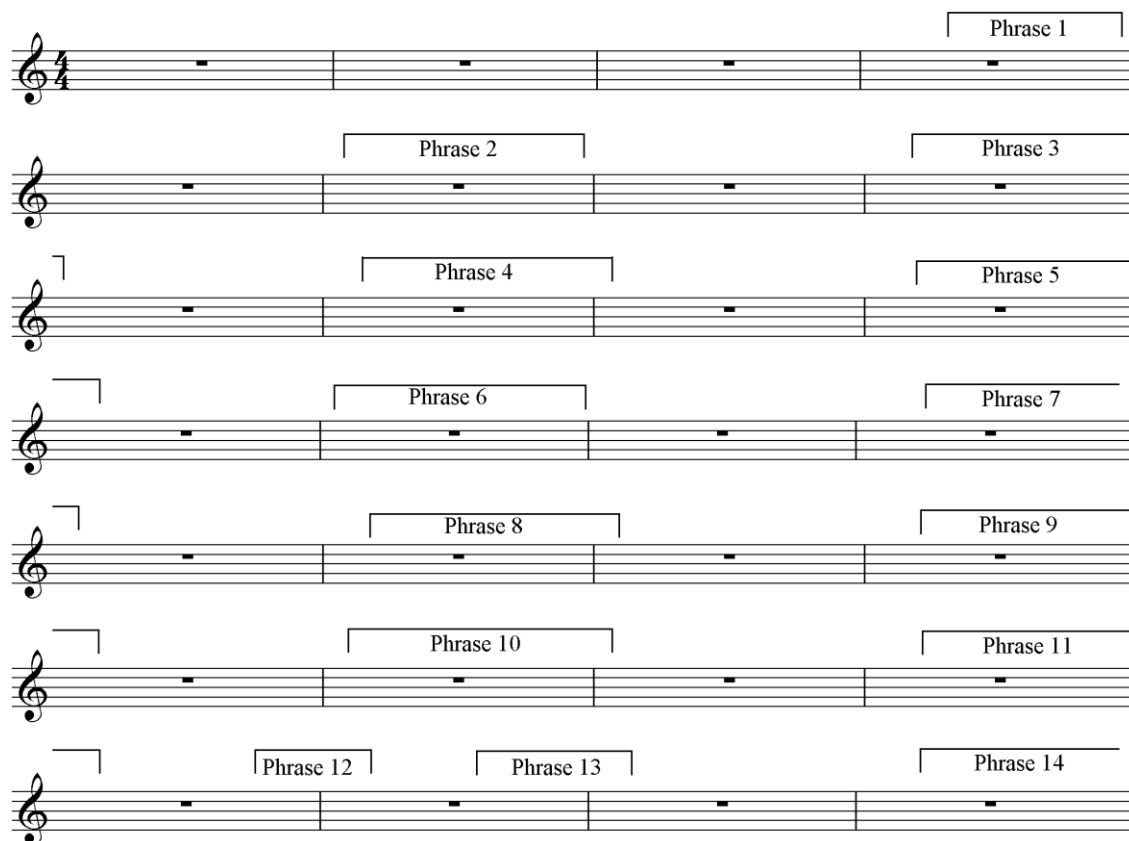


Figure 5.2: *Chitlins Con Carne* (phrase structure)

Comparing this to the first three choruses of an improvisation by Abercrombie over John Coltrane's *Bessie's Blues*, which is also a standard (12 bar) blues form, a very different, asymmetrical pattern emerges (Figure 5.3 on the following page).

Phrase 1 (5 Bars)

Phrase 2 (3 Bars)

Phrase 3 (1 Bar)

Phrase 4 (4 Bars)

Phrase 5 (4 Bars)

Phrase 6 (4 Bars)

Phrase 7 (1 Bar)

Phrase 8 (4 Bars)

Phrase 9 (3 Bars)

Phrase 10 (3 Bars)

Phrase 11 (6 Bars)

Phrase 12 (3 Bars)

Phrase 13 (4 Bars)

Figure 5.3: *Bessie's Blues* (Abercrombie's phrase structure)

Chapter One Summary

The preceding transcriptions and analyses explored the various phrasing devices listed at Appendix Four (pp. 132-134). Although the main transcriptions presented were of Hekselman and Abercrombie, all of the devices discussed have been incorporated into my performances and can be found on the submission recordings (Volume Two).

General asymmetry in phrasing can be heard in my improvisations over Hekselman's *Yo Mamma's Blues*, and Coltrane's *Countdown* (CD4: Disc One: Tracks 1, 7), and hierarchical polyrhythms are also utilized on *Yo Mamma's Blues*. Obscuring hierarchical structures, phrase displacement, and in particular off beat syncopation and on/off phrasing, are integral parts of almost all of my improvisations and/or compositions on the submission recordings. The following chapter shifts in focus from phrasing to polyrhythm, presenting material in a similar manner through the presentation of transcriptions and analysis.

Chapter Two: Polyrhythm

Chapter Two, the longest and most involved chapter of this exegesis, explores devices from the polyrhythm section of the practical application list (Appendix Four). Although transcriptions of Hekselman and Abercrombie are used to help explain the intellectual framework behind each device, the main focus of this chapter is transcribed extracts from my improvisations and compositions, included in the submission recordings (Volume Two).

Metric Modulation

Similar to the term 'displacement' (discussed on p. 14), a definition of metric modulation does not appear in the *Harvard Dictionary of Music (Second Edition)*, however, the *Oxford Companion to Music* describes it as:

A technique introduced by Elliott Carter, by which changing time signatures effect a transition from one meter to another, just as a series of chords can effect a harmonic modulation from one key to another (Latham, 2002: 769).

While this definition describes a classical composer with what Marc Hannaford describes as a 'highly developed rhythmic language' (Hannaford, 2012: ii), definitions of metric modulation and its near neighbour, 'superimposed metric modulation', relevant to this study are adopted from Ari Hoenig and Johannes Weidenmueller's *Contracting and Expanding Time Within Form*:

'Metric Modulation' signifies changing the tempo of a piece so that the new tempo has some kind of mathematical relation to the original tempo. This is achieved by making a note value from the first tempo equivalent to a note value in the second.

The definition of a 'Superimposed Metric Modulation' is simply applying a 'Metric Modulation' over a form, in which the original harmonic structure and time feel stay intact. Therefore we are actually superimposing one time feel or pulse over another (Hoenig/Weidenmueller 2009: 4).

Since both these definitions are expressing the same concept, albeit one relating to an underlying form and the other not, the generic term 'metric modulation' will be used to describe all examples in this study.

Hekselman and Abercrombie employ metric modulation throughout their improvisations, and also use the device compositionally. As is shown below, I have identified nuances in the ways in which metric modulation is employed, according to the following subheadings: compositional metric modulations, improvised metric modulations and implied metric modulations.

Compositional metric modulations

Compositional metric modulations are pre-planned metric modulations. This includes either an actual shift in tempo (Hoenig/Weidenmueller's 'metric modulation'), or a modulation within the framework of a form ('superimposed metric modulation').

An example of this is included on the following pages, in Hekselman's composition *The Bucket Kicker*. Bars 8-12 of the composition metrically modulate to the tempo of every fifth eighth note. This is achieved by the bass playing every fifth eighth note (bottom line), while the drums play a swing pattern based off of the superimposed time (outlined above the staff). The melody of the work (top line) is also phrased in the superimposed time during bars 8-10, but in bar 11, the melody outlines the original time to signify the return of the previous tempo. My performance of this composition is included on CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 3.

The Bucket Kicker

Transcribed Quentin Angus 2013

Gilad Hekselman

Medium Up Swing ♩ = 230

5

9

13

17

Cm^7 F^7 $B\flat maj^7$

Figure 6.1: (TC: Volume Two: CD4: Disc One: Abercrombie and Hekselman Repertoire, Track 3) *The Bucket Kicker*

21

25

29

Improvised metric modulation

Improvised metric modulations are the same as compositional metric modulations, although they occur spontaneously. They are un-planned modulations that show an advanced level of interaction within the rhythm section.

An example of this type of metric modulation is provided on the following page, and has been taken from an improvisation of Hekselman's over Sammy Cahn's *I Should Care*, from his debut album *Splitlife* (2006).

In bar 59, Hekselman begins phrasing off of the quarter note triplet pulse, and interestingly, both Joe Martin (bass), and Ari Hoenig (drums), join Hekselman in the new, superimposed tempo in the exact same place. This occurs on the third triplet of beat two, in bar 60. The modulation is continued from bars 60-63, followed by a transitional bar (64), before eventually returning to the original tempo at bar 65.

The image displays a musical score for the piece "I Should Care" (improvised metric modulation), spanning measures 58 to 64. The score is arranged in three systems, each containing three staves: Treble Clef (top), Bass Clef (middle), and Drum Set (bottom). The key signature is one flat (B-flat major / D minor).

- System 1 (Measures 58-59):**
 - Measure 58:** Treble clef features a triplet of eighth notes (G4, A4, B4) followed by a triplet of eighth notes (C5, B4, A4). Bass clef has a quarter note G2, a quarter note F2, and a quarter note E2. Drum set has a quarter note G, a quarter note D, and a quarter note C.
 - Measure 59:** Treble clef features a triplet of eighth notes (B4, C5, B4) followed by a triplet of eighth notes (A4, G4, F4). Bass clef has a quarter note D2, a quarter note C2, and a quarter note B1. Drum set has a quarter note G, a quarter note D, and a quarter note C.
- System 2 (Measures 60-61):**
 - Measure 60:** Treble clef features a triplet of eighth notes (F4, G4, A4) followed by a triplet of eighth notes (B4, C5, B4). Bass clef has a quarter note G2, a quarter note F2, and a quarter note E2. Drum set has a quarter note G, a quarter note D, and a quarter note C.
 - Measure 61:** Treble clef features a triplet of eighth notes (A4, B4, C5) followed by a triplet of eighth notes (B4, A4, G4). Bass clef has a quarter note D2, a quarter note C2, and a quarter note B1. Drum set has a quarter note G, a quarter note D, and a quarter note C.
- System 3 (Measures 62-64):**
 - Measure 62:** Treble clef features a triplet of eighth notes (G4, A4, B4) followed by a triplet of eighth notes (A4, G4, F4). Bass clef has a quarter note G2, a quarter note F2, and a quarter note E2. Drum set has a quarter note G, a quarter note D, and a quarter note C.
 - Measure 63:** Treble clef features a triplet of eighth notes (F4, G4, A4) followed by a triplet of eighth notes (B4, C5, B4). Bass clef has a quarter note D2, a quarter note C2, and a quarter note B1. Drum set has a quarter note G, a quarter note D, and a quarter note C.
 - Measure 64:** Treble clef features a triplet of eighth notes (B4, C5, B4) followed by a triplet of eighth notes (A4, G4, F4). Bass clef has a quarter note G2, a quarter note F2, and a quarter note E2. Drum set has a quarter note G, a quarter note D, and a quarter note C.

Chord progressions are indicated above the treble clef: Cmaj7 (58), Bm7(b5) (59), E7 (60), Am7 (61), D7 (62), Dm7 (63), G7 (64), Cmaj7 (64), F7 (64), Em7 (64), and A7 (64). The drum set part includes the instruction "w brushes" in measure 58 and "w sticks" in measure 64. A sixteenth-note triplet is marked with a "6" in measure 64.

Figure 6.2: (TC: Appendix Two: Track 6 [0:03-0:18]) *I Should Care* (improvised metric modulation)

The image shows a musical score for three staves (treble, bass, and guitar) covering measures 66 to 68. Measure 66 features a Dm7 chord with a soloist (s) playing a triplet of eighth notes in the treble staff, while the bass and guitar provide accompaniment with triplets. Measure 67 continues with G7, Em7, and A7 chords, with the soloist playing eighth notes and the guitar using a triplet. Measure 68 features Dm7, G7, and Cmaj7 chords, with the soloist playing a complex rhythmic pattern of eighth notes and the guitar using a triplet.

Implied metric modulation

Implied metric modulations are the same as improvised metric modulations in that they occur spontaneously, although they do not include interaction from the rhythm section. The soloist is the only band member suggesting the modulation.

Some short examples of Hekselman using this device are provided on the following pages (see Figures 6.3-6.5):

The image shows a musical score for two staves (treble and bass) covering measures 39 to 41. Measure 39 features a Gm7 chord with a soloist (s) playing a series of eighth notes in the treble staff, while the bass provides accompaniment. Measure 40 features a C7(b9) chord with a soloist (s) playing a series of eighth notes in the treble staff, while the bass provides accompaniment. Measure 41 features an Fmaj7 chord with a soloist (s) playing a series of eighth notes in the treble staff, while the bass provides accompaniment with triplets.

Figure 6.3: *April in Paris* (Vernon Duke) (implied metric modulation to the dotted quarter note)

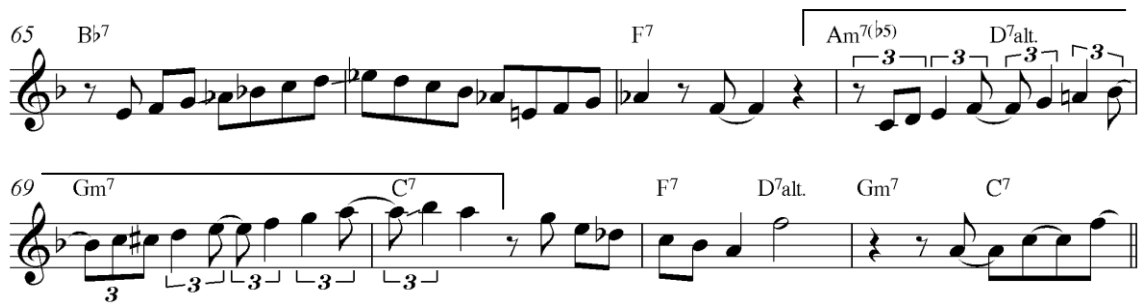


Figure 6.4: *When Will the Blues Leave* (Hekselman) (implied metric modulation to the quarter note triplet)



Figure 6.5: *Time After Time* (Sammy Chan) (implied metric modulation of 10 over 7)

When discovered, the final example (6.5 above) gave rise to two different devices. One is related to tuplet note groupings (discussed pp. 66-69), while also providing a doorway into understanding more complex metric modulations.

Figure 6.5 (above), an example of 10 over 7, is mathematically speaking the accenting of every seventh dectuplet.

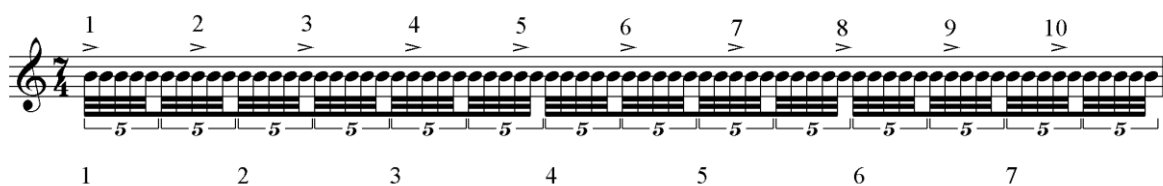


Figure 6.6: *Time After Time* (accenting every seventh dectuplet creating 10 over 7)

When discussing this modulation with Hekselman, he stated that:

It is on purpose, but it just happens to be that rhythm. I don't think those notes are exactly even, I would say it's just a phrasing thing. I probably picked it up from playing with other people (Hekselman, 2012: personal communication).

Even though Hekselman does not seem to be conscious of this particular example, he is correct that the notes are not ‘exactly even’, that it is a ‘phrasing thing’, and that he picked it up from playing with other people. It seems most likely that he picked up the technique from his extensive work as a sideman with Ari Hoenig.

Through listening to Hekselman performing with Hoenig during his Monday night residency at *Smalls Jazz Club* (NYC), it became apparent that shifting between 5 over 7 and 7 over 5 was a language that they had developed and used regularly.

A more accurate description for this type of modulation (10 over 7, Figure 6.6) would be 5 over 7, which is mathematically speaking, accenting every seventh quintuplet:

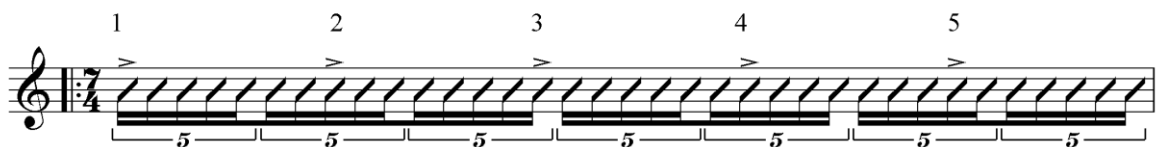


Figure 6.7: *Time After Time* (accenting every seventh quintuplet creating 5 over 7)

Accenting every seventh dectuplet, or rather 10 over 7 (as with the previous Hekselman example), would simply be playing eighth notes at this new superimposed tempo. Though this way of thinking (accenting every seventh quintuplet), or the opposite for 7 over 5, accenting every fifth septuplet (Figure 6.8 below), does not provide an easy way to actually apply the modulation in a performance setting.



Figure 6.8: Accenting every fifth septuplet creating 7 over 5

As Gilad's previous statement suggests 'I don't think those notes are exactly even', and after discussing a practical solution to this modulation with Ari Hoenig, my observations of how they were actually thinking about the transition between each time zone was confirmed. The practical application of the modulation is based around a simple clave, included below:

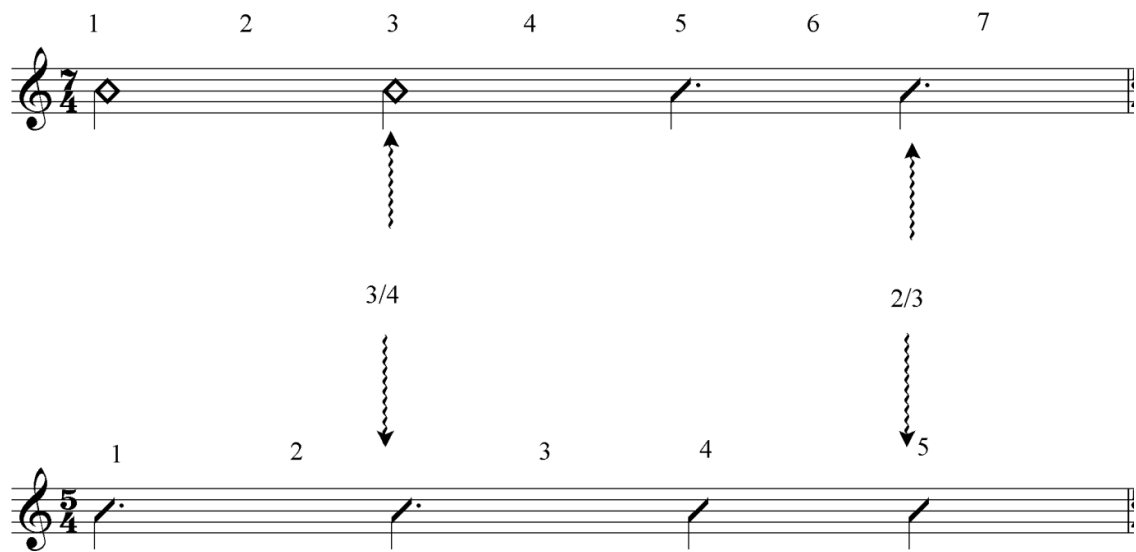


Figure 6.9: 7 over 5 and 5 over 7 clave

As evident in the above example, Hoenig's practical solution is to keep the same clave for both time zones, even though the mathematical relationships of the first part and second part of the bar ($3/4$ and $2/3$) are not the same. At a medium/fast tempo this fractional ambiguity is almost imperceptible, and certainly is a better solution than thinking of every seventh quintuplet as the new tempo. It is so unnoticeable in fact, that Hoenig discovered this modulation purely by chance:

I discovered that the relationship worked pretty well when I was playing a tune with Jean Michel [Pilc], we were sound checking and he started playing a tune and I joined in. When we stopped I said 'were you playing in five?' and he replied 'no, I was playing in seven'. Neither of us realized that we were playing in different time signatures; we were just playing off of the basic clave [included above]. I still noticed something was not quite lining up, and when we discussed it we realized what it was. But from then on, I knew that I could move between

them quite seamlessly, and incorporated it into my playing (Hoenig, 2013: personal communication).

Although Hoenig is an advocate of the mathematically incorrect practical solution to this modulation, he is still well aware of the actual relationship of the tempos:

When I first started doing 7 over 5, I would think of it as 4 over 3 and 3 over 4 [which splits the bar in two], even though the tempo of each is not exact. I knew that the 4 over 3 was a little faster and would play it that way. I think it's important to have both. To understand the mathematics of it, and how it works, but also to have a practical way of actually using the technique in an improvised manner. A way that you can really hear it (Hoenig, 2013: personal communication).

This way of thinking turns a complex modulation into something that is easily achievable and a viable option for use in an improvised setting.

Figure 6.10 on the following page shows how this modulation has been applied to the submission recordings. This particular modulation is also implied and utilized by the band during the improvisation and 'head out' sections in the recording of my arrangement of *All the Things You Are* (Jerome Kern). This can be found on CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 5.

All The Things You Are

Jerome Kern

Arranged Quentin Angus

Fast Jazz ♩ = 250

Intro (Open Vamp)

The musical score is written in treble clef and consists of five staves. The first staff begins with a key signature of one flat (Bb) and a 7/4 time signature. Above the staff, the chord $D\flat 7(\sharp 9)$ is indicated. The melody consists of eighth and quarter notes. The second staff continues the melody, with a $D\flat 7(\sharp 9)$ chord above the first measure and a $C 7(\sharp 9)$ chord above the second measure. The third staff features a more rhythmic pattern with eighth notes, still with $D\flat 7(\sharp 9)$ and $C 7(\sharp 9)$ chords. The fourth staff shows a '5 over 7 Metric Modulation', where the time signature changes to 5/4. The melody continues with eighth notes. The fifth staff is a 'Tag' in 7/4 time, starting with an $F m 7$ chord and ending with a double bar line. Above this staff, the text reads: 'Melody and solos in 7/4... end with Tag up a tone (Bbm7 Eb7/ Cm7 F7/ Bbm7 Eb7/ Abmaj7)'. The key signature changes to two flats (Bb) for this section.

Figure 6.10: (TC: Volume Two: CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 5) *All the Things You Are* (5 over 7 and 7 over 5)

The original example of this metric modulation (Figure 6.5, p. 48 [10 over 7]), can also be heard in Hoenig's improvisation over my original composition *Happy*, from Volume Two: CD4: Disc Two: *Ari Hoenig Session*, Track 1 (1:49-1:52).

Following this discovery of mathematically incorrect modulations, I decided to explore the concept of creating metric modulation illusions in a compositional context. An example of this is a 4 over 5 metric modulation illusion, which can also be heard on *Happy* (CD4: Disc Two: *Ari Hoenig Session*). Technically speaking, 4 over 5 is achieved by accenting every fifth sixteenth note:



Figure 6.11: Accenting every fifth sixteenth note (4 over 5)

Similar to Hoenig's conceptualization of 7 over 5 and 5 over 7 (p. 50), *Happy* achieves the auditory illusion of a 4 over 5 metric modulation, using the clave rhythm included below in Figure 6.12.



Figure 6.12: Clave to create 4 over 5 illusion

Bars 69-98 of *Happy*, along with a time code, have been provided on the following page to illustrate this (Figure 6.13), with the metric modulation illusion taking place in bars 81-83.

If the fractional relationship between each note remains rudimentary ($3/4$ or $2/3$), as with Figure 6.9 (p. 50), or Figure 6.12 (above), the human brain seems to accept the slight ambiguity, and the modulation illusion is easily achieved. This could be due to the fact that the listener perceives the new tempo as being swung, or that at a fast tempo, the notes are close enough, in the same way that the simpler the mathematical relationship to the fundamental in the harmonic series, the more harmonious. We are

also very used to digesting these simple fractions aurally. The hemiola polyrhythm in fact permeates almost all jazz recordings made in the past century (discussed p. 70).

69 $A\flat/C$ $B\text{maj}7(\#11)$ $A\text{maj}7(\#11)$ $B\flat m11$

72 $A\flat m7$ $E\flat/G$ $F\sharp m6$

75 $Cm7(\flat6)$

78 No Drums:

81 4 over 5 Metric Modulation Illusion:

84 Back to Regular Time:

87

91

95

Figure 6.13: (TC: Volume Two: CD4: Disc Two: *Ari Hoening Session*, Track 1 [2:00-2:40]) *Happy* (Current Author) (4 over 5 illusion)

By contrast, Figure 6.14 on the following pages shows use of a mathematically sound compositional metric modulation in *Outro*, another original work of mine (CD4: Disc

Two). In bars 15-16 (the B section), the band modulates to the tempo of every fourth sixteenth note triplet (implied by the melody line). This quickly resolves (end of bar 16), and is then repeated (bars 7-18), before returning to the original tempo at bar 19.

NO DRUMS

The musical score consists of six systems of piano and bass staves. The first system (bars 12-13) is marked '*NO DRUMS*' and 'N/C (Piano and Bass double bass line)'. It features a melody of eighth notes with triplets indicated by a '3' and a bracket. The second system (bar 14) is a 'DRUM FILL' with a wavy line above the staff and a dynamic marking of *f*. The third system (bar 15) is the start of the 'ENSEMBLE HITS' section, marked with a box containing the letter 'B'. It features a melody of eighth notes with triplets and a dynamic marking of *mf*. The bass line includes chords *Cm7* and *Am7(b5)*. The fourth system (bar 16) continues the melody with triplets and includes chords *Ab7* and *B/G*. The fifth system (bar 17) continues the melody with triplets and includes chords *Cm7* and *Am7(25)*.

Figure 6.14: (TC: Volume Two: CD4: Disc Two: *Ari Hoenig Session*, Track 3 [0:30-1:35]) *Outro* (Current Author) (metric modulation to every fourth sixteenth note)

18 ----Break---- | 3

19 **A**

21 PIANO

23

25 PIANO

27 rit.

Chords: $A\flat^7$, B/G , Cm^7 , $A\flat^7$, G^7 , Cm^7 , Cm^7 , $A\flat^7$, G^7 , Cm^7 , $A\flat^7$, G^7 , Cm^7 , $A\flat^7$, G^7 , Cm^7 , $A\flat^7$, G^7 , $F^7(\sharp 11)$

Note Groupings

In order to obscure the regularity of an improvised line within a particular subdivision, Abercrombie and Hekselman melodically group notes into patterns that do not directly relate to the underlying note value. In Figure 7.1, my transcription of Hekselman's improvisation in his *New York Angels*, provides one such example, in which sixteenth notes are grouped in six:



Figure 7.1: *New York Angels* (sixteenth notes in groups of six)

Many other studies explore this basic conceptualization of note groupings, such as Keith Waters' exploration of Herbie Hancock's frequent use of triplets grouped in fours, with transcribed examples of his improvisation over *Oliloqui Valley* from Hancock's *Empyrean Isles* (Waters, 1996: 19-37).

While initially an innovation, this contribution of Hancock's to the jazz idiom (grouping triplets in fours) has become extremely common among improvisers. Abercrombie discusses this point:

I would try playing eighth note triplets, and accenting every fourth one, which is a very common thing. I heard Herbie Hancock doing it on a record and then everyone was doing it (Abercrombie, 2010: personal communication).

While Abercrombie states that he 'never got really deeply into playing other groupings', Hekselman is well aware of this device, and has certainly explored it further. As he notes:

I've worked on it, it's always been a passion of mine. I'm able to do any of them. If you give me a number I could improvise a line based off of that grouping (Hekselman, 2012: personal communication).

I have identified four different categories of note groupings and, as the discussion will demonstrate, it seems Hekselman and Abercrombie generally only explore the first concept on the list below:

Note grouping categories

- Odd groupings
- Mixing groupings to create larger structures
- Augmentation and diminution of groupings
- Tuplet groupings

Odd groupings

As with the aforementioned examples of Hekselman and Abercrombie, 'odd groupings' are simply the accenting, or melodic grouping of notes into asymmetrical patterns in relation to their underlying note value. Another example of Hekselman, extracted from his improvisation over George Gershwin's *How Long Has This Been Going On?* has been included on the following page.

Figure 7.2 consists of three staves of musical notation. The first staff starts at measure 31 with chords B^bm⁷, E⁷, E^b7, A^bΔ, and F⁷alt. It features five groups of five sixteenth-note triplets, each marked with a '5' above a bracket. The second staff starts at measure 33 with chords B^bm⁷ and B^bm/A, also featuring five groups of five sixteenth-note triplets. The third staff starts at measure 34 with chords B^bm/A^b and G[∅], featuring three groups of five sixteenth-note triplets.

Figure 7.2: *How Long Has This Been Going On?* (sixteenth note triplets in groups of five)

Notes are not always arranged in succession, the odd grouping can be organized in anyway the improviser likes. This includes rests, holding notes, grouping variations or mixing durations, as the following examples from Hekselman demonstrate:

Figure 7.3 consists of three staves of musical notation. The first staff starts at measure 39 and features a triplet of eighth notes, a triplet of quarter notes, and a triplet of eighth notes, with a group of five notes above a bracket. The second staff starts at measure 41 and features three groups of five notes, each marked with a '5' above a bracket, and four triplets of eighth notes below a bracket. The third staff starts at measure 42 and features a group of five notes above a bracket, a triplet of eighth notes below a bracket, and a triplet of quarter notes below a bracket.

Figure 7.3: *Flower* (Hekselman) (triplets in groups of five, holding the first note of the grouping)

Figure 7.4 below provides an example of grouping variations, while keeping the overall structure of triplets in fours; Hekselman achieves this by swapping between four note groupings of three triplets and one rest, and two quarter note triplets.

The image shows two staves of music from 'April in Paris'. The first staff, starting at measure 59, features a sequence of triplets under an $E_m7(b5)$ chord. The second staff, starting at measure 61, features a sequence of triplets under a $D_m7(b5)$ chord, followed by a $G^7alt.$ chord. Above the second staff, a bracket indicates a larger structure of 15 notes, composed of: 3/1 rest, 3/1 rest, 2 quarters, 3/1 rest, 2 quarters, 3/1 rest, and 2 quarters. The notation includes various accidentals, slurs, and articulation marks like 's' and 'b'.

Figure 7.4: *April in Paris* (Vernon Duke) (variations of triplets in groups of four)

Mixing groupings to create larger structures

Following the rather basic application of this device to my performances through odd groupings, other concepts were developed to expand the idea, including mixing groupings to create larger structures.

Rather than playing a single grouping (five, seven, nine, etc), the concept here is simply to combine groupings into larger, repeating sequences as a basis for creating improvisatory material. An example is included below:

The image shows a musical staff starting at measure 17. A bracket above the staff spans 15 notes and is labeled 'larger structure of 15'. The notes are grouped into three 5-note groups, three 7-note groups, and three 3-note groups. Above the staff, there are labels 'on' and 'off' with arrows pointing to specific notes. To the right, the text 'pattern continues...' is written with a downward arrow. The notes are beamed together in groups of 5, 7, and 3.

Figure 7.5: Mixing groupings of five, seven and three to create a larger 15/4 structure

Figure 7.5 on the previous page displays three different groupings (five, seven and three), which together add up to an odd number (fifteen). This number, which is not directly divisible by its note value (eighth notes) affords more rhythmic tension and improvisational interest than an even number. When using eighth notes, the recapitulation of the pattern begins off the beat, creating further tension before the pattern resolves on the third repeat (after fifteen quarter notes).

Mixing groupings to create larger structures has been used as an improvisatory device in my own performances, as the following extract from my rendition of Abercrombie's *Ralph's Piano Waltz* demonstrates:

The image shows a musical score for 'Ralph's Piano Waltz' in 3/4 time, featuring a complex 15/4 structure. The score is written in G-flat major (three flats) and consists of three staves. The first staff is marked with a $D\flat/C$ chord and contains a melodic line with rhythmic groupings of 5, 3, 7, 5, and 3 eighth notes. The second staff continues the melodic line with groupings of 7, 5, 3, and 7 eighth notes. The third staff is marked with an $A\text{m}^7$ chord and features a bass line with a similar rhythmic pattern of eighth notes.

Figure 7.6: *Ralph's Piano Waltz* (mixing groupings of five, three and seven to create a larger 15/4 structure)

Augmentation and diminution of groupings

The augmentation and diminution of groupings is a fundamental aspect of many Indian and Brazilian approaches to organizing rhythms. One such example can be found in the so-called '2-1 series', which forms the backbone of *Ritmica* by Jose Eduardo Gramani. The 2-1 Series is based on an additive process whereby, in the example below, the sixteenth note groupings are augmented successively so that an eighth note (two sixteenth notes value) is followed first by a single sixteenth note, then in the next group, by two sixteenth notes, the next, three sixteenth notes, etc:

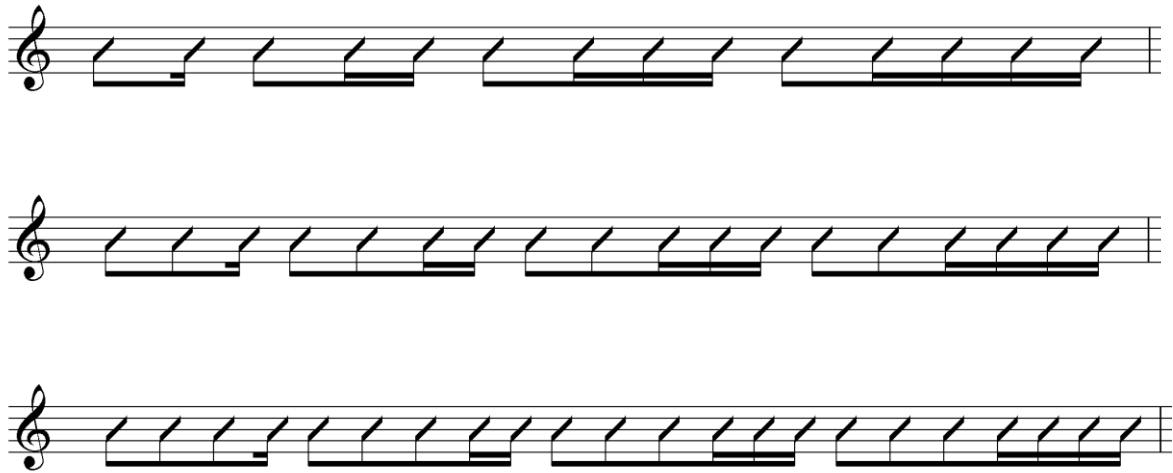


Figure 7.7: *Ritmica* (2-1 Series)

The 2-1 series is not restricted to sixteenth notes, and can be played with a different pulse or ostinato behind it. For example, if the above exercise was performed with a dotted eighth note as the pulse, it could be conceptualized as comprising triplets. The beat/note type is not the point, rather, it is the additive mathematical process that generates the material, and the idea is to be comfortable hearing these rhythms against a wide variety of ostinati or pulses.

Allusions to the augmentation and diminution of note groupings can be found in the improvisations of Hekselman (presented in Figures 7.8 and 7.9 below). Although, as he notes, he does not employ it deliberately or self-consciously:

I'll be honest with you, a lot of this stuff, I mean most of this stuff, I don't think at all. Of course I've thought about note groupings, and I'm able to do any of them, but it's always been a passion of mine. So I worked on it, and now it's like a language. You talk, you don't think about it. I never decide, OK this is going to be a descending number of notes in the grouping, and I have not practised that (Hekselman, 2012: personal communication).

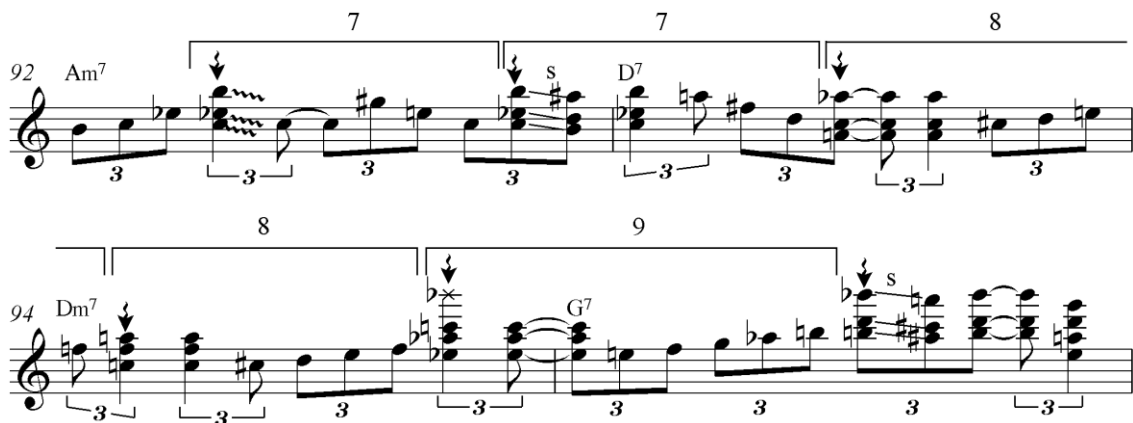


Figure 7.8: *I Should Care* (Sammy Cahn) (augmentation of triplet groupings 7-8-9)



Figure 7.9: *Ga'agua* (Hekselman) (diminution of triplet groupings 7-6)

Iterations of the note grouping devices described here have been applied to my performances on the submission recordings (Volume Two) in both a compositional sense, and as a basis for creating improvisational material. Displayed in Figure 7.10,

transcribed from my improvisation on Jerome Kern's *All the Things You Are*, additive note groupings are employed:



Figure 7.10: *All the Things You Are* (augmentation of eighth note groupings 2-3-4-5-6-7)

Figure 7.11 (on the following page), shows use of note grouping diminution as a compositional device for *Coltrane Matrix*, an original composition of mine included on CD1: *Retrieval Structure*, Track 1. Bar 30 uses descending groupings (5-4-3) for the end of an eighth note melody line, which leads into the B section that follows. These groupings are also outlined by the rhythm section.

A

23 Am¹¹ Em⁷ Fm⁶

25 Cm⁹ Gm⁹ B^bm⁷

27 Am⁷ Em⁷ Fm⁶

29 Cm⁹ Gm⁹ B^bm⁷

CODA

B (more legato)

31 Am⁷ B^bmaj⁷(#11) Bm¹¹ C⁶ Fmaj⁷ F#m⁷ G C/A^b

35 Am⁷ B^bmaj⁷(#11) Bm¹¹ C⁶ Fmaj⁷ F#m⁷ G C/A^b

39 Am⁷ B^bmaj⁷(#11) Bm¹¹ C⁶ Fmaj⁷ F#m⁷ G C/A^b

43 Am⁷ B^bmaj⁷(#11) Bm¹¹ C⁶ Fmaj⁷ F#m⁷ G Tacet.....

Interlude 2

47 Am¹¹ Em⁷ Fm⁶ Cm⁹ Gm⁹ B^bm⁷

(HEAD OUT ONLY) → rit. →

51 Am⁷ Em⁷ Fm⁶ Cm⁶ Gm⁹ B^bm⁷

Figure 7.11: (TC: Volume Two: CD1: *Retrieval Structure*, Track 1 [1:00-1:50])
Coltrane Matrix (Current Author) (diminution of eighth note groupings 5-4-3)

Tuplet groupings

A tuplet is any rhythm that incorporates non-conventional subdivisions, for example, quintuplets, septuplets, and nontuplets³ (Humphries, 2002: 266). 'Tuplet groupings' are therefore, asymmetrical in relation to any given tuplet's original structure. For example, grouping septuplets in fours:



Figure 7.12: Septuplets grouped in fours

This accent pattern also implies a seven over four metric modulation, as follows:



Figure 7.13: Septuplets grouped in fours implying a metric modulation of 7 over 4

In fact, there is a very simple mathematical equation that can be used to calculate any complex fractional relationship and coinciding metric modulation. The superimposed figure (in this case 7) designates the tuplet grouping (septuplets), and the accent pattern (in this case groups of four) is taken from the time signature (4/4). Another example of this concept is provided on the following page, this time showing how five over four is constructed.

³ Tuplets of nine and above have an alternate spelling, without a 't', of 'nonuplets' (9) and 'decuplets' (10), etc, which Humphries publication favours



Figure 7.14: Quintuplets grouped in fours implying a metric modulation of 5 over 4

Figure 7.14 above shows the superimposition (5) designating the tuplet grouping (quintuplets), while the accent pattern (4), is taken from the time signature (4/4).

This calculation works for any desired superimposition. An example of nine over eleven follows, with the superimposition (9) designating the tuplet grouping (nontuplets), and the accent pattern (11) taken from the time signature (11/4).

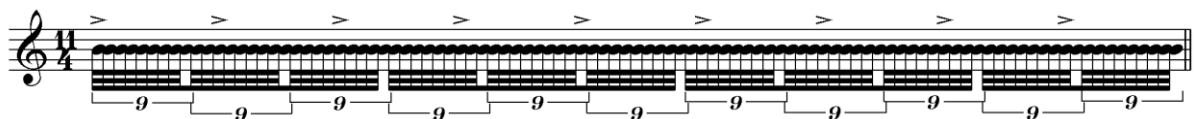


Figure 7.15: Nontuplets grouped in eleven implying a metric modulation of 9 over 11

While tuplets are discussed by some authors, such as Gary Chaffee (*Rhythm and Meter Patterns* [1976]), Ari Hoenig/Johannes Weidenmueller (*Metric Modulations Contracting and Expanding Time Within Form* [2011]), and Jerry Bergonzi (*Melodic Rhythms* [2007]), tuplet groupings are not. Jazz guitarists in particular have not properly explored their potential. Even Ari Hoenig, who favours quintuplet groupings on the drum set, is reticent about using them extensively:

It would definitely catch people off guard, but that's not a reason not to do it... It's something the music is growing towards, and it's definitely something that I use, but I use it pretty sparingly. Not all the time. Yea, I like it, sure. [But] it's... I don't want to say less useable, but I would say that it is less commonly used, much less commonly used in fact (Hoenig, 2013: personal communication).

As Hoenig's statement suggests, in order for successful use of a rhythmic device there needs to be a shared language (what Hannaford calls a 'common ground') between the

members of a given ensemble (Hannaford, 2012: 1). Hoenig and his band members have developed many innovative rhythmic devices, but it seems this kind of rhythmic exploration is still in the early stages of its development. While, as Hoenig notes, heavy metal groups such as Car Bomb use tuplet groupings in a compositional sense, their application in an improvisatory setting is much less common. Although used in a different manner and taken from different source material, some Melbourne-based Australian musicians (including Hannaford and Scott Tinkler) have been using this kind of rhythmic language as a basis for improvisation in recent years.

The transcription on the following page (Figure 7.16), taken from the submission recording of Hekselman's *The Bucket Kicker* (CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 3) shows two examples of tuplet groupings which I applied in an improvisational manner. The first, quintuplets grouped in seven, implies a 5 over 7 metric modulation (bars 5-8), while the second groups quintuplets in six, implying a 5 over 6 metric modulation (bars 17-19).

The musical score consists of eight staves of music in a single system. The key signature has one flat (B-flat). The notation includes various chords and rhythmic markings:

- Staff 1:** Chords: Fmaj7, Em7(b5), A7alt., Dm7, Cm7, F7. Rhythmic markings: 7, 7.
- Staff 2:** Chords: Bbmaj7, Am7(b5), D7alt. Rhythmic markings: 5, 5, 5.
- Staff 3:** Chords: Gm7, C7, Fmaj7. Rhythmic markings: 5, 5, 5, 5.
- Staff 4:** Chords: Cm7, F7, Bbmaj7. Rhythmic markings: 5, 5.
- Staff 5:** Chords: Dm7, G7, Gm7, C7. Rhythmic markings: 5, 5, 5, 5.
- Staff 6:** Chords: Fmaj7, Em7(b5), A7alt. Rhythmic markings: 5, 5, 5, 5.
- Staff 7:** Chords: Dm7, Cm7, F7. Rhythmic markings: 5, 5, 6.

Figure 7.16: (TC: Volume Two: CD4: Disc One: *Abercrombie and Heksleman Repertoire*, Track 3 [1:42-2:01]) *The Bucket Kicker* (Heksleman) (quintuplets grouped in seven and six, implying 5 over 7 and 5 over 6)

Superimposing Other Meters

Jazz improvisers have been superimposing one meter over another since the days of Louis Armstrong, who made frequent use of the simplest example of the device, the hemiola (Lippi, 2008: 15). The hemiola has always been, and still is the most common superimposition in jazz improvisation. It is so common in fact, that Brian Levy in his article *Polyrhythmic Superimposition in Jazz, Hemiola and Implied Meters Before 1965*, states that:

It may not be possible to find a single recording from that time [before 1965] that lacks elements of implied 3/4 meter juxtaposed with the 4/4 meter in improvised solos or accompaniment (Levy, 2006: 55).

Abercrombie confirms this observation:

You will find them on all the recordings. People I was playing with did it all the time. 3/4 over 4/4 and 4/4 over 3/4 are easy to hear and the most common (Abercrombie, 2012: personal communication).

Beyond the hemiola, the transcription and analysis undertaken as part of this study identified three means of superimposing one meter over another: superimposition using on/off phrasing, superimposition using a rhythmic motif, and superimposition through phrase structure.

Superimposition using on/off phrasing

The technique of on/off phrasing described in Chapter One (pp. 24-29) can also be applied to meter superimposition. This is in fact the main way that Hekselman constructs odd meter phrases, as shown in the transcription extract on the following page.

Figure 8.1 is a musical score in 5/4 time, starting at measure 25. The score is written in a single staff with a treble clef and a key signature of one flat (B-flat). The music begins with a piano (p) dynamic marking and a chord of E-flat major 7 (E♭maj7). Above the staff, a bracket labeled '5/4' spans the first two measures, which are further divided into two '5/8' measures. The third measure is also bracketed as '5/8'. The fourth measure is marked with a piano (p) dynamic and a chord of B-flat major 7 (B♭maj7). The fifth measure is marked '3', and the final four measures are marked '3' and '3' respectively, indicating triplet rhythms. The notation includes eighth and sixteenth notes, rests, and phrasing slurs.

Figure 8.1: 5/4 over 4/4 *Summer of Laughs and Tears* (Heksleman) (superimposing other meters using on/off phrasing)

The overall rhythm resulting from the procedure can be summarised as follows:

Figure 8.2 is a rhythmic summary of the piece shown in Figure 8.1. It consists of a single staff with a treble clef and a 4/4 time signature. The rhythm is represented by a sequence of notes: a quarter note, followed by a half note, then a quarter note, and finally a half note. Above the first quarter note is the word 'on' with a downward-pointing arrow. Above the fourth quarter note is the word 'off' with a downward-pointing arrow. This illustrates the 'on/off' phrasing technique where the 5/4 time signature is superimposed over the 4/4 time signature.

Figure 8.2: Rhythmic summary of Figure 8.1

Figure 8.4 on the following page shows an example of the application of this device in the submission recordings, and the resulting interaction (CD2: *Abercrombie and Heksleman Duets*, Track 8).

Figure 8.3: (TC: Volume Two: CD2: *Abercrombie and Hekselman Duets*, Track 6 [3:20-3:32]) *Anthropology* (5/4 on/off phrasing interaction)

The top line (me), in bars 16-23 shows use of on/off phrasing to create a 5/4 over 4/4 idea, using the rhythmic pattern of Figure 8.3, summarised as follows:

Figure 8.4: Rhythmic summary of Figure 8.3

After my 5/4 idea is first implied (bar 16), Hekselman interacts by copying the superimposition. His comping pattern changes at bar 18 to outline the 5/4 idea, and he continues until bar 23. Both my improvised line and Hekselman's accompaniment are

made up of two identical 5/8 parts, constructed through the use of on/off phrasing to create a larger 5/4 superimposition.

Figure 8.6 on the following pages provides a more complex example of this device, taken from the same duet performance of Charlie Parker's *Anthropology* by Hekselman (bottom line), and me (top line). Bars 57-66 (top line) show use of this device to create a 13/4 superimposed meter. The rhythm employed through on/off phrasing to create the 13/4 superimposition detailed in 8.6 can be summarised as follows:



Figure 8.5: Rhythmic summary of Figure 8.6

It is worth noting the interaction and interplay before the above on/off rhythm is employed. Bars 35-41 are the remainder of a more conventional section of the improvisation, where Hekselman uses a very abrasive, almost country inspired four-to-the-bar comping pattern. Bars 42-49 show my use of a 5/4 superimposition (top line), while Hekselman (bottom line) simultaneously begins a chromatic 'power chord' (that is, lacking a third) run (bars 43-53), which creates a 6/4 superimposition.

Hekselman's concept wins over as the prominent idea, and in bar 50 a complementary chromatic line is begun by me in a higher register. This dialogue is then continued for another 6 bars (51-56). Bar 57 sees the emergence of the previously discussed 13/4 on/off rhythm, while Hekselman decides to outline the form quite directly, starting at the bridge (bar 59) with long, legato chords on beats one and three.

35 $B\flat$ maj7 G7 Cm7 F7 $B\flat$ maj7 G7 Cm7 F7

39 Fm7 B7 $E\flat$ maj7 $E\flat$ m7 $B\flat$ maj7 G7 Cm7 F7

43 $B\flat$ maj7 G7 Cm7 F7 $B\flat$ maj7 G7 Cm7 F7

6/4 6/4

$B\flat$ A $A\flat$ G $G\flat$ F | $B\flat$ A $A\flat$ G $G\flat$ F | $B\flat$ A $A\flat$ G

47 Fm7 B7 $E\flat$ maj7 $E\flat$ m7 $B\flat$ maj7 G7 Cm7 F7

$G\flat$ F $B\flat$ A $A\flat$ G $G\flat$ F $B\flat$ A $A\flat$ G $G\flat$ F $B\flat$ A

51 $B\flat$ maj7 G7 Cm7 F7 $B\flat$ maj7 G7 Cm7 F7

$A\flat$ G $G\flat$ F $B\flat$ A $A\flat$ G $G\flat$ F $B\flat$ A $A\flat$ G $G\flat$ $B\flat$

Figure 8.6: (TC: Volume Two: CD2: *Abercrombie and Hekselman Duets*, Track 6 [4:05-4:38]) *Anthropology* (Charlie Parker)

13/4

55 Fm7 Bb7 Ebmaj7 Ebm7 Bbmaj7 on F7 Bbmaj7

A A^b G G^b F B^b A A^b G G^b F F[#] G A B C[#]

13/4

59 D7 off on G7 off

D D D^b

13/4

63 C7 F7

C B

67 Bbmaj7 G7 Cm7 F7 Bbmaj7 G7 Cm7 F7

B^b A A^b G

The image displays a musical score for the piece 'Anthropology'. It is organized into four systems, each with a guitar staff on top and a bass staff on the bottom. The time signature is 13/4. The first system (measures 55-58) features a melodic line in the guitar staff with various chords (Fm7, Bb7, Ebmaj7, Ebm7, Bbmaj7, F7, Bbmaj7) and a bass line with diamond-shaped chord diagrams. The second system (measures 59-62) includes articulation marks like 'off' and 'on' above the guitar staff and continues the bass line. The third system (measures 63-66) shows a melodic phrase in the guitar staff with chords C7 and F7, and a bass line with C and B chord diagrams. The fourth system (measures 67-70) continues the melodic and harmonic development with chords Bbmaj7, G7, Cm7, F7, Bbmaj7, G7, Cm7, and F7, and a bass line with Bb, A, Ab, and G chord diagrams.

This performance of *Anthropology* showcases many different examples of interaction and interplay, most of which relate back to the devices discussed in this exegesis.

Superimposition using a rhythmic motif/superimposition through phrase structure

Further examples of superimposing other meters can be achieved through either the structure of a phrase which outlines a superimposed meter, or the repetition of a rhythmic motif. Figure 8.8 below provides an example of the latter:

Figure 8.7 shows two staves of music. The first staff, starting at measure 27, contains a melodic line with notes and rests. Above the staff are chord symbols: Cm7/Bb, Am7(b5), D7alt., Gmaj7, and G7. Below the staff, three 5/4 time signatures are indicated, each spanning two measures. The second staff, starting at measure 31, continues the melodic line. Above the staff are chord symbols: Cm(maj7)/G, Cm(maj7)/G, Gmaj7, C#m7, and F#7. The notation illustrates a 5/4 over 4/4 superimposition through the repetition of a rhythmic motif.

Figure 8.7: *Purium* (Hekselman) 5/4 over 4/4 using a rhythmic motif

Hekselman creates a 5/4 over 4/4 superimposition through the motivic repetition of the rhythmic summary presented in Figure 8.8 (below). The rhythm stays constant, while melodic material is developed using the repeating rhythmic pattern below as a framework:

Figure 8.8 shows a rhythmic summary of the motif from Figure 8.7. It consists of a single staff in 5/4 time, with a treble clef. The rhythm is represented by a sequence of notes and rests: a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note, followed by a quarter rest. This sequence is repeated three times, illustrating the constant rhythmic pattern used in the superimposition.

Figure 8.8: Rhythmic summary of Figure 8.7

Figure 8.9 below shows Hekselman achieving a similar effect through simply phrasing in a way that outlines the superimposed meter. In the case of the following example, 7/4 is being superimposed over 5/4.

Figure 8.9: *April in Paris* (Vernon Duke) (7/4 over 5/4 through phrase structure)

When improvising in meters other than common time, 4/4 rhythms are often used as superimpositions, as the following example of Abercrombie demonstrates:

Figure 8.10: *Ralph's Piano Waltz* (4/4 over 3/4 using a rhythmic motif)

Figure 8.11 on the following page provides another example, taken from an improvisation of mine over *All the Things You Are*.

Figure 8.11: *All The Things You Are* (Jerome Kern) (4/4 over 7/4 using a rhythmic motif)

As with the other devices, superimposing other meters improves interaction and interplay within the group. Figure 8.12 on the following page (taken from CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 7) shows one such interaction. Using a repeating rhythmic motif, I create a 5/4 over 4/4 superimposition (top line). This is interacted with by the drums (bottom line), which joins after three bars by playing hits on the cymbals to outline the dotted quarter note section of each superimposed 5/4 bar.

The musical score is divided into three systems, each with a guitar staff (treble clef) and a drum staff (bass clef).

- System 1:** The guitar staff has a key signature of two flats and a 5/4 time signature. Chords are $B\flat 7$, $E\flat 7$, $B\flat 7$, and $5/4$. The drum staff shows a 4/4 time signature with a pattern of eighth notes and rests. Labels include "Time:" and "Time Outlining Hits:".
- System 2:** The guitar staff continues with chords $E\flat 7$, $B\flat 7$, $Dm 7(b 5)$, and $G 7 \text{ alt.}$. The drum staff continues with eighth notes and rests.
- System 3:** The guitar staff concludes with chords $Cm 7$, $F 7$, $B\flat 7$, $D\flat 7$, $Cm 7$, and $F 7$. The drum staff continues with eighth notes and rests.

Figure 8.12: (TC: Appendix Two: CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 7 [1:50-2:03]) *Yo Mamma's Blues* (Hekselman) (5/4 over 4/4 guitar and drum interaction)

Multi-Layered Polyrythms

The concept of multi-layered polyrythms was developed through observations made in the transcription and analysis process, with relation to relevant literature consulted for the research, particularly Lerdahl and Jackendoff's *A Generative Theory of Tonal Music* (1983). Multi-layered polyrythms are simply musical statements that include layered polyrythms. In other words, examples that include more than one polyrythmic device occurring simultaneously. Rather than being taken to imply polyphony (discussed pp. 105-108), these examples are single lines that can be conceptualized as containing more than one polyrythm. The initial discovery created the basic concept, described below as the grouping structure of a superimposed meter, and following this, a re—conceptualization of the idea created an additional category which turns on the melodic pattern of a note grouping.

The grouping structure of a superimposed meter

The transcription on the following page shows Hekselman superimposing 5/4 over the underlying time signature of 4/4 (bars 1-15). When taking into account the shape of the melodic line and the superimposed harmony (included in brackets above the underlying harmony), a repeating three bar pattern of F, Eb and Db emerges. This is in fact an example of the previously discussed hierarchical polyrythm device (see pp. 34-38), one which in this instance creates a 3/4 polyrythm at the hierarchical level of the bars themselves.

Figure 9.1 which follows includes two, simultaneous layered polyrythms. Firstly, the 5/4 superimposition at the level of beats, and the second, a 3/4 hierarchical polyrythm layered on top at the level of bars.

Figure 9.1: (TC: Appendix Two: Track 7 [0:05-0:16]) *The Way You Look Tonight* (Jerome Kern) (multi-layered polyrhythm)

The melodic pattern of a note grouping

As discussed in pp. 57-59, asymmetrical note groupings can be produced by melodic patterns that do not adhere to their metric division (see, for example, the triplets grouped in fours in line one of Figure 9.2 on the following page). Regardless of the melodic structure, the same effect can be provided by simply placing a rest as part of the note grouping (see line two, Figure 9.2). More rests can be added, and the note grouping can be organized in any desired formation (one additional formation is provided on line three of Figure 9.2).



Figure 9.2: Various groupings of triplets in fours

This particular rhythmic pattern creates a 3 over 4 polyrhythm (as the superimposed pattern takes three repeats, and four beats to resolve). If a melodic pattern is created within this structure, for example, one that that resolves after four repeats, then a new layered polyrhythm is created.

In the case of the example on the following page (Figure 9.3), a 4 over 3 rhythm is layered on top as the rhythmic pattern (triplets grouped in fours) resolves after every third repeat, but the melodic pattern is organized to do so after every fourth note grouping. This creates a multi-layered polyrhythm of 3 over 4 and 4 over 3, thus creating a larger structure which resolves after sixteen beats (or four bars, as Figure 9.3 on the following page demonstrates).

Melodic Grouping Superimposition Creating 4 over 3

Triplets Grouped in 4 Creating 3 over 4

4 over 3

3 over 4

7

9

11

Pattern Resolves and Continues

Figure 9.3: Multi-layered polyrhythm

The following page provides a multi-layered polyrhythm of 3 over 4 and 2 over 3 (Figure 9.4), through the melodic pattern of a note grouping, the larger structure of which resolves after eight beats, or two bars.

Melodic Grouping
Superimposition Creating 2 over 3 2 over 3 2 over 3

Triplets Grouped in 4 Creating 3 over 4 3 over 4

12

14 Pattern Resolves and Continues

Figure 9.4: Multi-layered polyrhythm

This concept, developed by me, has been applied to performances throughout the submission recordings (Volume Two). For example, two different uses of the device are present in my improvisation over *One More Song* (CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 9). The first shows use of 3 over 5 and 4 over 3. This is achieved by grouping triplets in fives (3 over 5), and melodically organizing them to resolve after every fourth grouping (4 over 3). Since the underlying time signature is 3/4, it also creates a 5/4 over 3/4 effect.

4 over 3 4 over 3

3 over 5 (also 5/4 over 3/4) 3 over 5 (also 5/4 over 3/4)

201

205 G7 Cm/G

Figure 9.5: (TC: Volume Two: CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 9 [8:12-8:19]) *One More Song* (Hekselman) (multi-layered polyrhythm)

The second example shows the same multi-layered polyrhythm concept as Figure 9.3 (p. 83), consisting of 3 over 4 and 4 over 3. This is achieved through grouping triplets in fours (3 over 4), and melodically organizing them to resolve after every fourth grouping (4 over 3). As with the previous example, the underlying time signature is 3/4, so an additional 4/4 over 3/4 polyrhythm is created.

The image displays two staves of musical notation in 3/4 time, illustrating multi-layered polyrhythm. The first staff, starting at measure 145, features a melodic line with chords Fm7, Eb7, D7, and G7. It is annotated with '4 over 3' brackets spanning two measures and '3 over 4 (also 4/4 over 3/4)' brackets spanning four measures. The second staff, starting at measure 149, features a melodic line with a Cm7 chord and is annotated with '4 over 3' and '3 over 4 (also 4/4 over 3/4)' brackets. The notation includes triplets and accents to highlight the rhythmic patterns.

Figure 9.6: (TC: Volume Two: CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 9 [7:25-7:32]) *One More Song* (Hekselman) (multi-layered polyrhythm)

Augmentation and Diminution

The *Oxford Companion to Music* describes augmentation and diminution as follows:

Augmentation: A compositional procedure in which the note-values of a musical statement are lengthened (usually doubled), as in the climactic presentation of certain fugue subjects (e.g. Bach's C major Fugue for organ BWV547) (Latham, 2002: 70).

Diminution: A melodic device, often found in fugal compositions, in which the time-values of the melody notes are proportionally shortened. For example, a melody moving in minims [half notes], crotchets [quarter notes], and quavers [eighth notes] could undergo diminution to move in crotchets [quarter notes], quavers [eighth notes], and semiquavers [sixteenth notes] (each value diminishing by half) (Latham, 2002: 366).

Examples of the two procedures also abound in jazz, where they were used initially as a basis for compositional and improvisational development (Ferguson, 1994: 114).

Since then, the procedures have been evolving alongside other aspects of jazz improvisation. Their use can be deliberate, such as we find in Hoenig's arrangement of *Stella by Starlight* (Victor Young) from Jean Michel Pilc's *Welcome Home* (2002), or otherwise, as Abercrombie explains:

I don't know if I've ever specifically worked on it [augmentation and diminution]. It just seems to make sense to me. Usually these things would happen on a gig, or a recording, in relation to what was happening in the music (Abercrombie, 2010: personal communication).

Identified through the current research process, and included on the following pages are six different categories of augmentation and diminution.

Augmentation/diminution of note values

This is simply the augmentation and diminution of various note values, and can be used in relation to a phrase (Figure 10.2 and 10.3 on the following pages), or simply moving through successions of progressively smaller/larger note groupings (Figure 10.1, below).



Figure 10.1: *Will the Song Ever End* (Hekselman) (diminution of note values)

Figure 10.2 below shows Hekselman using an augmentation of note values in relation to a phrase. Rhythmically speaking, it is not an exact augmentation, but a phrase is stated, and then augmented to quarter note triplets. Melodically speaking, the phrase is repeated verbatim, albeit transposed down a minor 6th.

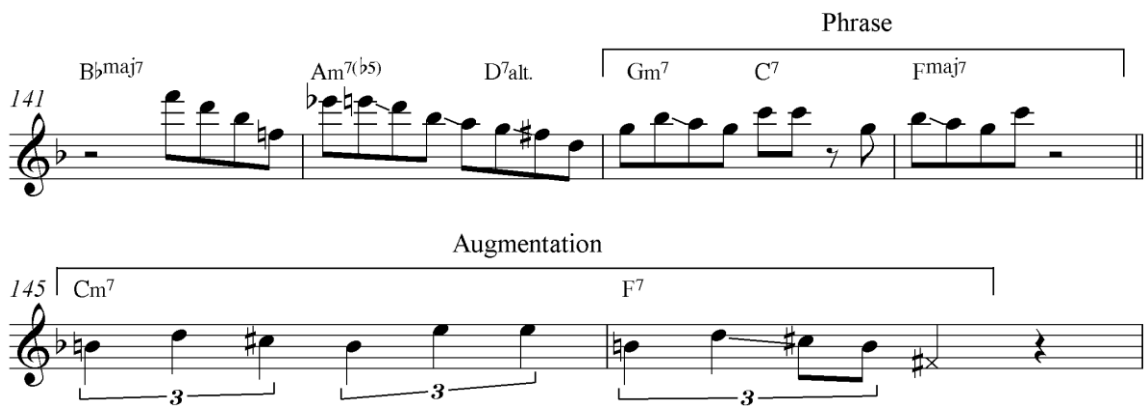


Figure 10.2: *The Bucket Kicker* (Hekselman) (augmentation of a phrase)

This device has been applied to performances on the submission recordings, including the compositional structure of my original work entitled *Phrygia* (Volume Two: CD1: *Retrieval Structure*, Track 6) (Figure 10.3 on the following page). Since the use of the device is planned, the band metrically modulates to the new tempo, though it still represents an augmentation of note values in relation to a phrase. The phrase in the coda (bars 62-67) is augmented initially from eighth notes to quarter note triplets (64-65), which is followed by a diminution back to the original tempo (66-67).

INTERLUDE- Drum Feature, Whole ensemble hits

41 G⁵ A^{b5} F⁵ E^{b5} G⁵ A^{b5} To Coda $\text{\textcircled{C}}$

43 G⁵ A²⁵ F⁵ E^{b5} G⁵

46 Grove without melody to set up solo section

50 **A** SOL.Os! Repeat over and over until cue for B section
 G^{7sus4b9} A^{2maj7#11} B^{7sus} Cm⁹

One Cue... 54 **B** Fm⁷ Gm⁷ A^{b2maj7#11} B⁷

58 **A** G^{7sus4b9} A^{2maj7#11} B⁷ Cm⁹

Repeat for further solos,
 After las solo D.S. Al Coda

$\text{\textcircled{C}}$ CODA

62 G⁵ A²⁵ F⁵ E^{b5} G⁵ A^{b5}

64 $\frac{3}{4}$ Quater Note Triplet Time...
 G⁵ A^{b5} F⁵ E^{b5} G⁵ A^{b5}

66 Regular Time...
 G⁵ A^{b5} F⁵ E²⁵ G⁵

Figure 10.3: (TC: Volume Two: CD1: *Retrieval Structure*, Track 6 [5:55-6:14])
Phrygia (Current Author) (augmentation/diminution of a phrase)

Augmentation/diminution of note groupings

This point was covered extensively when 'note groupings' were discussed (pp. 62-65), with relation to Indian and Brazilian music, Hekselman's improvisations, and personal explorations. A further example of Hekselman using this device has been included below.

The musical score for 'I Should Care' (Sammy Cahn) is presented in three systems, illustrating the diminution of triplet groupings. The first system (measures 26-29) features a melodic line with various triplet groupings (marked '3') and rests. Above the staff, chord symbols are indicated: Cmaj7, Bm7(b5), E7, Am7, and D7. Above the staff, fingerings are shown: 5, 5, 4, 4, 8. The second system (measures 30-31) continues the melodic line with triplet groupings and rests. Above the staff, chord symbols are indicated: Dm7 and G7. Above the staff, fingerings are shown: 8 (2 x 4), 4, 4, 4, 4, 4. The third system (measures 32-33) continues the melodic line with triplet groupings and rests. Above the staff, chord symbols are indicated: Cmaj7, F7, Em7, and A7. Above the staff, fingerings are shown: 3, 3, 3, 3, 3, 3.

Figure 10.4: *I Should Care* (Sammy Cahn) (diminution of triplet groupings)

Augmentation/diminution of on/off phrasing

Augmentation/diminution can be combined with the on/off phrasing device outlined in pp. 24-29, giving rise to interesting improvisatory material. This adaptation of the original device shows how a simple idea can be used to create a very sophisticated and intriguing musical statement. The following example provides a transcription of Hekselman employing this device over John Coltrane's *Countdown*:

The image shows a musical score for the piece "Countdown" by John Coltrane. It consists of three staves of music in treble clef, with various chord changes and phrasing annotations.

- Staff 1 (Measures 114-117):** Chords: Em7, F7, Bbmaj7, Db7, Gbmaj7, A7, Dmaj7. Annotations: "5 on" above the final measure.
- Staff 2 (Measures 118-121):** Chords: Dm7, Eb7, Abmaj7, B7, Emaj7, G7, Cmaj7. Annotations: "5 off" above measures 118-119, "4 on" above measure 120, and "4 off" above measure 121.
- Staff 3 (Measures 122-125):** Chords: Cm7, Db7, Gbmaj7, A7, Dmaj7, F7, Bbmaj7. Annotation: "Off beat syncopation" above measures 122-123.

Figure 10.5: (TC: Appendix Two, Track 8 [0:11-0:21]) *Countdown* (John Coltrane) (diminution of on/off phrasing)

Augmentation/diminution into a polyrhythm

When used creatively, augmentation/diminution can transform a regular phrase or idea into a polyrhythm, increasing the possibility of interaction for the band, while providing a direct relationship to the material that preceded it.

An extract taken from an Abercrombie improvisation has been used to express this concept (Figure 10.6 below). The transcription begins with a three note motif, comprising eighth notes, with the idea continuing for five bars. Bars 6-9 show a diminution of the three note motif into sixteenth notes. As with the previous example of Hekselman (Figure 10.2, p. 87), this is not an exact rhythmical diminution of the original melodic idea, as a quarter note still separates each three note grouping.

The musical score is written in treble clef with a key signature of two flats (Bb and Eb). It consists of four staves of music. The first staff shows a three-note motif (Bb, Ab, Gb) in the first bar, labeled 'Motif', with a BbΔ chord above it. The second staff shows the motif continuing with Eb7, Ab7, and G7 chords. The third staff shows a 'Diminution of Motif' where the three-note motif is played as sixteenth notes, with a C7 chord above it. The fourth staff shows the motif continuing with F7, BbΔ, Eb7, Ab7, and G7 chords, with a '3' indicating a triplet of eighth notes.

Figure 10.6: *There is no Greater Love* (Isham Jones) (diminution of motif into polyrhythm)

Through the diminution of the three note motif to sixteenth notes (keeping a quarter note rest between each grouping), a displaced 3/4 over 4/4 metric superimposition emerges. The resultant displaced 3/4 rhythm, which could also be described as a hemiola, is provided below:



Figure 10.7: Hemiola arising from motif diminution

By contrast, an example of augmentation into a polyrhythm can be found in an improvisation of Hekselman's, over Jerome Kern's *The Way You Look Tonight* (Figure 10.8 on the following page).

Again, this example does not provide a mathematically exact augmentation. Bar 1 provides the basic cell (marked 'phrase') which is then manipulated by Hekselman. The phrase is displaced, repeated, displaced, repeated, and displaced, before a final augmentation. Hekselman augments the phrase by taking each individual note (whether quarter or eighth note), and expands them all into dotted quarter notes (resulting in another hemiola superimposition, displayed in Figure 10.9).

(B Minor Superimposed Modal Harmony)

The musical score for Figure 10.8 is divided into three systems. The first system contains three measures: the first is labeled 'Phrase' with a Gm^7 chord; the second is labeled 'Displacement' with a C^7 chord; the third is labeled 'Repetition' with a Cm^7 chord. The second system contains three measures: the first is labeled 'Displacement' with a $B^{\flat}\Delta$ chord; the second is labeled 'Repetition' with Gm^7 and C^7 chords; the third is labeled 'Displacement' with F^{Δ} , Dm^7 , and Gm^7 chords. The third system is labeled 'Augmentation' and contains three measures with chords F^{Δ} , Dm^7 , $B^{\flat}m^7$, $E^{\flat}7$, $A^{\flat}\Delta$, and $A^{\circ}7$.

Figure 10.8: *The Way You Look Tonight* (Jerome Kern) (phrase augmentation)

The musical score for Figure 10.9 shows a single line of music in 4/4 time. Above the staff, four brackets indicate groups of three notes, each labeled with a 3/4 time signature, illustrating a hemiola superimposition over the 4/4 meter.

Figure 10.9: Hemiola arising from motif augmentation

Another example of this device, this time utilizing an exact rhythmic augmentation from one musical statement to the next, can be found on CD2: *Abercrombie and Hekselman Duets*, in the submission recordings. The transcription extract from Jerome Kern's *Long Ago and Far Away* (Track 6) performed as a duet between Abercrombie and I, shows my diminution of a three note motif from eighth notes to triplets. The resulting rhythm (Figure 10.11) creates a 3 over 4 polyrhythm (as the triplets are grouped in fours).



Figure 10.10: *Long Ago and Far Away* (Jerome Kern) (motif diminution)



Figure 10.11: 3 over 4 polyrhythm arising from motif diminution

Augmentation/diminution of superimposed meters

The final category is a concept developed by me, and is essentially a hierarchical adaptation of the note grouping augmentation/diminution on p. 90. It has not been observed in the improvisations of Hekselman or Abercrombie, nor has it surfaced in my own improvisations, yet it is a possible adaptation of augmentation and diminution.

Figure 10.12 below combines superimposed meters (pp. 70-79) with augmentation.

Diminution could also be used to create a similar effect, or a combination of both.



Figure 10.12: Augmentation of superimposed meter

Chapter Two Summary

Through transcription and analysis this chapter presented the findings of the research with relation to polyrhythm, touching on metric modulation, note groupings, superimposing other meters, multi-layered polyrhythms, augmentation and diminution, and their respective sub-categories. Helping to frame the ideas were personal insights from Hekselman, Abercrombie and Hoenig, while the overall focus of the chapter was transcribed examples to showcase the application of each device in the submission recordings (Volume Two). This discussion covered established concepts and ideas, new insights, and original observations and developments, providing an extensive collection of polyrhythmic devices. Following the current chapter's focus on polyrhythm, and the previous chapter's discussion of phrasing, the third and final chapter to follow consolidates the findings and considers broader aspects of their implications.

Chapter Three: Other Considerations

The final chapter of Volume One briefly examines the research in relation to my chosen instrument. It also provides an insight into use within polyphony, along with exploring how the devices are used in relation to the overall structure of an improvisation.

Instrument Specific Explorations

When describing the practice of rhythmic devices, Hekselman states:

It's not a guitar thing, it's about getting the concept down. The guitar is just technique or harmony. Ideas have nothing to do with guitar, that's why you can take them from different places (Hekselman, 2012: personal communication).

Although Hekselman is quite justified in saying this, as a guitarist it is essential to be aware of the possibilities contained within the instrument itself. Whether it is the range, material, size, shape, or type, every instrument has its own particular uniqueness. Even within its infinite diversity in comparison to other stringed instruments, the guitar still provides instrument specific nuances that can be exploited to create unique and personalized sounds, and Abercrombie certainly makes use of this fact (Gruhn, 1996: 176).

Although most are generally not applicable to the jazz idiom, a general insight into the plethora of different electric guitar techniques can be found in the preface of Carl Culpepper's transcription book of Joe Satriani's *Flying in a Blue Dream* (1990).

Culpepper's quite broad and detailed list includes twenty nine different techniques, the majority of which are unique to the guitar.⁴

While in-depth studies do exist on particular instruments, such as Kimi Coaldrake's research into mapping the tonal colour of the Japanese koto, or Mark French's *Technology of the Guitar* (2012), formal studies into instrument specific techniques in relation to performances are seldom explored.

With specific consideration as to stylistic appropriateness, this study provides two different categories of guitar specific techniques (neither of which are found in Culpepper's book). These techniques – the use of campanella or adjoining open strings, and the sounding of the same note on a different string, have here been combined with various rhythmic devices uncovered throughout the research project.

Campanella

'Campanella', Italian for 'little bell' (Scholes, 1975: 150), is a classical guitar technique that utilizes open strings in combination with fretted notes to create a cascading, bell like effect. It is most commonly used as an alternative to more traditional scale and arpeggio fingerings (Stanton, 1999: 120). An example of campanella, as applied to the fingering of a G Lydian scale is included on the following page. The lower staff – known as tablature in guitar circles – identifies the exact position of each note on the fretboard. This is essential in ensuring the campanella effect.

⁴ Ranging from bends to palm muting, harmonics, tapping, tremolo bar, vibrato and many more

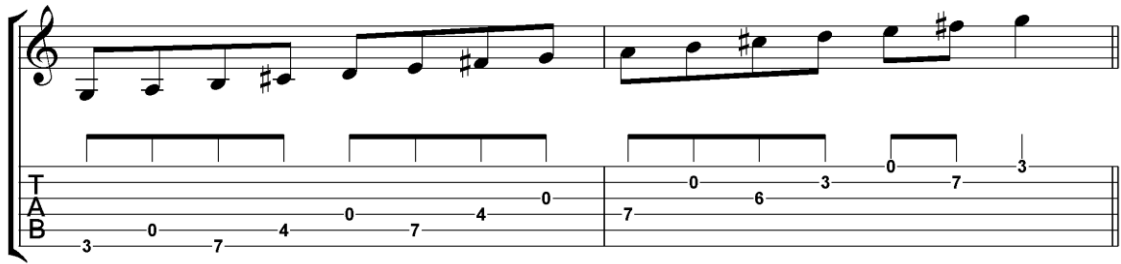


Figure 11.1: Campanella of G Lydian

This effect is distinct from the use of open strings as the basis of chord voicings, such as we find in the work of Bill Frisell and Ben Monder (Stowell, 2011: 25). These types of voicings can also be heard in the submission recordings, particularly the melody to *The Heights*, found on CD1: *Retrieval Structure*, Track 4.

Rather than scale or arpeggio runs, campanella has been employed in a more general sense in the submission recordings. This includes using open strings as part of a larger improvised line. Figure 11.2 on the following page shows an eighth note line from my improvisation over John Coltrane's *Countdown*, with regular use of open b and e strings (marked with an 'o' above each, and indicated in the tablature staff). Note that this technique has also been combined with the note grouping device discussed on pp. 58-59, creating a 9/4 polyrhythm.

The image displays three systems of musical notation for guitar, each consisting of a treble clef staff and a bass clef staff. The music is in 4/4 time and features a sequence of chords and melodic lines.

System 1 (Measures 13-16):

- Measures 13-14: Chord Em^7 . Treble staff: quarter notes G2, A2, B2, C3. Bass staff: fret numbers 2, 4, 2, 6.
- Measure 15: Chord F^7 . Treble staff: quarter notes D3, E3, F3, G3. Bass staff: fret numbers 4, 2, 6, 4, 6, 4, 8, 6.
- Measure 16: Chord $B\flat maj^7$. Treble staff: quarter notes G3, A3, B3, C4. Bass staff: fret numbers 4, 8, 6, 8, 6, 10, 8, 6.
- Measure 17: Chord $A^7 alt.$. Treble staff: quarter notes E3, F3, G3, A3. Bass staff: fret numbers 10, 8, 10, 8, 12, 10, 8, 12.

System 2 (Measures 17-20):

- Measures 17-18: Chord Em^7 . Treble staff: quarter notes G2, A2, B2, C3. Bass staff: fret numbers 10, 12, 10, 12, 14, 10, 14.
- Measure 19: Chord F^7 . Treble staff: quarter notes D3, E3, F3, G3. Bass staff: fret numbers 0, 12, 14, 16, 14, 12, 0.
- Measure 20: Chord $B\flat maj^7$. Treble staff: quarter notes G3, A3, B3, C4. Bass staff: fret numbers 0, 16, 10, 12, 14, 10, 0.
- Measure 21: Chord $D\flat^7$. Treble staff: quarter notes B2, C3, D3, E3. Bass staff: fret numbers 0, 14, 8, 10, 12, 10.

System 3 (Measures 21-24):

- Measures 21-22: Chord Dm^7 . Treble staff: quarter notes G2, A2, B2, C3. Bass staff: fret numbers 8, 0, 12, 0, 8, 10, 12.
- Measure 23: Chord $E\flat^7$. Treble staff: quarter notes A2, B2, C3, D3. Bass staff: fret numbers 10, 8, 12, 10, 12, 14, 12.
- Measure 24: Chord $A\flat maj^7$. Treble staff: quarter notes E3, F3, G3, A3. Bass staff: fret numbers 10, 14, 10, 11, 13, 11, 10, 12.
- Measure 25: Chord $C\flat^7$. Treble staff: quarter notes B2, C3, D3, E3. Bass staff: fret numbers 10, 10, 11, 13, 11, 10, 12.
- Measure 26: Chord $F\flat maj^7$. Treble staff: quarter notes G2, A2, B2, C3. Bass staff: fret numbers 10, 10, 11, 13, 11, 10, 12.
- Measure 27: Chord G^7 . Treble staff: quarter notes A2, B2, C3, D3. Bass staff: fret numbers 10, 10, 11, 13, 11, 10, 12.
- Measure 28: Chord $C^7 maj^7$. Treble staff: quarter notes G2, A2, B2, C3. Bass staff: fret numbers 10, 10, 11, 13, 11, 10, 12.

Figure 11.2: (TC: Volume Two: CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 1 [2:51-3:02]) *Countdown* (campanella within note groupings)

Same note on an adjacent string

Apart from open strings, another characteristic of the guitar is that the same note can be found on adjacent strings. This is due to the intervallic relationships between the strings. Although it is the exact same pitch, shifts in position – both across strings and up and down the fretboard, result in timbral contrasts that are useful in their own right. This is broadly equivalent to saxophonists using alternate fingerings in the production of the same note. Michael Brecker is widely recognized as the first to properly explore the sound and approach as a fundamental improvisational technique in the jazz idiom. Since then contemporary jazz saxophonists such as Rudresh Mahanthappa have continued developing the technique (Giddins, 2009: 74). Jazz guitar greats such as Wes Montgomery and Jimmy Raney used the same notes on adjacent strings in very basic ways, but contemporary guitarists like Kurt Rosenwinkel, Wolfgang Muthspiel and Charles Altura have taken it further, although even their use is rather sparing.

Figure 11.3 below provides an example of my application of this technique to the previously discussed note grouping device, creating a long eighth note line in six note groupings. The extract is taken from my improvisation over an original arrangement of Miles Davis' *Nardis* (CD3: *Perception*, Track 3), and the repeated notes marked with arrows are all played using an adjacent string fingering (as the tablature illustrates).

The musical notation for Figure 11.3 consists of a treble clef staff and a three-string tablature (T, A, B). The solo begins at measure 96. The solo line is composed of eighth notes in six-note groupings. The tablature shows the following fret numbers for strings T, A, and B: 12-17-13, 12-17-14-12-17-14, 12-17, 14-12-17-14, 12-17-14-12, 16-14-12, 16-13-12. Arrows point to the repeated notes in the solo, indicating adjacent string fingerings. The chord progression above the solo is: Dm7, Fmaj7, E7(b9), Dm7.

Figure 11.3: *Nardis* (same note on an adjacent string with note groupings)

The score extract on the following page (Figure 11.5) shows my application of this technique in a compositional context, in my original work *Falling* (CD4: Disc Two: *Ari Hoenig Session*, Track 4). Bars 5, 7, 8 and 10 have arrows marking where the technique is used in the guitar part (top line), while the technique is again clearly articulated in the tablature staff. Coincidentally, the same guitar part highlights the use of a hierarchical polyrhythm (moving in three bar phrases), which was discussed on pp. 34-36.

Another original composition that explores the hierarchical polyrhythm, *Happy*, from CD4: Disc Two: *Ari Hoenig Session*, Track 1, does so through a 5/4 time signature grouped in 3 bar phrases (Figure 11.4 below).

Happy

Straight 8ths Modern Jazz ♩ = 200

Quentin Angus

The musical score for 'Happy' is presented in a system of five staves. The top staff is a grand staff with a treble clef and a 5/4 time signature. The bottom four staves are bass clef staves, with measure numbers 4, 7, 10, and 13 indicated at the beginning of each line. The score features a complex rhythmic pattern of eighth notes and rests, characteristic of a hierarchical hemiola. The piece concludes with a 6/4 time signature change at the end of the fifth staff.

Figure 11.4: (TC: Volume Two: CD4: Disc Two: *Ari Hoenig Session*, Track 1 [0:05-0:27]) *Happy* (Current Author) (hierarchical hemiola used as compositional device)

5

6

8

9

Figure 11.5: (TC: Volume Two: CD4: Disc Two: *Ari Hoenig Session*, Track 4 [0:14-0:28]) *Falling* (Current Author) (same note on adjacent string)

Polyphony

As well as rhythmic innovations, Hekselman is one of the first jazz guitarists to incorporate what might be termed genuine polyphony into his playing. That is, rather than creating contrapuntal lines, Hekselman executes truly independent voices, and this can be heard throughout his recordings. One example of this is included below, taken from his improvisation over George Gershwin's *Someone to Watch Over Me*.

The musical score consists of four staves of music in treble clef, spanning measures 29 to 33. Measure 29 is marked with a box 'A' and contains a triplet of eighth notes on the first staff, with a C^{Δ} chord above. The second staff has a triplet of eighth notes starting on the second measure. Measure 30 continues with triplets on both staves, with an F^6 chord above the first staff. Measure 31 features a C/E chord above the first staff and a triplet of eighth notes on the second staff. Measure 32 has a Dm^7 chord above the first staff and a triplet of eighth notes on the second staff. Measure 33 has a Dm^7 chord above the first staff and a triplet of eighth notes on the second staff. Chords $E^{\flat 07}$, $D^{\flat 07}$, A^7 , $G^{\flat 07}$, and G^7sus are also indicated throughout the passage.

Figure 12.1: (TC: Appendix Two: Track 9 [0:08-0:34]) *Someone to Watch Over Me* (polyphony example)

Although the use of polyphony throughout his albums is certainly present, aspects of polyrhythm are not included within these examples. However, Hekselman's aptly titled DVD, *Polyphony for Guitar* (Jazz Heaven), does explore this combination.

Transcriptions to accompany the DVD were completed for Jazz Heaven by me as an offshoot of this research project (Provided in Volume Three: Appendix Seven: p. 215-231). Discussed on the following pages are three adaptations of polyrhythm within polyphony.

Devices employed over or under a melody

Figure 12.2 below shows Hekselman repeating a four bar phrase (top line), while simultaneously improvising a melody under it that contains a polyrhythmic eighth note grouping in fives below (bottom line).

The musical score consists of six systems, each with a treble clef staff and a bass clef staff. The top staff of each system contains a four-bar phrase with a melody and a chord progression. The bottom staff contains an improvisation with eighth notes grouped in fives. The systems are numbered 480, 484, 488, 492, 496, and 500. The chord progressions are: C7, F7, C7; F7, F#o7, C7, Em7(b5), A7alt.; Dm7, G7, C7, A7alt., Dm7, G7; C7, F7, C7; F7, F#o7, C7, Em7(b5), A7alt.; Dm7, G7, C7, A7alt., Dm7, G7.

Figure 12.2: Eighth notes grouped in fives under a melody

Devices employed over or under an ostinato

Hekselman also makes use of ostinati, or repeated phrases, set against another voice to create a polyrhythm. Figure 12.3 below shows use of an ostinato (bottom line) below, while Hekselman improvises a line of dotted eighth notes on top (top line).



Figure 12.3: Dotted eighth notes over an ostinato

Devices employed in each individual line

In contrast to the previous examples of Hekselman is a creation of my own, in which both independent lines make use of contrasting rhythmic devices. It is in effect an extension of the on/off phrasing device discussed earlier (pp. 24-29). Figure 12.4 on the following page shows the combination of on/off phrasing with polyphony, the top line outlining 5/4, while the bottom contrasts with a 7/4 idea.

The image shows three staves of musical notation. The top staff is labeled 'Top Line' and 'Bottom Line' above it. It features a treble clef and a 4/4 time signature. The first staff contains a sequence of notes with rests, some marked with 'x' above them. The second and third staves show more complex rhythmic patterns. Brackets above the second staff indicate two measures of 5/4 time. Brackets below the second and third staves indicate two measures of 7/4 time. The notation includes various note values, rests, and articulation marks.

Figure 12.4: Devices employed in each individual line

Figure 12.5 below shows the exact same example (Figure 12.4), although applied to triplets, and extracted from my improvisation over Hekselman's *Suite for Sweets* (CD4: Disc One: *Abercrombie and Hekselman Repertoire*, Track 6).

The image shows four staves of musical notation. The first two staves are in 4/4 time and feature several triplet markings (the number '3' above groups of notes). The third and fourth staves are in 7/4 time, with brackets indicating the 7/4 sections. The notation includes various note values, rests, and articulation marks, including slurs and accents.

Figure 12.5: *Suite for Sweets* (Hekselman) devices employed in each individual line

When transferred from eighth notes to triplets, each rhythmic pattern (or rather displacement) takes three repeats to resolve. They still however, result in a bar of five and a bar of seven, as Figure 12.6 below summarises:

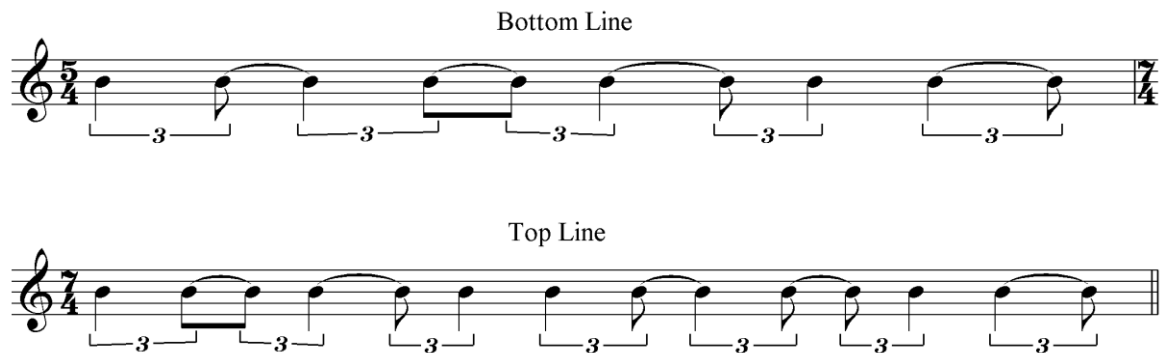


Figure 12.6: Rhythmic summary of Figure 12.5 (p. 108)

Where to Use the Devices

An important consideration with any musical device is when and how to use it. This is especially relevant with regard to the devices discussed within this submission, and several different considerations have been taken into account. This includes who you are playing with, and what you are playing.

As Hekselman discusses in relation to his performances with two different drummers, Ari Hoenig (as a sideman), and Marcus Gilmore (as a band leader):

I always try to play with the people that I play with. It's different, if someone takes it somewhere, then I have to go with the flow and not resist it, you know. Ari will almost always take it there and Marcus will hardly take it there. So that [playing with Marcus] allows me to go to a different place. Ari has a different game and he has roads to his game and Marcus has different rules to his game. Every drummer has slightly different rules, but I would say that they are two extreme opposites as drummers (Hekselman, 2012: personal communication).

Another important observation arising from the transcription and analysis process was that the devices were almost never used by Hekselman or Abercrombie in a ballad. Melody, touch, feel and dynamics became the most important considerations when improvising in this setting. The opposite end of the spectrum can be seen on fast, energetic works where rhythmic superimposition, displacement and interaction become the focal point of the improvisation.

What follows is a reflection – not intended to be definitive – regarding considerations as to when to employ the techniques and devices outlined in this study. The first concerns the ways in which the points of rhythmic and/or melodic tension are resolved by the ensembles at pivotal points in a given improvisation. This entails the use of what I call reference points. The second concerns what precedes and follows each device, and the third consideration turns on the degree of interaction between the players.

Reference points

I never wanted to play the downbeat. I always tried to keep away. Part of the game was can I play and keep away from always emphasising the downbeat, but what I realised was what made this sound great was that after you play some of these types of phrases, you did emphasise the downbeat. You came back to the downbeat and emphasised that, and played something that was more in, right in the time, and not so whacked out, so to speak... or over the time. Because it was the relationship between the two that really made everything sound good to me (Abercrombie, 2010: personal communication).

This approach to the use of rhythmic devices can be observed in both Abercrombie and Hekselman's improvisations. The rhythmic resolutions Abercrombie suggests, where he 'came back to the downbeat and emphasised that' constitute improvisatory reference points for the more sophisticated material each guitarist explores.

Figure 13.1 on the following pages provides an example of this. It is an extension of an example previously discussed within this dissertation, when covering off beat

syncopation and band interaction (p. 22), taken from Hekselman's improvisation over Ornette Coleman's *When Will the Blues Leave?*. Bars 17-22 are comprised of conventional melodic material, drums keeping time, bass walking, and guitar phrasing in predictable, symmetrical statements. In bars 22-30 Hekselman employs a long line of off beat syncopation (pp. 19-23), and in bars 26-29 Ari Hoenig (drums) provides a complimentary response to Hekselman, by providing a slightly contrasting accompaniment, through a displaced drum groove that outlines a 5/4 pattern (discussed in detail on pp. 22-23). After this interaction of rhythmic sophistication, bars 31-36 provide a gradual journey back to more conventional material, and by bar 37, drums are keeping time, bass is walking, and Hekselman is once more phrasing in predictable, symmetrical statements, a so called reference point for the improvisation.

The image displays two systems of musical notation for the piece 'When Will the Blues Leave'. The first system covers bars 17 to 22. It features a treble clef staff with a key signature of one flat (Bb), a bass clef staff, and a drum staff. Chord symbols are placed above the treble staff: Bb7, F7, Am7(b5), and D7alt. The second system covers bars 21 to 26. It also features a treble clef staff with a key signature of one flat, a bass clef staff, and a drum staff. Chord symbols are placed above the treble staff: Gm7, C7, F7, D7alt, Gm7, and C7. The drum staff in both systems shows a consistent groove with 'x' marks indicating hits.

Figure 13.1: (TC: Appendix Two: Track 10 [0:00-0:25]) *When Will the Blues Leave* (Ornette Coleman) (improvisatory reference point)

25 F⁷ B^{b7}

Musical notation for measures 25-26. Treble clef, bass clef, and guitar staff. Chords F⁷ and B^{b7} are indicated above the staff.

27 F⁷

Musical notation for measures 27-28. Treble clef, bass clef, and guitar staff. Chord F⁷ is indicated above the staff.

29 B^{b7}

Musical notation for measures 29-30. Treble clef, bass clef, and guitar staff. Chord B^{b7} is indicated above the staff.

31 F⁷ Am^{7(b5)} D^{7alt.}

Musical notation for measures 31-32. Treble clef, bass clef, and guitar staff. Chords F⁷, Am^{7(b5)}, and D^{7alt.} are indicated above the staff.

33 Gm7 C7 F7 D7alt Gm7 C7

37 F7 Bb7 F7

Aside from reference points such as these, which occur in the middle of an improvisation, a high percentage of the beginnings and endings of solos by Hekselman and Abercrombie contain standard material that clearly outlines the form. This approach has the effect of a metaphorical frame of a painting, and helps to provide a context for the more complex ideas explored throughout their improvisations.

Connection of Devices

Although many of the devices discussed within this submission are isolated examples, what precedes and follows each device, and how ideas are connected from one statement to the next are extremely important considerations. Ari Hoenig is well aware of this and can seamlessly integrate complex ideas without them ever feeling forced.

An example of this can be found in Hoenig's drumming while performing an original composition of mine entitled *Juncture* (CD4: Disc Two: *Ari Hoenig Session*, Track 6, Figure 13.2 below). On the 3 'and' of bar 4, Hoenig begins a metric modulation, playing off of the dotted eighth note tempo (marked above the staff). This initially outlines the melody at bar 4, and then builds tension through bar 5 as the melody does not fit the modulation. When arriving at bar 6, the modulation and the melody line up once again (on the 1 'and'), providing a pleasing aural resolution to the rhythmic tension provided by Hoenig.

The image shows a musical score for a bass line in 4/4 time. The score is divided into two systems. The first system contains bars 1 through 4. A box labeled 'A' is placed above the first bar. The second system contains bars 5 through 8. A '5' is written above the first bar of the second system. The score illustrates a metric modulation starting on the 3rd 'and' of bar 4. A dotted eighth note tempo marking is shown above the staff in bar 4. The modulation continues through bar 5, where the melody does not fit the new tempo. In bar 6, the modulation and melody align again on the 1st 'and', providing a resolution. The score ends with a double bar line in bar 8.

Figure 13.2: (TC: Volume Two: CD4: Disc Two: *Ari Hoenig Session*, Track 6 [0:16-0:31]) *Juncture* (current author) (connection of devices)

Interaction

All of the devices discussed within this submission, whether isolated examples or not, are almost always responses to, or statements made which increase interaction and interplay. Examples of this type of musical dialogue can be found throughout the submission recordings (for example *Anthropology*, discussed on pp. 72-75 [CD2: Track 8], *One More Song* [CD4: Disc One: Track 9], and *Happy* [CD4: Disc Two: Track 1]).

Figure 13.3 on the following page provides another example of the interaction created through the use of rhythmic devices, with an extract from my duet performance of *Beautiful Love* (Victor Young) with Abercrombie (CD2: Track 7). The transcription begins with Abercrombie (top line) using off beat syncopation and augmentation (bars 61-64). I respond to this by using 5/4 comping, built using on/off phrasing (bars 70-71). Abercrombie then implies a metric modulation to the dotted quarter note (bars 73-74), but my accompaniment contrasts by outlining the time and 'walking' (bars 74-78). This spurs Abercrombie on to play faster, more technically inspired runs while the harmony and form is clearly being outlined (bars 77-78).

The musical score is divided into several systems, each with a measure number and chord changes:

- System 1 (Measures 61-64):** Starts with Gm^7 and C^7 . A bracket labeled "Off Beat Syncopation" covers measures 62-64. Measure 64 features $F^{\#}maj^7$. The piano part includes triplets (marked '3') in measures 63 and 64.
- System 2 (Measures 65-68):** Chords are Dm^7 , Gm^7 , $Em^7(b^5)$, and $A^7alt.$. The piano part has triplets in measures 65 and 66.
- System 3 (Measures 69-72):** Chords are Dm^7 , $G^7(\#11)$, $Em^7(b^5)$, and $A^7alt.$. The guitar part includes a 5/4 time signature bracket and "on/off" markings in measures 70-72.
- System 4 (Measures 73-76):** Chords are $Em^7(b^5)$, $A^7alt.$, Dm^7 , and $D^7alt.$. The piano part has triplets in measures 74 and 75.
- System 5 (Measures 77-80):** Chords are Gm^7 and C^7 . The piano part has triplets in measures 77-79.

Figure 13.3: (TC: Volume Two: CD2: *Abercrombie and Hekselman Duets*, Track 7 [3:53-4:19]) *Beautiful Love* (Victor Young) (interaction)

Chapter Three Summary

After exploring in detail phrasing and polyrhythm (Chapters One and Two), Chapter Three has consolidated the findings by considering a broader context for the research. This includes an explanation of how the research has informed my improvisational language in relation to the guitar itself (pp. 98-104), a brief discussion of Hekselman's innovative use of polyphony in jazz guitar (pp. 105-109), and finally, a bird's eye view of how to incorporate the various devices in an extended improvisation (pp. 109-116).

Conclusion

Through transcription, analysis, application, exploration and performance, this research project has resulted in a significantly increased understanding of the current trend in contemporary jazz towards further rhythmic sophistication, in particular as it applies to the guitar. As a performance based study, the CDs and accompanying exegesis provide a detailed and thorough case study of the application of Walter Bishop Junior's tripartite model of imitation, assimilation, and innovation (discussed p. 8). As has been demonstrated throughout, these steps are an important and essential part of the artistic process, although due to the rather unnatural marrying of performance and a formal academic pursuit, it is unfortunately largely undocumented (Martin, 2005: 84). The subject matter of this study: phrasing and polyrhythm, seem to be at the core of what helped Abercrombie achieve the final 'innovation' part of this process: 'I'm always looking for something that is a little more personal... something unique... and I'd say, aside from sound, the main way I was able to develop that was by creating displaced, odd phrases, and rhythmically sophisticated vocabulary' (Abercrombie, 2010: personal communication).

The introduction provided the context in which the research was undertaken, justified the methodology and theoretical framework, and through a detailed literature review, the need for the research and its place within jazz scholarship was established. An important feature of the dissertation is the scholarly interplay between critical analysis and the articulation of the findings in the CD recordings.

Chapter One covered phrasing, presenting transcriptions and analyses of Hekselman and Abercrombie, covering general asymmetry in phrasing, hierarchical polyrhythms, obscuring hierarchical structures, phrase displacement, off beat syncopation and on/off phrasing. Chapter Two explored polyrhythm, presenting transcribed extracts from my

improvisations and compositions, with reference to the submission recordings. Devices discussed in this chapter include metric modulation, note groupings, superimposing other meters, multi-layered polyrhythms, augmentation and diminution, and their respective sub-categories. The final chapter consolidated the findings by considering broader aspects of their application and importance. This was achieved through the examination of the research in relation to my chosen instrument, a brief discussion of polyphony, and an exploration of how the devices are used in relation to the overall structure of an improvisation. Taken from interviews conducted throughout my candidature, personal insights from Hekselman, Abercrombie and Hoenig helped to frame the research presented.

The devices presented in this study include established concepts and ideas, new insights, and original observations and developments, providing an extremely broad and detailed analysis of the current state of rhythmic developments in jazz. The Appendices highlight the large amount of data consulted to inform the research, collected through original transcription and analysis (Volume Three: Appendix Seven: pp. 3-231). Edited transcripts of the Abercrombie, Hekselman, and Hoenig interviews (Appendix Five: pp. 135-153), lead sheets of the repertoire performed on the submission recordings (Volume Three: Appendix Eight: pp. 232-363), and transcriptions of my own improvisations (Volume Three: Appendix Nine: pp. 364-371) are also provided to further support the research.

In addition to insights into transcription, analysis and theoretical concepts, the research has helped me to establish a clear and refined method for developing contemporary approaches to phrasing and polyrhythm, resulting in a far larger improvisational vocabulary, and has significantly enhanced my performance practice. This impact is evident in a variety of different settings, including duos, trios, small groups and larger ensembles, and a variety of different repertoire, including standards, Abercrombie and

Hekselman compositions, and a plethora of original compositions. Broadly speaking, the research has resulted in a more contemporary, artistically relevant sound and aesthetic, and has significantly increased interaction and interplay when used in an improvisational manner.

Overall, this study is simply a reflection of my personal experience in the current contemporary jazz climate. It is a direct response to what I regard as the defining features of the modern jazz idiom, with particular reference to the guitar. The submission recordings are firmly placed within this ideal and have been well received with international audiences. They feature many of the world's most prominent voices in jazz, and were recorded, mixed and mastered by highly regarded, established engineers in New York (full details provided on the cover of each CD (Volume Two), and in Appendix One: pp. 123-125).

The accompanying CDs along with the Hekselman transcriptions are the main products of the research process, although I anticipate the thesis as a whole will be of benefit to collegiate candidates, professional performing musicians, teachers, theorists, musicologists and jazz enthusiasts. The practical application list (Appendix Four: pp. 132-134), could easily be used by others who are also seeking to advance their rhythmic vocabulary, and augurs well for future research on the topic by providing a detailed framework which can be added to, manipulated and expanded. This list provides one of the first large scale organizations of rhythmic devices in jazz, as Ari Hoenig states: 'Sometimes it's hard to classify and codify all these different ideas and devices. It's really at the beginning stages of actually categorizing and really defining the different possibilities in contemporary rhythmic language in jazz' (Hoenig, 2013: personal communication).

This study presents the first academic examination of Hekselman's highly innovative, modern and rhythmically sophisticated improvisations, and Abercrombie's idiosyncratic approaches to phrasing and polyrhythm. The transcriptions of Hekselman's entire discography as a band leader (Volume Three: Appendix Seven: pp. 10-163) have been published, contributing to knowledge in the discipline, and leading to other publications for Mel Bay (Volume Three: Appendix Seven: pp. 180-205). The devices presented and discussed in the three previous chapters (pp. 14-117) provide an extension of the literature currently available on polyrhythm, while offering a unique examination of phrasing, a much less documented topic in jazz (Yoshizawa, 1999: 17).

Although rhythmic developments are the current focal point for many modern jazz improvisers and composers, there is still a long way to go, and we are really just at the beginning stages of this paradigm. When discussing advanced tuplet groupings with Hoenig (p. 66-69), his statement of 'It's something the music is growing towards' clearly supports this assertion. There are still many avenues for further developments in this regard, and although the research questions, aims and objectives of this study have been achieved and answered, creating a far deeper and grounded understanding of phrasing and polyrhythm, I look forward to observing and hopefully being involved with, the future developments of this music.

Appendices

The appendices on the following pages provide a detailed selection of support material to accompany the written exegesis. There are nine different appendices, five included in this first volume, and the remaining four in the third volume.

List of Appendices (Volume One)

Appendix One: CD Recording Discussion	123
Appendix Two: Recorded Extracts of Hekselman Transcriptions.....	126
Appendix Three: Glossary	129
Appendix Four: Practical Application List.....	132
Appendix Five: Edited Transcripts of Interviews	135

List of Appendices (Volume Three)

Appendix Six: Drum Transcription Legend	2
Appendix Seven: Transcriptions.....	3
Appendix Eight: Lead Sheets of the Repertoire Performed.....	232
Appendix Nine: Transcriptions of my Own Improvisations	364

Appendix One: CD Recording Information

The four CD recordings which present the main product of the research process: CD1: *Retrieval Structure*, CD2: *Abercrombie and Hekselman Duets*, CD3: *Perception* and CD4: Disc One: *Abercrombie and Hekselman Repertoire*/Disc Two: *Ari Hoenig Session*, are provided in the second volume of this thesis. All relevant information relating to the recordings (catalogue number, track listings, musicians, engineers, mixing, mastering and studio information) can be found on the CD covers themselves, although a summary of each CD has been included below.

CD1: *Retrieval Structure*

Recording Date: August 15th 2011

Recording Studio: Acoustic Recording, Brooklyn, NY, USA

Musicians: Quentin Angus- Guitar, Chad Lefkowitz-Brown- Saxophone, Matthew Sheens- Piano, Scott Colberg- Bass, and Kenneth Salters- Drums

Catalogue Number: QAQNO11

Recording Engineer: Michael Brorby

Mixing: Michael Brorby

Mastering: Alan Silverman

Producer: Quentin Angus

Short Description:

Retrieval Structure was a commercially released and distributed recording, containing completely original compositions.

CD2: *Abercrombie and Hekselman Duets*

Recording Dates: May 3rd 2011 (Abercrombie Duets), and September 28th 2012 (Hekselman Duets)

Recording Studio: Studio A (Purchase College), New York, NY, USA (Abercrombie Duets) and Peter Karl Studios, Brooklyn, NY, USA (Hekselman Duets)

Musicians: Quentin Angus- Guitar, John Abercrombie- Guitar, and Gilad Hekselman- Guitar

Catalogue Number: NA

Recording Engineer: Ben Goldstein

Mixing: Ben Goldstein

Mastering: Simen Solvang

Producer: Quentin Angus

Short Description:

This recording was completed for research purposes, and has not been commercially released or distributed. It comprises renditions of standard jazz repertoire.

CD3: *Perception*

Recording Dates: January 30th and 31st 2013

Recording Studio: Peter Karl Studios, Brooklyn, NY, USA

Musicians: Quentin Angus- Guitar, Jo Lawry- Voice, Will Vinson- Saxophone, Chad Lefkowitz-Brown- Saxophone, Shai Maestro- Piano, Matthew Sheens- Piano, Linda Oh- Bass, Or Bareket- Bass, Kenneth Salters- Drums, and the Yanni Burton String Quintet (Yanni Burton [bass], Sarah Koenig-Plonskier [violin 1], Lavinia Pavlish [violin 2], Jack Stulz [viola], and Leanna Rutt [cello])

Catalogue Number: AS-QA001

Recording Engineer: Michael Perez

Mixing: Michael Perez

Mastering: Alan Silverman

Producer: Jon Gordon and Quentin Angus

Short Description:

Perception was a commercially released and distributed recording, containing six original compositions, an original by Matthew Sheens, and an arrangement of *Nardis* (Miles Davis).

CD4: Disc One: *Abercrombie and Hekselman Repertoire*/Disc Two: *Ari Hoenig Session*

Recording Dates: April 22nd 2013 (Abercrombie and Hekselman Repertoire), and December 4th 2013 (Ari Hoenig Session)

Recording Studio: Peter Karl Studios, Brooklyn, NY, USA

Musicians: Quentin Angus- Guitar, Alon Tayar- Piano, Or Bareket- Bass, Bambam Rodriguez- Bass, Kenneth Salters- Drums, and Ari Hoenig- Drums

Catalogue Number: NA

Recording Engineer: Michael Perez

Mixing: Michael Perez

Mastering: Michael Perez and Alan Silverman

Producer: Quentin Angus

Short Description:

These recordings were completed for research purposes, and have not been commercially released or distributed. The sessions comprise renditions of standard jazz repertoire, Abercrombie and Hekselman compositions, and some original compositions. *Outro*, and *Falling* are additional original compositions, taken from the January 30th session, originally recorded for inclusion in *Perception*.

Appendix Two: Recorded Extracts of Hekselman Transcriptions

With permission from Hekselman (see 'statement of authorship' on the following page), a sample CD of his recordings has been provided below. Only small snippets of larger recordings have been included, provided to give an aural reference to the transcription extracts discussed within this submission. Following the statement of authorship is a track listing, though specific track numbers are referenced throughout Chapters One, Two and Three. The CD itself is provided below.

NOTE:

This appendix is on a CD included with the print copy of the thesis held in the University of Adelaide Library.

Statement of Authorship

Title of Publication

Splitlife, Words Unspoken, Hearts Wide Open and This Just In (Hekselman)

Publication Status

Published	Accepted for Publication	Submitted for Publication	Publication style
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Publication Details

Four CD Recordings. Short snippets have been cut from the original recordings in order to provide aural examples of the transcribed extracts discussed within this dissertation.

Author Contributions

By signing this Statement of Authorship, on the 29th day of December 2013, each author certifies that their stated contribution to the publication is accurate and that permission is granted for the publication to be included in the candidate's thesis

Name of Principal Author	Gilad Hekselman
Contribution to the Publication	Guitarist and composer for Splitlife, Words Unspoken, Hearts Wide Open and This Just In
Signature	

Name of Candidate	Quentin Angus
Contribution to the Publication	No contribution to original publication (contribution to this submission through the transcription of the recorded examples)
Signature	

CD Track Listing

(Recorded Extracts of Hekselman Transcriptions)

Chapter One: Phrasing	p. 14
Phrase Displacement	p. 18
Figure 1.3	Track 1
Off Beat Syncopation and On/Off Phrasing	pp. 21-22
Figure 2.3	Track 2
Figure 2.4	Track 3
Obscuring Hierarchical Structures	p. 32
Figure 3.4	Track 4
Hierarchical Polyrhythms	p. 36
Figure 4.4	Track 5
Chapter Two: Polyrhythm	p. 42
Metric Modulation	p. 46
Figure 6.2	Track 6
Multi-Layered Polyrhythms	p. 81
Figure 9.1	Track 7
Augmentation and Diminution	p. 91
Figure 10.5	Track 8
Chapter Three: Other Considerations	p. 98
Polyphony	p. 105
Figure 12.1	Track 9
Where to Use the Devices	p. 111
Figure 13.1	Track 10

Appendix Three: Glossary

Provided below is a summary of different terms used throughout the exegesis, with their accompanying definitions. Terms with references indicate definitions that have been adopted verbatim from relevant literature, while those without have a general description, followed by a page number reference to a fuller explanation. The majority of these terms can be found throughout the larger discussion, usually with specific reference to a particular device.

Phrase: Any structure or idea which can be seen as containing a clear beginning and ending, whether it conforms to the underlying structure of the work or not (p. 5).

Polyrhythm: A general, non specific description for the rhythmic devices discussed within the exegesis (p. 6).

Displacement: 'A rhythmic displacement is any rhythm or musical phrase that begins on a different part of the beat than its original starting point' (Hoenig/Weidenmueller, 2011: 5) (p. 14).

Metric Modulation: 'Changing the tempo of a piece so that the new tempo has some kind of mathematical relation to the original tempo' (Hoenig/Weidenmueller, 2011: 5) (pp. 42-56).

Syncopation: 'The displacement of the normal musical accent from a strong beat to a weak one' (Latham, 2002: 1235). 'The regular shifting of each beat in a measured pattern by the same amount ahead of or behind its normal position in that pattern' (Sadie, 1980: 469) (pp. 19-23).

Motif [Motive]: 'A melodic, rhythmic musical unit which brings unity, relationship, coherence, logic, comprehensibility and fluency to composition, by means of its repetition and varied recurrence. A motif is the main building-block for themes and melodic lines' (Latham, 2002: 803)

Tuplet: A tuplet is any rhythm that involves dividing the beat into a different number of equal subdivisions from that usually permitted by the time-signature (pp. 66-69).

Meter: 'The pattern of regular pulses (and the arrangement of their constituent parts) by which a piece of music is organized. One complete pattern is called a bar' (Latham, 2002: 769)

Campanella: A guitar technique that utilizes open strings to create a cascading, bell like effect (pp. 99-101).

Counterpoint: 'Counterpoint is the coherent combination of distinct melodic lines in music' (Latham, 2002: 315).

Polyphony: 'Musical texture in two or more (though usually at least three) relatively independent parts' (Latham, 2002: 978).

Augmentation and Diminution: The lengthening and shortening of time values (pp. 86-96).

Ostinato: 'A fairly short melodic, rhythmic, or chordal phrase repeated continuously throughout a piece or section' (Latham, 2002: 916).

Clave: 'A fairly short melodic, rhythmic, or chordal phrase repeated continuously throughout a piece or section' (Latham, 2002: 916).

Appendix Four: Practical Application List

Through the process of transcription, analysis and categorization, a list of various devices was compiled for use as a comprehensive practical application guide. This list was then expanded upon by combining devices, extending concepts, and some personal explorations. The resultant practical application list has been included on the following pages and is split into three different categories: 'phrasing', 'polyrhythm', and 'other considerations'.

Phrasing

- 1) Phrase displacement
- 2) Off beat syncopation and on/off phrasing
 - Off beat syncopation
 - On/off phrasing
- 3) Obscuring hierarchical structures
- 4) Hierarchical polyrhythms
- 5) General asymmetry in phrasing

Polyrhythm

- 6) Metric modulation
 - Compositional metric modulations
 - Improvised metric modulations
 - Implied metric modulations

7) Note groupings

- Odd groupings
- Mixing groupings to create larger structures
- Augmentation and diminution of groupings
- Tuplet groupings

8) Superimposing other meters

- Superimposition using on/off phrasing
- Superimposition using a rhythmic motif
- Superimposition through phrase structure

9) Multi-layered polyrhythms

- The grouping structure of a superimposed meter
- The melodic sequence of a note grouping

10) Augmentation and diminution

- Augmentation/diminution of note values
- Augmentation/diminution of note groupings
- Augmentation/diminution of on/off phrasing
- Augmentation/diminution into a polyrhythm
- Augmentation/diminution of superimposed meters

Other considerations

11) Instrument specific explorations

- Open strings (campanella)
- Same note on an adjacent string

12) Polyphony

- Devices employed over or under a melody
- Devices employed over or under an ostinato
- Devices employed in each individual line

13) Where to use the devices

- Reference points
- Connection of Devices
- Interaction

Appendix Five: Edited Transcripts of Interviews

Interviews were conducted with Abercrombie, Hekselman and Hoenig, to gain insights into their opinions and thoughts on the research contained within this thesis. The Abercrombie interview (pp. 135-142) was completed in 2010, on the 16th of November, Hekselman (pp. 143-147) in 2012 on the 13th of August, and Hoenig (pp. 148-153) in 2013 on the 13th of May.

John Abercrombie

Quentin (hereafter Q): A question?

John Abercrombie (hereafter J): An answer

Q: Do you have any comments about 'general asymmetry in phrasing'? Are you aware of this type of phrasing? [This question was asked after explaining this concept, which is discussed in detail on pp. 37-40 of this dissertation]

J: I'm very aware of it, and I've practised some things, most of the times it's just, I'm trying to feel a phrase... and play all the different rhythms with a metronome and try to develop ideas, very simple things like that... or I would try playing eighth note triplets, and accenting every 4th one, which is a very common thing. I heard Herbie Hancock doing it on a record and then everyone was doing it. I never got really deeply into playing other groupings such as 5 or 7 or 9... I found it to be a little too 'heady' for me, you know, I'm just not that kind of person, I'm not saying it's a bad thing to do... it's probably a great thing to do... it's just, my way of thinking was a little more natural, with the exception of some triplet phrasing, but I never wanted to play the downbeat. I always tried to keep away. Part of the game was can I play and keep away from always emphasising the downbeat, but what I realised was what made this sound great

was that after you play some of these types of phrases, you did emphasise the downbeat. You came back to the downbeat and emphasised that, and played something that was more in, right in the time, and not so whacked out, so to speak... or over the time. Because it was the relationship between the two that really made everything sound good to me.

I played a lot of music that had no meter, and that obviously influences the way you play. I started with people like Jack DeJohnette and Dave Holland, and we'd play a little melody, usually just a melody and bass line, and after that you were completely free. You could play in the tempo of the song, or anywhere you wanted. There were no rules. We started to play 'pulse' oriented music, but you may not be playing the same pulse as the other members of the band... this will also influence the way you play a standard song, or something with a structure, one influences the other, and playing structurally influences free playing, because if you improvise freely without any coherent matter, then it would just sound weird.

Also, my influences, like Jim Hall, Bill Evans, Miles... people that did phrase across the bar line... would play things that would sort of suspend... with Miles it was never worked out... it was like someone throwing paint on a canvas... where ever the notes landed was not precise... whereas Bill [Evans] obviously worked on displacements and specific ideas... triplets and ideas... very intellectually, but when he played it never sounded that way... he played it until it sounded right... it depends on what you listen to, what you practise and who you played with. I could sound like Kenny Burrell if I wanted to, lots of my early phrasing lined up very evenly.

When this version of this tune was recorded [*Bessie's Blues*, p. 40] I was young... it was in the 70s. This particular album was recorded on a trip back from Japan with my Quartet... we recorded it in LA before returning in NYC... I was 30 years old... I hadn't

developed a concrete way to play... this take was played on a mandolin guitar... a very high instrument... a four string instrument... it sort of sounds like someone playing high on the guitar, I still have the instrument... fender made it... and it was called the electric mandolin... I played it for a couple years and on a few records... it was like having a soprano saxophone... you couldn't play the full range of the instrument as the frets get very small... it was a certain timbre you couldn't get on the guitar. I was still very young and was still trying a lot of things... playing freely and fast over *Bessie's Blues* with an electric mandolin... it was kind of crazy, and the whole record has an energy to it as we were all very young and energetic... keep that in mind too... I was learning how to play... it was my first band... writing my own tunes... it was a very liberating experience.

Q: That has answered a lot of the other questions I was going to ask, but how about we talk about polyrhythm specifically? Through my research I found that the hemiola rhythm [discussed on p. 70] is the most common. Do you have any thoughts about this? Or other polyrhythms?

J: You will find them [hemiola rhythms] on all the recordings. People I was playing with did it all the time. 3/4 over 4/4 and 4/4 over 3/4 are easy to hear and the most common. Also playing 3 against 4 and 4 against 3, a metric modulation. For example playing a dotted quarter against 3/4 and then building a tempo from that... turning it into double time 4/4.... you can play off of that... subdividing things are very helpful... depends on tempos and feelings... when you are playing slow, triplets are great to use... it's very easy to hear how something is subdivided... if you play in triplets and start accenting in odd places, you get some very interesting sounds.

Also when I would play really fast tempos, quite often I could not cut eighth notes, so I would play off of the quarter note triplet and concentrate on different groupings and

rhythmic things, they say necessity is the mother of invention... and when you need to do something and can't, you will find a way of doing it... this is what I had to do.

I was always trying to hear melodies and intervallic motions, and rhythm to be the basis of what I played, not lines. I think it's a more natural way of playing. You have to use your ear and compositional talents and it's also more interactive. I need to be able to play with the right people. When no one is completely laying it down, that's when it's the most interesting. When bass and drums are not doing their usual roles [bass walking and drums keeping time], you have enough room to explore. You don't feel boxed in to needing to play constant eighth notes all the time... it also felt more personal... I might play a series of intervals through chords and liked the sounds.

Q: Have you explored any of these concepts in a compositional context?

J: Definitely. I mean, most of my compositions have something. Also, I write 80% waltzes... 3/4 sits really well with me. Bill played a lot of waltzes and most of the people around the place played them... they were also not usually played too fast... it was more lyrical... like *Someday my Prince Will Come*. The original Miles recording... I found myself more attracted to that, it was simpler to hear than the faster jazz. I incorporate the concepts of 4 against 3 everywhere in my compositions. *A Nice Idea*... etc... I find it such an interesting way to play... I don't like going to 9s and 13s, it seems too complicated... it would be an interesting study though. It would be more an intellectual pursuit rather than an aesthetic. What usually happens is I sit down and play... and then I find things that I like, I don't think about it... you can practise too much... your intuition needs to work as well... follow your intuition... you will find yourself in some interesting places... sometimes it's hard to get into that mind set... I have enough licks to plug in if I'm not feeling inspired... it's all vocabulary... it's just how you use it.

Q: Do you have any opinions about where this new rhythmic vocabulary came from?

J: Jim Hall was one of the first people to point the way to a different way of playing the guitar... [He showed that] you don't have to play long lines of eighth notes, and you can play different chord voicings. They were linked to the tradition, but more modern. A lot of it was rhythmic concepts.

Now you hear a lot of players using more sophisticated rhythmic vocabulary. When I was growing up there was Pat Martino, George Benson, Tal Farlow, and Wes [Montgomery]. They played in a very straight way, beautiful though, but if you grew up back then and then you heard Jim Hall you would have been blown away.... I think he was the first to start hinting at the new direction of jazz guitar. There were some other guitarists who were pushing in other directions like this: Larry Coryell, and Gabor Szabo, but Jim was the first that was heading in a new direction without playing rock jazz or Hungarian gypsy scales. He took the language and found a new way of expressing it. He arrived to show us the way forward.

If you listen to his early records though... he sounded exactly like Charlie Christian. It was right down the middle... it was very deliberate, swing guitar. His innovations were with Sonny Rollins, Bill Evans and Art Farmer, those different groups. When I first heard those recordings in the 1960's it was very modern... that arrived to show us the way... not in any way flashy... he had another quality that was an acquired taste for some.

Q: Augmentation and diminution? Do you have any comments or insights? [This question was asked after explaining the concepts presented in pp. 86-96 of this dissertation]

J: I don't know if I've ever specifically worked on it [augmentation and diminution]. It just seems to make sense to me. Usually these things would happen on a gig, or a

recording, in relation to what was happening in the music and then I would remember it... and I would like it, and use it again... that sounds like it comes from somewhere [example on p. 92], perhaps from Lennie Bro [another jazz guitarist]... he could play single notes but then could also be 'chordy', he did a version of 'There is no Greater Love' as well... it's a live recording from California... there might have been something in that version that influenced me... it's not all original... but who knows... maybe check out that recording and see if there is anything similar in our renditions of the song.

He [Lennie] was around all the time, an underrated player, lots of problems with drugs and alcohol, he was murdered by his wife, very tragic, bizarre ending to his life. Joey Barron [one of Abercrombie's favourite drummers] used to play with him... he was free but he played tunes... no rehearsals... no arrangements... you should listen to the recording... it's called *The Velvet Touch of Lennie Bro*. Very hard to get a hold of these days, it's out of print, so you'd have to buy a collector's edition from Amazon at a large price... then convert it to mp3 or something.

To directly answer your question, diminution just seems like a natural, and easy way to develop a musical idea, without losing the essence of what it is. I don't think I've checked out augmentation though.

Q: Phrase displacement? Comments or insights? [This question was asked after explaining the concepts presented in pp. 14-18 of this dissertation, and Abercrombie's phrase displacement found on p. 179 in Volume Three, Appendix Seven]

J: Well that's sneaky [the displacement in Volume Three, Appendix Seven, p. 179]... I think I remember playing that idea. About this concept, I heard Bill Evans say... try to play ahead of time... play the bar ahead of where you are... sometimes I will do that... I'll play the next chord before it arrives, anticipate the chord, you jump the gun. On

purpose... but as long as you know where you are in the form it is an interesting sound to go for. Bill was working very hard on that kind of thing... for me though, it needs to happen in a very natural way, it would take me longer to figure out if I did it intellectually... things happen when you play from purely intuition... and then... can you remember what it is? You then build up a vocab of odd phrasing... at least that is how I did it. I'm always looking for something that is a little more personal... something unique... and I'd say, aside from sound, the main way I was able to develop that was by creating displaced, odd phrases, and rhythmically sophisticated vocabulary. I can't sound like my idols, it's impossible, so why not create your own sound?

I also never disregarded the song to fit my special little ideas... I also still wanted to make the changes in some way or another... the idea of trying to get the ideas to fit in makes your playing more special, recognizable and more 'right'... I used to take some ideas from Sonny Rollins... and it's all about phrasing.

Phrasing is the key to make everything work... sometimes it works and sometimes it doesn't... for me to be able to play what I want I need to be able to play with the right people. We took a lot of risks, but we always kept to the form. I liked that take of [*There is*] *No Greater Love* [from *Straight Flight*, in Volume Three, Appendix Seven, pp. 165-169]. It was very mysterious... we avoided playing the melodies at the start of a song... we played standards without the melody... to make it interesting and so that people didn't know what we were doing... but we would play the melody at the end... we called them 'headless standards'. We always played over the form but we would see how much you can do with it... seeing how much you can bend it, twist it, leave it behind, and get away with, but still be able to come back, and know where it is. For a lot of jazz musicians it has been a game that we play. I have always liked that... making the tune a little more mysterious, without re-harmonizing, or putting it in an odd meter, or changing the form. It's just more like disguising how you are playing. That's where a lot

of this phraseology comes from, from trying to fool around with the rhythm, and the structure of standard tunes, and trying to make them more 'open' sounding.

Gilad Hekselman

Quentin (hereafter Q): A question?

Gilad Hekselman (hereafter G): An answer

Q: Can you comment about note groupings? And also augmentation and diminution within note groupings? Are you aware of this, have you practised it, etc?

G: I've worked on it, it's always been a passion of mine. I'm able to do any of them. If you give me a number I could improvise a line based off of that grouping. I'll be honest with you, a lot of this stuff, I mean most of this stuff, I don't think at all. Of course I've thought about note groupings, and I'm able to do any of them, but it's always been a passion of mine. So I worked on it, and now it's like a language. You talk, you don't think about it. I never decide, OK this is going to be a descending number of notes in the grouping, and I have not practised that.

Q: What about more advanced note groupings, such as tuplet groupings? Is playing 10 over 7 something that you have practised? Was this on purpose? [Example discussed on pp. 66-69 of this dissertation]

G: It is on purpose, but it just happens to be that rhythm. I don't think those notes are exactly even, I would say it's just a phrasing thing. I probably picked it up from playing with other people. I'm not thinking at all when I play... I really separate practicing and playing. I'm never thinking when I play, and I'm not trying to display things that I've been working on, or have any kind of agenda. I work on things at home and I keep it separate from when I'm playing a gig... I just play music with other people, and react to the other musicians and their flow of thought, I never think about it too specifically.

There are some people who would do that, and it's a different school of thought.

Preparing things to play on the bandstand.... I guess I do it to an extent. I work on the 'how' of things rather than the 'what'. I would work on hearing a certain rhythm... not a specific phrase, but I want to be able to do the rhythm... or I want to play polyphony. I would not practise a specific thing to play, but rather a way to be able to improvise off of that concept... 'how' to do something, rather than 'something' to do... you know what I mean?

Q: I do, definitely. That's a nice way of thinking of things. Could you please comment on on/off phrasing? I've also found you using the concept in combination with diminution; were you aware of either of these devices?

G: The diminution of on/off phrasing was unintentional, but the concept you have developed, the thing you just described with on the beat, off the beat could be thought of as a displacement... or I also think of it as dividing the bar in half. If you subdivide the bar in half... then that's what happens... then it can also sound like two against the underlying time. I'm not sure if you have heard, but my arrangement of *Nothing Personal* does exactly that... [splitting 5/4 into 2 halves]. I do that with the bass line, and made it in 5/4... check it out, it's on You Tube, the arrangement is subdividing the 5/4 bars into half.

Q: Could you comment on this phrase displacement? [Discussed on pp. 14-18]

G: This thing you're asking me about... where things move... I think about it more as a displacement... that's a language thing again, I've worked a lot on displacements... just like taking whatever... a song... and being able to play it in a different place... for example, *Mary Had a Little Lamb*... starting the melody on beat 1, the 'and' of one, beat 2... etc, and still being able to hear where you are in the form... I've done it on bebop

tunes... *Confirmation*... etc... it's almost like a game for me. It was very enjoyable for me to try see what I could do with them... my arrangement of *Countdown* is essentially that.

And... it's also Ari's thing [Ari Hoenig], he kinda' works with stuff like that a lot, drummers are very different in that sense... Ari is the extreme of that... if I play something... most likely he will go with it... that's kind of his thing too, it's a really big part of his language.

Q: Does your playing change when you are playing with someone like Ari?

G: Just because the ideas go to a different place... I always try to play with the people that I play with. It's different, if someone takes it somewhere, then I have to go with the flow and not resist it, you know. Ari will almost always take it there and Marcus will hardly take it there. So that [playing with Marcus] allows me to go to a different place. Ari has a different game and he has roads to his game and Marcus has different rules to his game. Every drummer has slightly different rules, but I would say that they are two extreme opposites as drummers.

Q: In your view are there any particular guitarists that have lead to this type of playing, or other instrumentalists?

G: Mainly from other instruments and music in general, I don't think anything that I play is extremely unique, I guess perhaps the fact that I am playing it on the guitar, and in the context of jazz, I might be somewhat unique, but I still think not... there is a massive amount of that going around these days... with jazz and Indian music and African music, and classical music... nothing is 'ours' anyway.

Q: There aren't that many guitarists who have influenced you in this regard?

G: I try not to listen to guitarists. You know before I played the guitar I wanted to be a drummer. I couldn't because my neighbours would get annoyed with the sounds and so I wasn't allowed to practise drums. My second instrument was guitar, and in a way I still want to be a drummer... I'm more interested in rhythm and I've always been more into rhythm than anything else.

Q: Do you still practise this stuff on the drums? Do you still play them?

G: I have a drum set at home and I still practise, I just work on getting a good sound and on technique because I already have this stuff down [the rhythmic devices discussed in this dissertation]... so it will come out naturally once I can play the instrument properly.

Q: I have some friends that study at the New School, where you did your degree, and they said there was an advanced rhythm class there; did you take that class? And did that influence your playing?

G: That would be Rory Stewart's class... well, I did do the class, but that stuff was easy! It was a good class, for sure... but the only things he showed that I had never dealt with before were the rhythms from other countries... anything that was polyrhythmic or cross rhythmic, I already had down.

Q: OK. We are running out of time, but I'd like to ask you about a personal concept I've developed, called Multi-Layered Polyrythms. And the concept's genesis can be found in one of your improvisations, over *The Way You Look Tonight* from Ari's album, where you play 5/4 over 4/4 but phrase in 3 bar fragments [showed him the transcription].

G: Yes that's what it is.

Q: Have you ever practised that?

G: Not that specifically... again, I've practised 5/4 over tunes, and being comfortable to hear that... the grouping for me is easy, once you feel comfortable on the superimposition... as long as you can do the superimposition over the entire form, then it doesn't matter what the grouping is... it could be anything... so I never worked on that specifically... rhythmic practise is all about being able to hear things and not get lost, or thrown off and to always be comfortable. I have practised singing melodies and clapping polyrhythms [he sings *The Way you Look Tonight* and claps 5/4 behind it]... it's a very practical thing [does 7/4 as well], if I make a mistake then I find out why, maybe two rhythms land at the same time... or that something would be confusing... or it's on a weak beat, all of those things... I then isolate it and then once I hear it I never have to practise it again... it's more like a practical practice, I try to find things that I can't do and get it so I can do them by the end of the practice... all this practise can be done without the guitar... It's not a guitar thing, it's about getting the concept down. The guitar is just technique or harmony. Ideas have nothing to do with guitar, that's why you can take them from different places.

Quentin (hereafter Q): A question?

Ari Hoenig (hereafter A): An answer

Q: 5 over 7 and 7 over 5. I've heard you employing this technique in live situations, and also transcribed examples [showed him transcription examples], but the mathematics behind it, and the practical application seem to differ [discussed p. 50]. Could you please comment about this?

A: Well first of all, I discovered that the relationship worked pretty well when I was playing a tune with Jean Michel [Pilc]. We were sound checking and he started playing a tune and I joined in. When we stopped I said 'were you playing in five?' and he replied 'no, I was playing in seven'. Neither of us realized that we were playing in different time signatures; we were just playing off of the basic clave.

I still noticed something was not quite lining up, and when we discussed it we realized what it was. But from then on, I knew that I could move between them [5 and 7] quite seamlessly, and incorporated it into my playing. I arranged *Summertime* [Gershwin] to use this concept. It changed between five, seven and three.

When I first started doing seven over five, I would think of it as 4 over 3 and 3 over 2 [which splits the bar in two], even though the tempo of each is not exact. I knew that the 4 over 3 was a little faster and would play it that way... I didn't want to think about playing septuplets and grouping them in fives while improvising, I knew I was not really going to think like that. At a fast tempo that simply is not going to happen and the other way of thinking presents an easier way to do it.

I think it's important to have both. To understand the mathematics of it, and how it works, but also to have a practical way of actually using the technique in an improvised manner. A way that you can really hear it. 5 over 7 was more difficult for me to get down than shifting from 7 to 5. When shifting back I often just think of what the original tempo was. Eventually you just get it in your head, it becomes a sound. It becomes like moving between sixteenth notes and triplets, you just remember what that relationship sounds like and can move between them freely.

Q: Could you discuss phrase displacements? How you think about them? [Showed him the transcribed example included on pp. 14-18 of this dissertation and explained the concept]

A: It's a way of thinking... the first time I heard someone do this was Tain [Jeff 'Tain' Watts], using displacement in a way, and he talked about it, I remember when he was playing with Wynton [Marsalis], the *Standard Time* records [Vol. 1, 1987, Vol. 2, 1991]. Those and *Live At Blues Alley* [1988] were extremely influential to me in terms of displacements and different rhythmic ideas. I don't know if you've checked out those records, but he was saying that one way to interact with the other musicians, for instance a soloist, it wasn't just about repeating back what they were playing, it was also about taking what they were playing, but repeating it back in a different way, or a different part of the beat. So that became a way that I would interact with people. And I would immediately be thinking, if someone played something, what it would sound like somewhere else. It's an illusion that you're creating. Just because you've created the illusion doesn't mean that you have fallen into the illusion. You're still hearing the song. With the Wynton albums I would listen to them and I would always sing the tune, and try to hear what the musicians were playing over the song, just with the song, and how that would sound, and so that started getting me into it.

And so with Gilad I was very open with that when I was teaching him at the New School, I talk a lot about displacements with all of my students. None of it is rehearsed, it's more about what we have done on our own, it's language, and Orlando [LeFleming, bass] picked it up more aurally, playing with us, seeing what we were doing, and interacting with that and doing a little work on his own to figure stuff out. But for all of those things there are no real arrangements. Maybe the little hits at the beginning and end, that little vamp, but as far as the language, there is a lot of depth within the language itself. Kind of anything can happen in that way.

Q: Do you listen to the harmony or melody when working out where you are in the form when using various rhythmic concepts?

A: I listen to both. If I just listened to the harmony, for example, if I was playing *C Jam Blues*, as opposed to *Au Privave*, or another blues, I wouldn't get the whole picture. Taking the melody as a guide would mean that I improvise completely differently because the melodies are different. I also do a lot of clapping and singing. Singing a melody and clapping a polyrhythm over the top of it and seeing how it sounds. That really helps, and when singing with a melody, it has to be really clear where the rhythms come, with respect to the melody. That's why I use both. The other way I do it, is just thinking of phrase lengths. Eight bar phrases, sixteen bar phrases, etc.

Q: I've developed a displacement concept from observing Gilad's improvisations [I explain the on/off phrasing concept, pp. 24-29], do you have any comments about this?

A: Yes. I've noticed that in his playing. It's a nice easy way to develop a motive and communicate with the band. You can also play an idea in half time, double time, or displace it and put it in double time... the possibilities are endless. There is more meaning when you use this kind of rhythmic development, as you are playing

something for a reason, and developing ideas. You're not just displaying techniques, they make sense. It's not random. They are called for in a conversational sense. You don't want to have a conversation with someone and have them talk for ages about something that has nothing to do with what you are saying... you want to communicate. It gets boring. I'm sure everyone has been in that situation before, when someone talks and doesn't make sense! There should be a reason for everything you play, to the point where if you stop playing and someone says, 'why did you play that?', you would have an answer.

Q: Cool. So it's a communication thing?

A: Yep. It's a language.

Q: Could you comment on tuplet groupings? [pp. 66-69] Do you use them? Or do you mainly stick to triplet groupings, sixteenths and eighths to use with displacements, and other rhythmically sophisticated material?

A: Yea, I like it, sure. Grouping quintuplets in different groupings. I've done it in the same way that I've explored triplets and sixteenth notes. [But] it's... I don't want to say less useable, but I would say that it is less commonly used, much less commonly used in fact.

Q: As a drummer, would this catch people off guard if you used it?

A: It would definitely catch people off guard, but that's not a reason not to do it... It's something the music is growing towards, and it's definitely something that I use, but I use it pretty sparingly. Not all the time. But you know, taking quintuplets and grouping

them, it's definitely the same thing [starts patting quintuplets on his legs in different groupings].

Q: Hierarchical polyrhythms? Could you comment on this? [Explained my concept development, discussed in pp. 34-36]

A: I mean, I think I understand what you are saying. I think this would be difficult the larger the hierarchical structure. You could do it at the level of bars... but I've never checked it out. I think though, this would be fantastic for arrangements of songs, compositions, or planned sections of songs, it would sound really cool. The difficulty in an improvised setting is that fact that there are other band members involved, and even a three or five bar phrase could be a bit too long of an idea to play, depending on how the band interacts to it or where it goes. Thinking in shorter phrases is much better for communication. As a drummer particularly, I think it would be hard. I'd say it would certainly work though, but you have to be willing to change mid-idea. It's just like if I was telling you a story, and you reacted badly to it, I would stop talking about it! It would be rude to continue without considering what you had said, or how you reacted to it.

Q: Speaking of arrangements, do you have any in particular that you have used these concepts with?

A: Yes. Quite a few. There is one in particular over *Stella* [by *Starlight*] that I recorded a while back. Let me play it for you [searches for CD and plays it/explains arrangement].

Q: Multi-layered polyrhythms? Do you have any comments? [I explain my concept development, included on pp. 80-85 of this dissertation]

A: You know... Not any particular comments. It's interesting though, and I see what you mean. I'd think of it as a larger scale grouping. A grouping of sixteen. Sixteen triplets. But I do see how you have a layered polyrhythm with this example and way of thinking. If I was to practise this, I'd do it at different tempos, and also practise displacing it, think of other ways to develop it, but I like the idea. If you took my interpretation of thinking of it as sixteen triplets, you could then play other rhythms, like seven notes spaced evenly over the duration, or eleven, you can do anything.

Sometimes it's hard to classify and codify all these different ideas and devices. It's really at the beginning stages of actually categorizing and really defining the different possibilities in contemporary rhythmic language in jazz.

Improvisational music right now. In the last fifteen years, it's been growing rhythmically more than anything else. It's more on the side of rhythm than harmony or anything else and it's just what's happening now. There is a lot of stuff happening in metal and other genres are making headways into this kind of development. You should check out *Car Bomb*. They're a band. It's not about improvisation. It's all written out, it's all arranged, it's all tight and it's also quite clear, though can be hard to decipher. They are developing their own language, and that's how new languages develop, sometimes it has to be really specifically thought out.

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Phrasing and Polyrhythm in Contemporary Jazz Guitar: A Portfolio of Recorded Performances and Exegesis

Volume Two

Quentin Angus

B.Mus. (Hons) 2008 (The University of Adelaide)
M.Mus. 2012 (Purchase College Conservatorium of
Music)

Submitted in fulfilment of the requirements
for the degree of

Doctor of Philosophy

Elder Conservatorium of Music
Faculty of Humanities and Social Sciences
The University of Adelaide

January 2014

Appendix Two: Recorded Extracts of Hekselman Transcriptions	126
CD	126
Statement of Authorship	127
Track Listing	128
Appendix Three: Glossary	129
Appendix Four: Practical Application List	132
Appendix Five: Edited Transcripts of Interviews	135
John Abercrombie	135
Gilad Hekselman	143
Ari Hoenig	148
Bibliography/Reference List	154

Table of Contents (Volume Two)

The Submission Recordings	1
CD1: Retrieval Structure	1
CD2: Abercrombie and Hekselman Duets	1
CD3: Perception	2
CD4: Abercrombie and Hekselman Repertoire/Ari Hoenig Session	2
Disc One: Abercrombie and Hekselman Repertoire	2
Disc Two: Ari Hoenig Session	2

Table of Contents (Volume Three)

List of Figures (Volume Three)	v
Appendices	1
List of Appendices	1
Appendix Six: Drum Legend	2

NOTE:

4 CDs containing 'Recorded Performances' are included with the print copy of the thesis held in the University of Adelaide Library.

The CDs must be listened to in the Music Library.

Phrasing and Polyrhythm in
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Table of Contents (Volume Three)

List of Figures (Volume Three)	v
Appendices	1
List of Appendices.....	1
Appendix Six: Drum Legend	2
Appendix Seven: Transcriptions	3
Explanatory Notes.....	3
Legend.....	4
List of Transcriptions Provided	7
Statement of Authorship	9
Gilad Hekselman	10
Split Life	10
Purium.....	11
Hello Who Is It?	17
My Ideal.....	21
I Fall In Love To Easily	24
Suite for Sweets	28
When will the Blues Leave?.....	32
The Summer of Laughs and Tears	35
I Should Care	38
My Second Childhood.....	43
Statement of Authorship	46
Words Unspoken.....	47
Ga'agua.....	48
New York Angels.....	52
April In Paris	58
Words Unspoken.....	63
Countdown	66
Someone to Watch Over Me.....	71
Yo Mama's Blues.....	74
Time After Time.....	79
How Long Has This Been Going On	83
Will The Song Ever End?.....	87
Statement of Authorship	90

Hearts Wide Open.....	91
Hazelnut Eyes	92
One More Song.....	98
Flower	104
Brooze.....	108
Hearts Wide Open.....	111
The Bucket Kicker	114
Understanding.....	119
Statement of Authorship	123
This Just In.....	124
Above.....	125
This Just In.....	132
The Ghost of the North	137
March of the Sad Ones.....	138
Nothing Personal.....	145
Eye in the Sky	151
Dreamers.....	155
Bert's Playground (Hekselman Recordings as a Sideman).....	158
The Way You Look Tonight	159
John Abercrombie	164
Straight Flight.....	164
There is No Greater Love	165
Bessie's Blues.....	170
In Your Own Sweet Way.....	179
Statement of Authorship	180
Lionel Loueke	180
Original Compositions (Mel Bay Publications)	181
Farafina	182
Griot	189
Karibu.....	199
Full Band Transcriptions.....	206
When Will The Blues Leave?.....	206
Suite for Sweets	208
I Should Care	210
Hello Who Is It?.....	212
Statement of Authorship	214
Polyphony DVD Transcriptions for Jazz Heaven	215

Appendix Eight: Lead Sheets of the Repertoire Performed	232
List of Lead Sheets Provided.....	232
CD1: Retrieval Structure.....	234
Coltrane Matrix	235
Retrieval Structure.....	238
Level 21	242
The Heights	245
The First Fall	247
Phrygia	248
Five Ahead	250
What the Future Holds.....	252
Sentient	256
CD2: Abercrombie and Hekselman Duets	258
Den Haag	259
CD3: Perception.....	261
Particular, Peculiar	262
Perception	265
Nardis.....	269
Red and Yellow	272
Chernobyl.....	276
Restoration	286
Den Haag	291
Bounce	310
CD4: Abercrombie and Hekselman Repertoire/Ari Hoenig Session.....	313
Disc One: Abercrombie and Hekselman Repertoire.....	313
Countdown	314
You Don't Know What Love Is	316
The Bucket Kicker	318
Ralph's Piano Waltz.....	320
All the Things You Are	323
Suite for Sweets (Guitar Part).....	324
Suite for Sweets (Lead Sheet)	329
Yo Mamma's Blues.....	332
One More Song.....	333
Disc Two: Ari Hoenig Session	337
Happy.....	338
How Deep Is The Ocean	343
Outro	345
Falling Guitar Part.....	348

Falling Piano Part	351
Falling Bass Part	354
Dreamscape	357
Juncture	360
Appendix Nine: Transcriptions of my own Improvisations	364
One More Song	365

List of Figures (Volume Three)

Appendix Six: Drum Legend	2
Drum Legend	2
Figure 14.1	2
Figure 14.2	2
Figure 14.3	2
Figure 14.4	2
Figure 14.5	2
Figure 14.6	2
Figure 14.7	2
Figure 14.8	2
Figure 14.9	2
Figure 14.10	2
Figure 14.11	2
Appendix Seven: Transcriptions	3
Legend	4
Figure 15.1	4
Figure 15.2	4
Figure 15.3	4
Figure 15.4	4
Figure 15.5	4
Figure 15.6	5
Figure 15.7	5
Figure 15.8	5
Figure 15.9	5
Figure 15.10	5

Figure 15.11	5
Figure 15.12	6
Figure 15.13	6

Appendices (Volume Three)

The appendices on the following pages provide a detailed selection of support material to accompany the written exegesis. There are nine different appendices, five included in the first volume, and the remaining four in this, the third volume.

List of Appendices (Volume One)

Appendix One: CD Recording Discussion	123
Appendix Two: Recorded Extracts of Hekselman Transcriptions.....	126
Appendix Three: Glossary	129
Appendix Four: Practical Application List.....	132
Appendix Five: Edited Transcripts of Interviews	135

List of Appendices (Volume Three)

Appendix Six: Drum Transcription Legend	2
Appendix Seven: Transcriptions.....	3
Appendix Eight: Lead Sheets of the Repertoire Performed.....	232
Appendix Nine: Transcriptions of my Own Improvisations	364

Appendix Six: Drum Legend

Figure 14.1: Crash/Ride



Figure 14.7: Stick Shot Snare



Figure 14.2: Ride

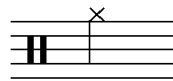


Figure 14.8: Low Tom



Figure 14.3: Open High Hat

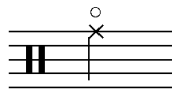


Figure 14.9: Kick



Figure 14.4: Closed High Hat



Figure 14.10: High Hat Foot Open

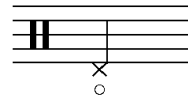


Figure 14.5: High Tom



Figure 14.11: High Hat Foot Closed



Figure 14.6: Snare



Appendix Seven: Transcriptions

Appendix seven provides full transcriptions of the smaller extracts included throughout the first volume of this thesis. This includes 179 pages of Hekselman transcriptions (a total of 34 transcriptions, selected full band transcriptions, and an instructional DVD on Polyphony, pp. 9-163, 206-213, and 214-231), including transcriptions from his entire discography as a band leader¹. Other relevant transcriptions of Abercrombie (pp. 164-179), and Lionel Loueke (pp. 180-205) have also been provided.

Many of the transcriptions included in this volume have been published by Mel Bay, Jazz Heaven, or by me, and therefore, a 'statement of authorship' form and title page is provided before each section that has been published.

In order to meet editorial standards, the published transcriptions have been notated with detail and precision. The following pages provide a legend outlining the various techniques to show exactly how the transcriptions have been notated. Apart from the Loueke transcriptions, where notation and tablature have been included (a requirement of Mel Bay Publications), the rest of the transcriptions include traditional notation only.

¹ At the time of this submission Hekselman's discography as a leader comprised four albums: *Splitlife* (2006), *Words Unspoken* (2008), *Hearts Wide Open* (2011), and *This Just In* (2013)

Legend

Figure 15.1: If an improvised line is ascending and two notes are connected with a line, it signals a 'hammer on' into the following note



Figure 15.2: If an improvised line is descending and two notes are connected with a line, it signals a 'pull off' onto the following note



Figure 15.3: An 'S' between two notes means 'slide'



Figure 15.4: An 'h/a' between two notes signals a 'hammer on' to a note, while also 'articulating it', by plucking the string when the second note is sounded



Figure 15.5: An 's/a' between two notes means a 'slide' to a note, while also 'articulating it', by plucking the string when the second note is sounded



Figure 15.6: A zigzag line after a note is a 'fall off' (a 'fall off' is a slide down the neck, to an indistinct tone, and the volume fades out as you slide down)



Figure 15.7: The words 'Lay back', and a zigzag line over a group of notes means exactly that, 'laying back' on the time (NB- As the time is being manipulated by the improviser, an exact rhythmic transcription of these segments would be impossible. The notation in these instances has therefore been approximated to display the rhythm as accurately as possible)



Figure 15.8: 'tr' above a note means a 'tremolo' (a note or grouping of notes repeated at a rapid speed)

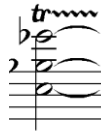


Figure 15.9/15.10: A 'crush note' is always a short and abrupt 'slide' from one note to the next, unless a 'h', or 'p' is also present above the note. Then it becomes either a 'hammer on' or 'pull off'



Figure 15.11: A note with an 'X' as a note head is a note that is implied rather than played, or a note that does not cut through very loudly, but is none-the-less still played and evident in the recording

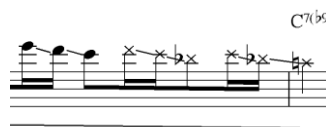
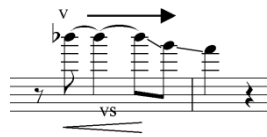


Figure 15.12: Notes with 'O' on top are notes played with the 'open string' (for example, and open E, B, G, D, A or E)



Figure 15.13: 'VS' means volume swell



List of Transcriptions Provided

Gilad Hekselman	10
Split Life	10
Purium.....	11
Hello Who Is It?	17
My Ideal.....	21
I Fall In Love To Easily	24
Suite for Sweets	28
When will the Blues Leave?.....	32
The Summer of Laughs and Tears	35
I Should Care	38
My Second Childhood.....	43
Words Unspoken.....	47
Ga'agua.....	48
New York Angels.....	52
April In Paris	58
Words Unspoken	63
Countdown	66
Someone to Watch Over Me.....	71
Yo Mama's Blues.....	74
Time After Time	79
How Long Has This Been Going On.....	83
Will The Song Ever End?.....	87
Hearts Wide Open.....	91
Hazelnut Eyes	92
One More Song.....	98
Flower	104
Brooze.....	108
Hearts Wide Open.....	111
The Bucket Kicker	114
Understanding.....	119
This Just In.....	124
Above	125
This Just In.....	132
The Ghost of the North	137
March of the Sad Ones.....	138
Nothing Personal.....	145
Eye in the Sky	151

Dreamers.....	155
Bert's Playground (Hekselman Recordings as a Sideman).....	158
The Way You Look Tonight	159
John Abercrombie	164
Straight Flight.....	164
There is No Greater Love	165
Bessie's Blues	170
In Your Own Sweet Way.....	179
Lionel Loueke	180
Original Compositions (Mel Bay Publications)	181
Farafina	182
Griot	189
Karibu.....	199
Full Band Transcriptions.....	206
When Will The Blues Leave?	206
Suite for Sweets	208
I Should Care	210
Hello Who Is It?	212
Polyphony DVD Transcriptions for Jazz Heaven	215

Statement of Authorship

Title of Publication

Gilad Hekselman Transcriptions ALBUM: Splitlife

Publication Status

Published	Accepted for Publication	Submitted for Publication	Publication style
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Publication Details

Transcription book of all of Gilad Hekselman's improvised solos from the album Splitlife

Author Contributions

By signing this Statement of Authorship, on the 31st day of December 2013, each author certifies that their stated contribution to the publication is accurate and that permission is granted for the publication to be included in the candidate's thesis

Name of Principal Author (Candidate)	Quentin Angus
Contribution to the Publication	Sole Author of Publication
Signature	

Gilad Hekselman Transcriptions

By Quentin Angus

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ALBUM: 'Split-Life'



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Author Contributions

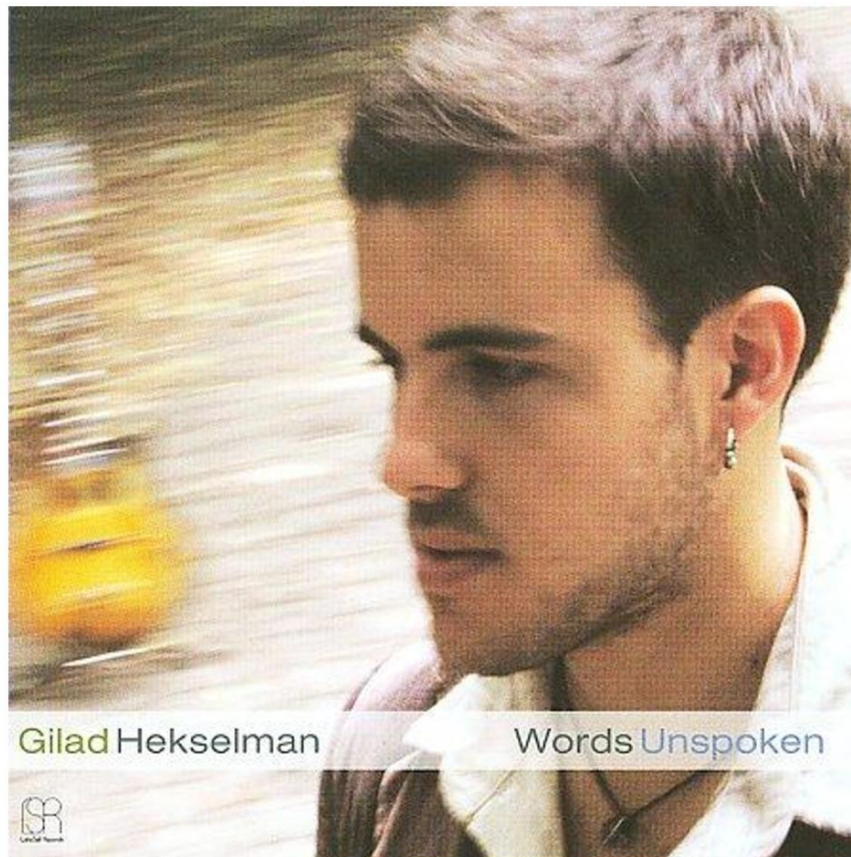
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Gilad Hekselman Transcriptions ALBUM: This Just In

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Publication Details

Transcription book of all of Gilad Hekselman's improvised solos from the album This Just In

Author Contributions

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Contribution to the Publication	Sole Author of Publication
Signature	

Gilad Hekselman Transcriptions

By Quentin Angus

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ALBUM: 'This Just In'

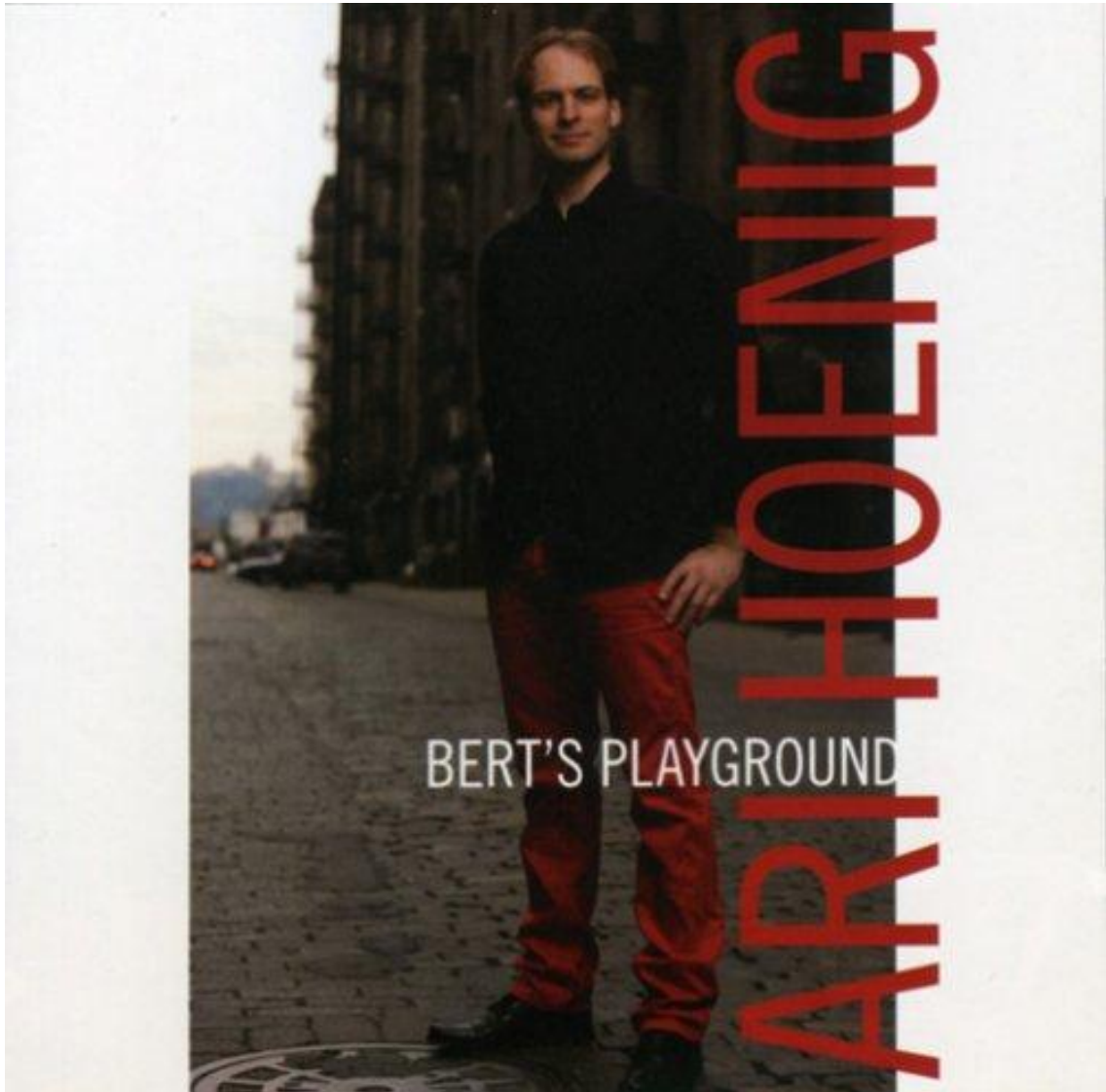


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NOTE:

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Ari Hoenig: Bert's Playground



The Way You Look Tonight: Gilad Hekselman's Solo

Transcribed Quentin Angus 2009

Jerome Kern

Fast Jazz ♩ = 340
Intro

5

9

13

17

21

25 F^A Dm^7 Gm^7 C^7

29 F^A D^7 Gm^7 C^7

33 Cm⁷₉ F⁷ B[♭]^Δ Gm⁷ C⁷

37 F⁶ Dm⁷ Gm⁷ C⁷ F^Δ Dm⁷ Gm⁷ C⁷

41 F^Δ Dm⁷ Gm⁷ C⁷

45 F^Δ D⁷ Gm⁷ C⁷

49 Cm⁷ F⁷ B[♭]^Δ Gm⁷ C⁷

53 F⁶ Dm⁷ Gm⁷ C⁷ F^Δ Dm⁷ B[♭]m⁷ E[♭]⁷

57 A[♭]^Δ A^{o7} B[♭]m⁷ E[♭]⁷

61 A[♭]^Δ Cm⁷ B^{o7} B[♭]m⁷ E[♭]⁷

65 A[♭]^Δ A^{o7} B[♭]m⁷ E[♭]⁷

69 A[♭]^Δ D[♭]^Δ Gm⁷ C⁷

73 F^Δ Dm⁷ Gm⁷ C⁷

77 F^Δ D⁷ Gm⁷ C⁷

81 Cm⁷ F⁷ B^{♭Δ} Gm⁷ C⁷

85 F⁶ Dm⁷ Gm⁷ C⁷ F^Δ Dm⁷ Gm⁷ C⁷

89 Gm⁷ C⁷ Solo Break-----
F⁶

Guitar Solo--

93 F^Δ Dm⁷ Gm⁷ C⁷

97 F^Δ D⁷ Gm⁷ C⁷

101 Cm⁷ F⁷ B^{♭Δ} Gm⁷ C⁷

105 F^Δ Dm⁷ Gm⁷ C⁷ F^Δ Dm⁷ Gm⁷ C⁷

109 F^Δ Dm⁷ E[♭] Gm⁷ D[♭] C⁷ F

113 $F^{\#A}$ E^{\flat} D^7 Gm^7 D^{\sharp} C^7 F

117 Cm^7 E^{\sharp} F^7 $B^{\flat A}$ Gm^7 C^7

121 $F^{\#A}$ Dm^7 Gm^7 C^7 $F^{\#A}$ Dm^7 $B^{\flat m^7}$ $E^{\flat 7}$

125 $A^{\sharp A}$ $A^{\flat 7}$ $B^{\flat m^7}$ $E^{\sharp 7}$

129 $A^{\sharp A}$ Cm^7 $B^{\flat 7}$ $B^{\flat m^7}$ $E^{\flat 7}$

133 $A^{\flat A}$ $A^{\flat 7}$ $B^{\flat m^7}$ $E^{\sharp 7}$

137 $A^{\flat A}$ $D^{\sharp A}$ Gm^7 C^7

141 $F^{\#A}$ Dm^7 Gm^7 C^7

145 $F^{\#A}$ D^7 Gm^7 C^7

149 Cm^7 F^7 $B^{\flat A}$ Gm^7 C^7

153 F^Δ Dm⁷ Gm⁷ C⁷ F^Δ Dm⁷ Gm⁷ C⁷

157 Gm⁷ C⁷ F^Δ Gm⁷ C⁷

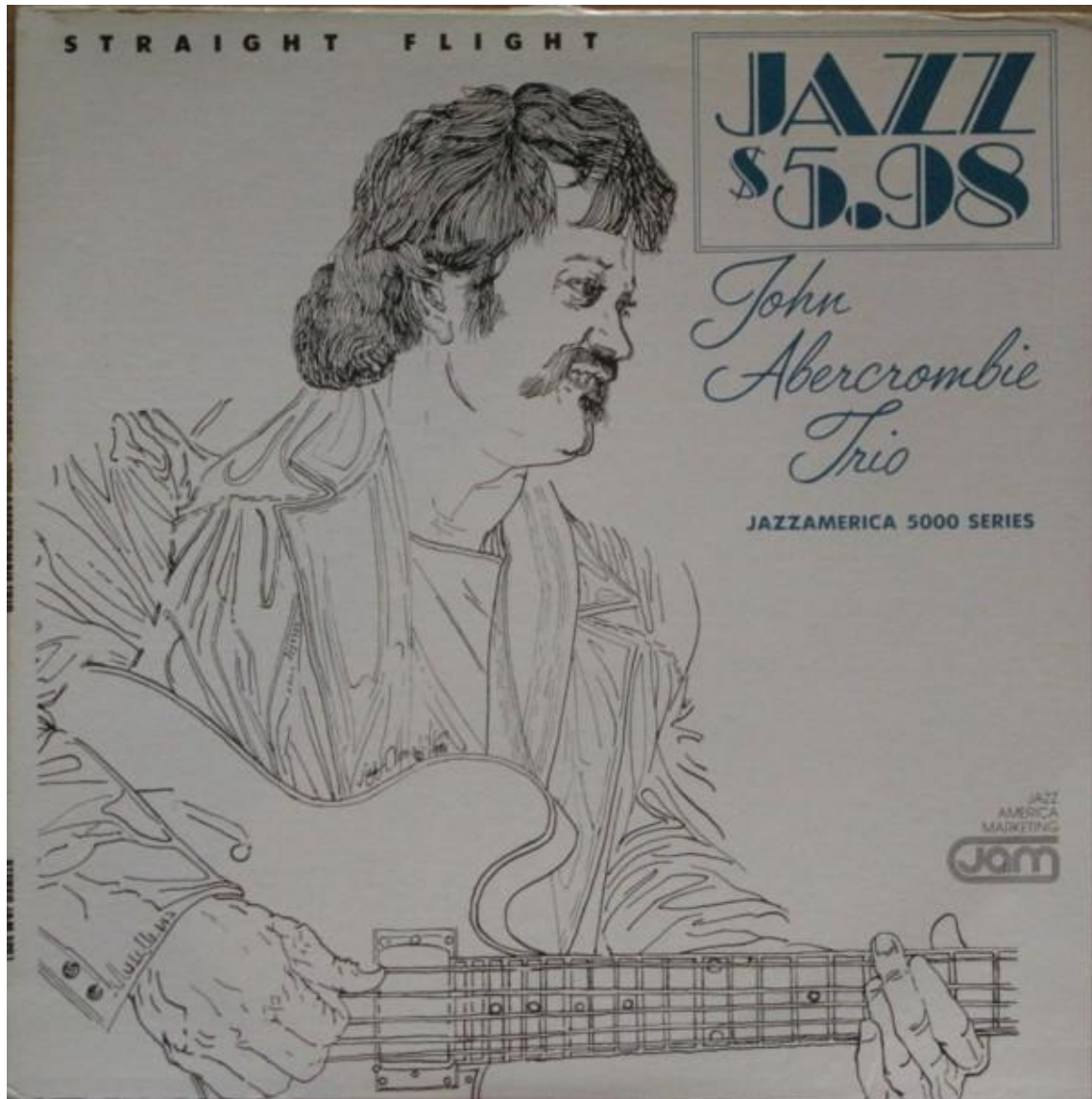
161 F^Δ Dm⁷ Gm⁷ C⁷

165 F^Δ D⁷ Gm⁷ C⁷

169 Cm⁷ F⁷ B^{bΔ} Gm⁷ C⁷

173 F^Δ Dm⁷ Gm⁷ C⁷ F^Δ Dm⁷ Gm⁷ C⁷

John Abercrombie: Straight Flight



There is no Greater Love

Transcribed- Quentin Angus- 2009

John Abercrombie's solo

Medium Swing ♩ = 170

Chord markings above the staff:

1-4: B^bΔ, E^b7, A^b7, G7

5-8: C7, F7

9-12: B^bΔ, E^b7, A^b7, G7 (includes a triplet in measure 10)

13-16: C^m7, F7, B^bΔ

17-20: G^m7, A^ø, D⁷alt, G^m7, A^ø, D⁷alt

21-24: G^m7, C^m7, F7

25-28: B^bΔ, E^b7, A^b7, G7

29-32: C^m7, F7, B^bΔ, G7, C^m7, F7

33-36: B^bΔ, E^b7, A^b7, G7

37 C⁷

39 F⁷

41 B^bΔ E^b7 A^b7 G⁷

45 Cm⁷ F⁷ B^bΔ

49 Gm⁷ A[∅] D⁷alt Gm⁷ A[∅] D⁷alt

53 Gm⁷ Cm⁷ F⁷

57 B^bΔ E^b7 A^b7 G⁷

61 Cm⁷ F⁷ B^bΔ G⁷ Cm⁷ F⁷

65 B^bΔ E^b7 A^b7 G⁷

69 C⁷

71 F⁷

73 B^bΔ E^b7 A^b7 G⁷

77 Cm⁷ F⁷ B^bΔ

81 Gm⁷ A[∅] D⁷alt Gm⁷ A[∅] D⁷alt

85 Gm⁷ Cm⁷ F⁷

89 B^bΔ E^b7

91 A^b7 G⁷

93 Cm⁷ F⁷

95 B^bΔ G⁷ Cm⁷ F⁷

97 $B^{\flat\Delta}$ $E^{\flat 7}$ $A^{\flat 7}$ G^7

101 C^7 F^7

105 $B^{\flat\Delta}$ $E^{\flat 7}$ $A^{\flat 7}$ G^7

109 Cm^7 F^7 $B^{\flat\Delta}$

113 Gm^7 A° $D^7\text{alt}$ Gm^7 A° $D^7\text{alt}$

117 Gm^7 Cm^7 F^7

121 $B^{\flat\Delta}$ $E^{\flat 7}$ $A^{\flat 7}$ G^7

125 Cm^7 F^7 $B^{\flat\Delta}$ G^7 Cm^7 F^7

129 $B^{\flat\Delta}$ $E^{\flat 7}$ $A^{\flat 7}$ G^7



Bessies Blues

Transcribed- Quentin Angus- 2009

John Abercrombie

Fast Jazz ♩ = 320

5

9

13

17

21

25

29

33 $B^{\flat}m^7$ $E^{\flat}7$ $A^{\flat}7$ $F^{\flat}alt$ $B^{\flat}m^7$ $E^{\flat}7$

37 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

41 $D^{\flat}7$ $A^{\flat}7$ $(F^{\flat}alt)$

45 $B^{\flat}m^7$ $E^{\flat}7$ $A^{\flat}7$ $F^{\flat}alt$ $B^{\flat}m^7$ $E^{\flat}7$

49 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

53 $D^{\flat}7$ $A^{\flat}7$ $(F^{\flat}alt)$

57 $B^{\flat}m^7$ $E^{\flat}7$ $A^{\flat}7$ $F^{\flat}alt$ $B^{\flat}m^7$ $E^{\flat}7$

61 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

65 $D^{\flat}7$ $A^{\flat}7$ $(F^{\flat}alt)$

69 $B^{\flat}m^7$ $E^{\flat}7$ $A^{\flat}7$ $F^{\flat}alt$ $B^{\flat}m^7$ $E^{\flat}7$

The musical score consists of ten staves of music in a key signature of three flats (B-flat major / D-flat minor). The notation includes various chords and melodic lines with fingerings and articulations. The chords are: $B^{\flat}m^7$, $E^{\flat}7$, $A^{\flat}7$, $F^{\flat}alt$, $D^{\flat}7$, and $(F^{\flat}alt)$. The piece features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. There are also triplets indicated by the number '3' under certain notes.

Musical score for guitar, measures 73-105. The score is written in treble clef with a key signature of two flats (B-flat and E-flat) and a time signature of 12/8. The music consists of a single melodic line with various chordal accompaniments indicated by chord symbols above the staff. The measures are grouped into systems of four lines each.

Measures 73-76: Chords A^b7, D^b7, A^b7.

Measures 77-80: Chords D^b7, A^b7, (F⁷alt).

Measures 81-84: Chords B^bm⁷, E^b7, A^b7, F⁷alt, B^bm⁷, E^b7.

Measures 85-88: Chords A^b7, D^b7, A^b7.

Measures 89-92: Chords D^b7, A^b7, (F⁷alt).

Measures 93-96: Chords B^bm⁷, E^b7, A^b7, F⁷alt, B^bm⁷, E^b7.

Measures 97-100: Chords A^b7, D^b7, A^b7, (F⁷alt).

Measures 101-104: Chords D^b7, A^b7, (F⁷alt).

Measures 105-108: Chords B^bm⁷, E^b7, A^b7, F⁷alt, B^bm⁷, E^b7.

109 A^{b7} D^{b7} A^{b7}

113 D^{b7} A^{b7} F^{7alt}

117 B^{bm7} E^{b7} A^{b7} F^{7alt} B^{bm7} E^{b7}

121 A^{b7} D^{b7} A^{b7}

125 D^{b7} A^{b7} F^{7alt}

129 B^{bm7} E^{b7} A^{b7} F^{7alt} B^{bm7} E^{b7}

133 A^{b7} D^{b7} A^{b7}

137 D^{b7} A^{b7} F^{7alt}

141 B^{bm7} E^{b7} A^{b7} F^{7alt} B^{bm7} E^{b7}

145 A^b7 D^b7 A^b7

149 D^b7 A^b7 (F^7alt)

153 B^bm7 E^b7 A^b7 F^7alt B^bm7 E^b7

157 A^b7 D^b7 A^b7

161 D^b7 A^b7 (F^7alt)

165 B^bm7 E^b7 A^b7 F^7alt B^bm7 E^b7

169 A^b7 D^b7 A^b7

173 D^b7 A^b7 (F^7alt)

177 $B^b m^7$ $E^b 7$ $A^b 7$ $F^7 \text{alt}$ $B^b m^7$ $E^b 7$

181 $A^b 7$ $D^b 7$ $A^b 7$

185 $D^b 7$ $A^b 7$ $(F^7 \text{alt})$

189 $B^b m^7$ $E^b 7$ $A^b 7$ $F^7 \text{alt}$ $B^b m^7$ $E^b 7$

193 $A^b 7$ $D^b 7$ $A^b 7$

197 $D^b 7$ $A^b 7$ $(F^7 \text{alt})$

201 $B^b m^7$ $E^b 7$ $A^b 7$ $F^7 \text{alt}$ $B^b m^7$ $E^b 7$

205 $A^b 7$ $D^b 7$ $A^b 7$

209 $D^b 7$ $A^b 7$ $(F^7 \text{alt})$

213 $B^{\flat}m7$ $E^{\flat}7$ $A^{\flat}7$ $F7alt$ $B^{\flat}m7$ $E^{\flat}7$

217 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

221 $D^{\flat}7$ $A^{\flat}7$ $(F7alt)$

225 $B^{\flat}m7$ $E^{\flat}7$ $A^{\flat}7$ $F7alt$ $B^{\flat}m7$ $E^{\flat}7$

229 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

233 $D^{\flat}7$ $A^{\flat}7$ $(F7alt)$

237 $B^{\flat}m7$ $E^{\flat}7$ $A^{\flat}7$ $F7alt$ $B^{\flat}m7$ $E^{\flat}7$

241 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

245 $D^{\flat}7$ $A^{\flat}7$ $(F7alt)$

249 $B^{\flat}m^7$ $E^{\flat}7$ $A^{\flat}7$ F^7alt $B^{\flat}m^7$ $E^{\flat}7$

253 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

257 $D^{\flat}7$ $A^{\flat}7$ (F^7alt)

261 $B^{\flat}m^7$ $E^{\flat}7$ $A^{\flat}7$ F^7alt $B^{\flat}m^7$ $E^{\flat}7$

265 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

269 $D^{\flat}7$ $A^{\flat}7$ (F^7alt)

273 $B^{\flat}m^7$ $E^{\flat}7$ $A^{\flat}7$ F^7alt $B^{\flat}m^7$ $E^{\flat}7$

277 $A^{\flat}7$ $D^{\flat}7$ $A^{\flat}7$

281 $D^{\flat}7$ $A^{\flat}7$ (F^7alt)

285 B^bm⁷ E^b7 A^b7 F⁷alt B^bm⁷

289 N.C - Out of time

293

In Your Own Sweet Way- John Abercrombie

Fast Jazz ♩ = 250

Dave Brubeck

Transcribed- Quentin Angus- 2009

In Your Own Sweet Way- Phrase displacement

Chordal Vamp (open feel) Displaced phrase

$A^{7\#11}$ 0:29mins of original recording

Repeats phrase

A Resolution of phrase at the start of a four bar phrase (bass and drums begin 'regular' time)

Am^7 D^7 Gm^7 C^7 Cm^7 F^7 B^b7 $E^b\Delta$

Statement of Authorship

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Transcription book of all of Lionel Loueke's improvised solos, and compositions from various albums. Published by Mel Bay Publications.

Author Contributions

By signing this Statement of Authorship, on the 4th day of January 2014, each author certifies that their stated contribution to the publication is accurate and that permission is granted for the publication to be included in the candidate's thesis

Name of Principal Author (Candidate)	Quentin Angus	
Contribution to the Publication	Transcriptions of Farafina, Griot, and Karibu (the only transcriptions included in this submission)	
Signature		

Name of Co-Author (Candidate)	Travis Reuter	
Contribution to the Publication	Transcriptions of Benny's Tune and Ifê (none of which have been included in this submission)	
Signature		

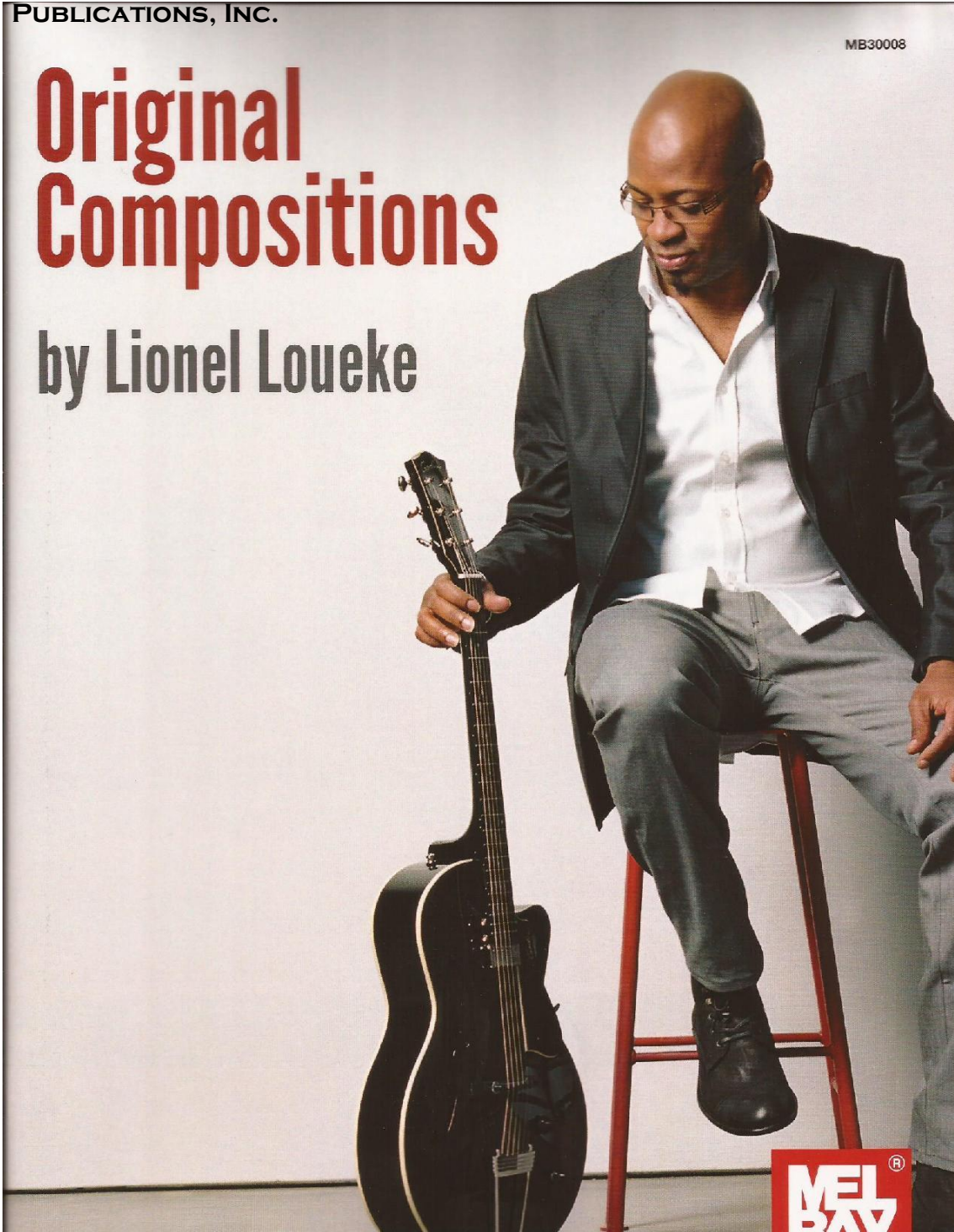
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Signature		

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Original Compositions

by Lionel Loueke



NOTE:

This appendix is included on pages 182-205 of the print copy of the thesis held in the University of Adelaide Library.

Gilad Hekselman: Full Band Transcriptions

The following pages include original full band transcriptions (guitar/bass/drums) from selected tracks of Hekselman's album *Splitlife*.

When Will the Blues Leave?

The musical score for "When Will the Blues Leave?" is presented in three systems. Each system consists of three staves: a treble clef staff for guitar, a bass clef staff for bass, and a drum staff for drums. The key signature is one flat (B-flat major/D minor).

System 1 (Measures 17-20):

- Measure 17:** Chord $Bb7$. The guitar part has a whole rest. The bass part has a whole note Bb with a natural sign (Bb^o). The drum part has a quarter note on the snare.
- Measure 18:** Chord $F7$. The guitar part has a quarter note F . The bass part has a quarter note F . The drum part has a quarter note on the snare.
- Measure 19:** Chord $F7$. The guitar part has a quarter note F . The bass part has a quarter note F . The drum part has a quarter note on the snare.
- Measure 20:** Chord $Am7(b5)$ and $D7alt.$. The guitar part has a triplet of eighth notes: A , bB , and C . The bass part has a quarter note A . The drum part has a quarter note on the snare.

System 2 (Measures 21-24):

- Measure 21:** Chord $Gm7$. The guitar part has a whole note chord $Gm7$. The bass part has a whole note G . The drum part has a quarter note on the snare.
- Measure 22:** Chord $C7$. The guitar part has a quarter note C . The bass part has a quarter note C . The drum part has a quarter note on the snare.
- Measure 23:** Chord $F7$ and $D7alt.$. The guitar part has a quarter note F . The bass part has a quarter note F . The drum part has a quarter note on the snare.
- Measure 24:** Chord $Gm7$ and $C7$. The guitar part has a quarter note G . The bass part has a quarter note G . The drum part has a quarter note on the snare.

25 F⁷ B^{b7}

Musical notation for measures 25-26. Treble clef, bass clef, and guitar tablature. Chords F⁷ and B^{b7} are indicated above the staff.

27 F⁷

Musical notation for measures 27-28. Treble clef, bass clef, and guitar tablature. Chord F⁷ is indicated above the staff.

29 B^{b7}

Musical notation for measures 29-30. Treble clef, bass clef, and guitar tablature. Chord B^{b7} is indicated above the staff.

31 F⁷ Am^{7(b5)} D^{7alt.}

Musical notation for measures 31-32. Treble clef, bass clef, and guitar tablature. Chords F⁷, Am^{7(b5)}, and D^{7alt.} are indicated above the staff.

33 Gm7 C7 F7 D7alt. Gm7 C7

37 F7 Bb7 F7

Suite for Sweets

59

61

Musical score for measures 61-62. The system consists of three staves: Treble Clef, Bass Clef, and a second Bass Clef. The key signature is three sharps (F#, C#, G#). The top staff (Treble Clef) contains a melodic line with eighth and sixteenth notes, including slurs and accents. The middle staff (Bass Clef) contains a bass line with eighth and sixteenth notes, including slurs and accents. The bottom staff (second Bass Clef) contains a guitar-style accompaniment with 'x' marks indicating fretted notes and rhythmic patterns.

63

Musical score for measures 63-64. The system consists of three staves: Treble Clef, Bass Clef, and a second Bass Clef. The key signature is three sharps (F#, C#, G#). The top staff (Treble Clef) contains a melodic line with eighth and sixteenth notes, including slurs and accents. The middle staff (Bass Clef) contains a bass line with eighth and sixteenth notes, including slurs and accents. The bottom staff (second Bass Clef) contains a guitar-style accompaniment with 'x' marks indicating fretted notes and rhythmic patterns.

65

Musical score for measures 65-66. The system consists of three staves: Treble Clef, Bass Clef, and a second Bass Clef. The key signature is three sharps (F#, C#, G#). The top staff (Treble Clef) contains a melodic line with eighth and sixteenth notes, including slurs and accents. The middle staff (Bass Clef) contains a bass line with eighth and sixteenth notes, including slurs and accents. The bottom staff (second Bass Clef) contains a guitar-style accompaniment with 'x' marks indicating fretted notes and rhythmic patterns.

67

Musical score for measures 67-68. The system consists of three staves: Treble Clef, Bass Clef, and a second Bass Clef. The key signature is three sharps (F#, C#, G#). The top staff (Treble Clef) contains a melodic line with eighth and sixteenth notes, including slurs and accents. The middle staff (Bass Clef) contains a bass line with eighth and sixteenth notes, including slurs and accents. The bottom staff (second Bass Clef) contains a guitar-style accompaniment with 'x' marks indicating fretted notes and rhythmic patterns.

69

I Should Care

58

Cmaj7

Bm⁷(b5)

E7

with brushes

60

Am7

D7

62 Dm7 G7

Musical notation for measures 62-63. Treble clef: Dm7 chord, eighth-note triplet runs. Bass clef: eighth-note triplet runs. Guitar: eighth-note triplet runs.

64 Cmaj7 F7 Em7 A7

Musical notation for measures 64-65. Treble clef: Cmaj7, F7, Em7, A7 chords, eighth-note triplet runs. Bass clef: eighth-note triplet runs. Guitar: eighth-note triplet runs, then a sixteenth-note sixteenth chord (6).

66 Dm7 G7 Em7 A7

Musical notation for measures 66-67. Treble clef: Dm7, G7, Em7, A7 chords, eighth-note triplet runs. Bass clef: eighth-note triplet runs. Guitar: eighth-note triplet runs, then a sixteenth-note sixteenth chord (6).

68 Dm7 G7 Cmaj7

Musical notation for measures 68-69. Treble clef: Dm7, G7, Cmaj7 chords, eighth-note triplet runs. Bass clef: eighth-note triplet runs. Guitar: eighth-note triplet runs, then a sixteenth-note sixteenth chord (6).

Hello Who Is It?

53 A^Δ Bm^7 $C\#m^7$ Dm^7 G^7

Musical notation for measures 53-56, including treble clef, bass clef, and guitar accompaniment with chord symbols: A^Δ , Bm^7 , $C\#m^7$, Dm^7 , and G^7 .

57 C^Δ Dm^7 Em^7 $F\#m^7$ B^7

Musical notation for measures 57-60, including treble clef, bass clef, and guitar accompaniment with chord symbols: C^Δ , Dm^7 , Em^7 , $F\#m^7$, and B^7 .

61 E^Δ $B\flat m^7$ $E\flat^7$ $A\flat^\Delta$ Dm^7 G^7

Musical notation for measures 61-64, including treble clef, bass clef, and guitar accompaniment with chord symbols: E^Δ , $B\flat m^7$, $E\flat^7$, $A\flat^\Delta$, Dm^7 , and G^7 .

65 C^{Δ} Dm^7 Em^7 $F^{\#}m^7$ B^7

The musical score is written for guitar and consists of three staves. The top staff is in Treble Clef, the middle in Bass Clef, and the bottom in Guitar notation. Measure 65 begins with a C^{Δ} chord. The bass line starts with a quarter rest, followed by a sequence of notes: D, E, F#, G, A, B, C, D. The guitar part features a series of chords: C^{Δ} (measure 65), Dm^7 (measure 66), Em^7 (measure 67), $F^{\#}m^7$ (measure 68), and B^7 (measure 69). An artificial harmonic 'a' is indicated in the final measure of the guitar part.

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Instructional DVD by Gilad Hekselman for Jazz Heaven. The accompanying transcriptions for each example were all completed by the current author. Since the DVD is currently unpublished, a title page has not been possible to include.

Author Contributions

By signing the Statement of Authorship, on the 3rd day of January 2014, each author certifies that their stated contribution to the publication is accurate and that permission is granted for the publication to be included in the candidate's thesis

Name of Principal Author (Candidate)	Quentin Angus
Contribution to the Publication	Transcriptions of guitar parts performed on DVD (included in this submission)
Signature	

Name of Co-Author (Candidate)	Gilad Hekselman
Contribution to the Publication	Guitar performances on the DVD (not included in the submission)
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Signature	

NOTE:

This appendix is included on pages 215-231 of the print copy of the thesis held in the University of Adelaide Library.

Appendix Eight: Lead Sheets of the Repertoire Performed

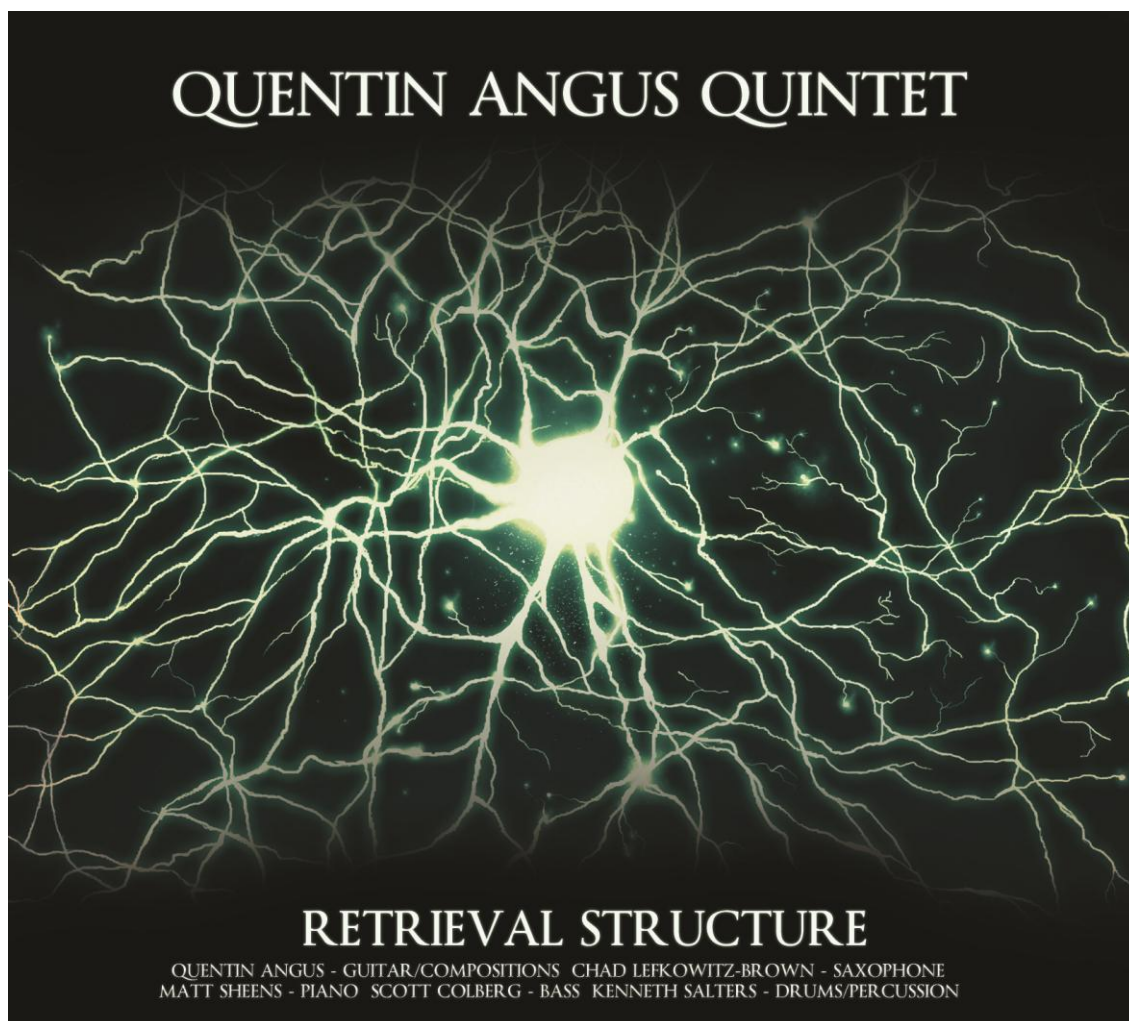
Lead sheets are provided on the following pages for any original compositions, arrangements, or Abercrombie and Hekselman compositions performed on the submission recordings (Volume Two). Most of the jazz standards from CD2: *Abercrombie and Hekselman Duets (Mohawk, Solar, Beautiful Love, Long Ago and Far Away, Nardis, How Deep Is the Ocean, and Anthropology)* along with *A Weaver of Dreams*, from CD4: Disc One: *Abercrombie and Hekselman Repertoire*, were performed spontaneously, without any preconceived arrangement. This, combined with the fact that they are all 'standard' jazz repertoire, resulted in their exclusion from this appendix. The only exception to this is arranged standard repertoire, lead sheets of which have been included.

List of Lead Sheets Provided

CD1: Retrieval Structure.....	234
Coltrane Matrix	235
Retrieval Structure.....	238
Level 21	242
The Heights	245
The First Fall	247
Phrygia	248
Five Ahead	250
What the Future Holds.....	252
Sentient	256
CD2: Abercrombie and Hekselman Duets	258
Den Haag	259
CD3: Perception	261
Particular, Peculiar	262
Perception	265
Nardis.....	269
Red and Yellow	272
Chernobyl.....	276
Restoration	286

Den Haag	291
Bounce	310
CD4: Abercrombie and Hekselman Repertoire/Ari Hoenig Session	313
Disc One: Abercrombie and Hekselman Repertoire.....	313
Countdown	314
You Don't Know What Love Is	316
The Bucket Kicker	318
Ralph's Piano Waltz.....	320
All the Things You Are	323
Suite for Sweets (Guitar Part)	324
Suite for Sweets (Lead Sheet)	329
Yo Mamma's Blues.....	332
One More Song	333
Disc Two: Ari Hoenig Session	337
Happy.....	338
How Deep Is The Ocean	343
Outro	345
Falling Guitar Part.....	348
Falling Piano Part	351
Falling Bass Part	354
Dreamscape	357
Juncture	360

Quentin Angus: Retrieval Structure



NOTE:

This appendix is included on pages 235-257 of the print copy of the thesis held in the University of Adelaide Library.

Quentin Angus: Abercrombie and Hekselman Duets



Quentin Angus:
Abercrombie and Hekselman Duets



Den Haag

Quentin Angus

3/4 **Ballad** ♩ = 170

5 B \flat 6 Am¹¹ A \flat maj7(#11)

9 G \flat maj7(#11) Am¹¹ Fm⁶ E \flat 6

13 A \flat 6 F/A

17 A \flat 6 F/A

21 G \flat maj7(#11) Fm⁶ B \flat maj7(#11) B \flat m⁶

25 1. Am¹¹ Gm¹¹

29 Fm¹¹

Bass and Drums Enter.....

33 Bm7(b9) B \flat m⁷ F/A A \flat 7

-----Play Superimposed Time-----

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2

37 Gm7 G7maj7(#11) Fm11 Break.....

2. Am11 Gm11

Fm11 Am11

Bass and Drums Legato Hits on 1s

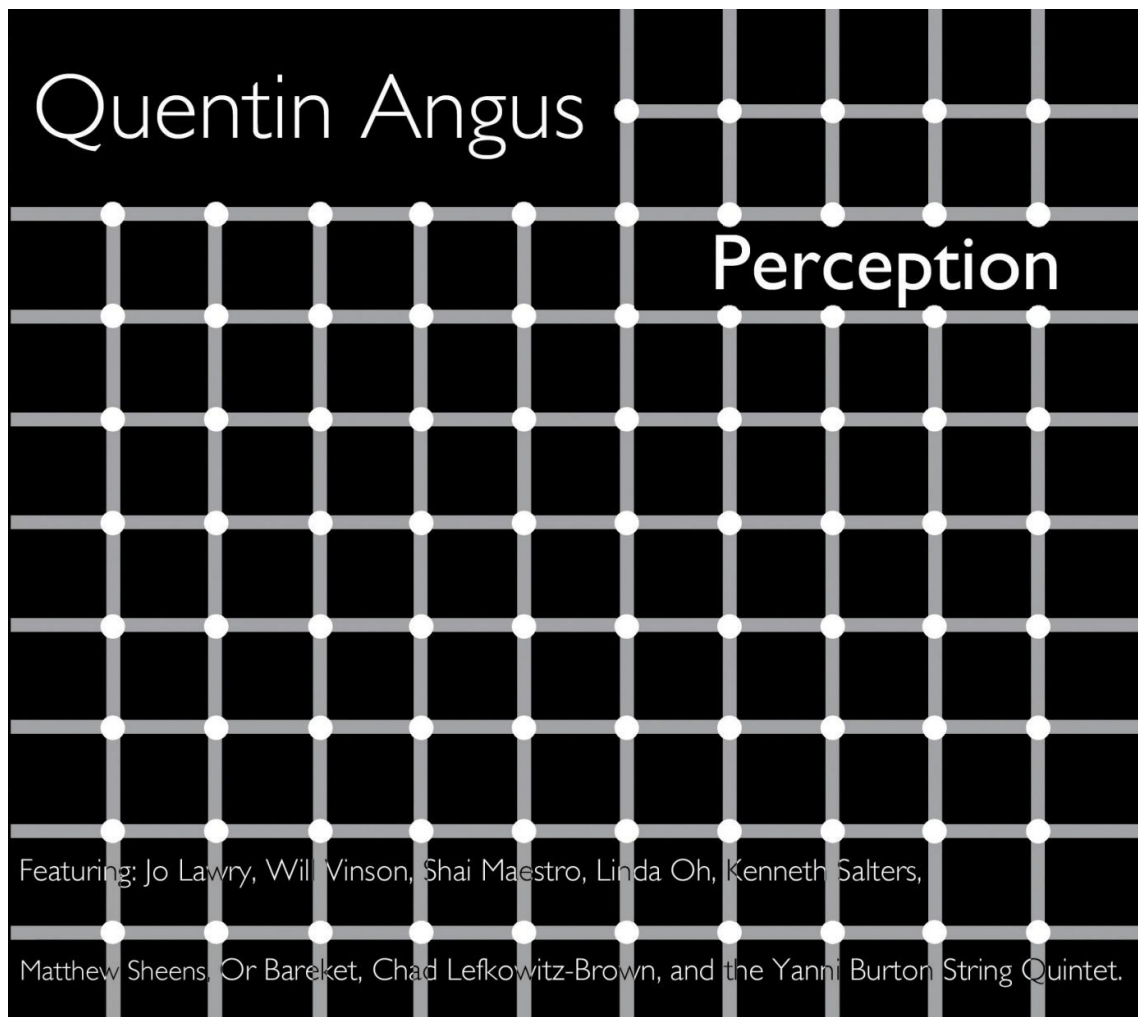
Abmaj7 Gm11 Gbmaj7(#11) Fm11

Emaj7(#11) Cm11 Dbmaj7(#11) G7maj7(#11)

Fm11 Emaj7(#11)

After Last Solo- Head out/ Vamp last 4 bars and Fade

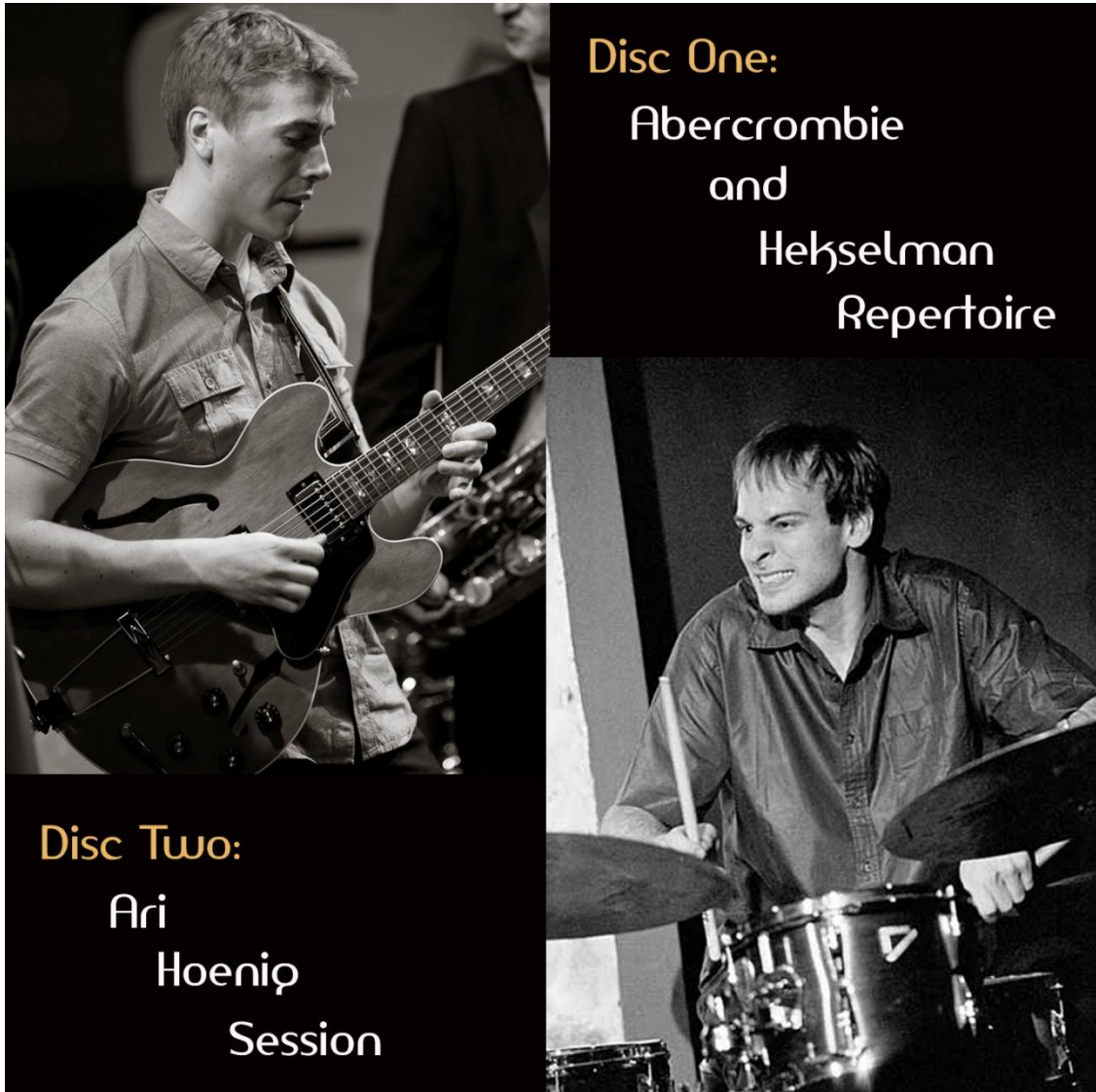
Quentin Angus: Perception



NOTE:

This appendix is included on pages 262-312 of the print copy of the thesis held in the University of Adelaide Library.

Quentin Angus: CD4: Disc One
Abercrombie and Hekselman Repertoire



Countdown

John Coltrane Arranged Gilad Hekselman

Transcribed Quentin Angus 2012

Fast Jazz ♩ = 240

Musical notation for the first system of 'Countdown'. It consists of four staves of music in 4/4 time. The first staff contains measures 1-4 with chords: Em7, F7, Bbmaj7, D7, Gbmaj7, A7alt., Dmaj7. The second staff contains measures 5-8 with chords: Dm7, Eb7, Abmaj7, B7, Emaj7, G13, Cmaj7. The third staff contains measures 9-12 with chords: Cm7, D7, Gbmaj7, A13, D6, F7, Bbmaj7, and a 'TO CODA' symbol. The fourth staff contains measures 13-16 with chords: Em7, F7, Bbmaj7(#11), and A7(#5). There are triplets in measures 9 and 10.

Drum Solo: Play Twice, then Open

Musical notation for the drum solo section of 'Countdown'. It consists of four staves of music in 4/4 time. The first staff contains measures 17-20 with chords: Em7, F7, Bbmaj7, Db7, Gbmaj7, A7alt., Dmaj7. The second staff contains measures 21-24 with chords: Dm7, Eb7, Abmaj7, B7, Emaj7, G7alt., Cmaj7. The third staff contains measures 25-28 with chords: Cm7, Db7, Gbmaj7, A7, Dmaj7, F7alt., Bbmaj7. The fourth staff contains measure 29 with the chord Em7.

2 CODA C^\flat REPEAT 4 X

33 Em⁷ F⁷ B \flat maj⁷(#11) A⁷(#5)

37 Dmaj⁷ B \flat maj⁷ G \flat maj⁷ Dmaj⁷ Bmaj⁷ G \flat maj⁷ Dmaj⁷

rit. -----

You Don't Know What Love Is Arrangement

Gene de Paul

Arranged Quentin Angus 2013

Waltz/ Ballad ♩ = 198

Intro: Repeat 4 Times

1, 2, 3
Bm¹¹

♩. = ♩
4 C⁷alt.

Fm¹¹ Ebm¹¹ Dbm¹¹ Bm¹¹ C⁷alt.

A

Fm⁷ Db⁷ C⁷ Fm⁷ Db⁷

Gm⁷(b5) C⁷alt. Fm⁷ Ab⁷(#11) Db⁷ Gm⁷(b5) C⁷

A

Fm⁷ Db⁷ C⁷ Fm⁷ Db⁷

Gm⁷(b5) C⁷alt. Fm⁷ Ab⁷(#11) Gm⁷(b5) C⁷ Fm⁷

B

Bbm⁷ Eb⁷ Abmaj⁷

Bbm⁷ Eb⁷ Abmaj⁷

Dm⁷ G⁷ Cmaj⁷

Db⁷ Gm⁷(b5) C⁷alt. ♩. = ♩

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2

A Fm⁷ Db⁷ C⁷ Fm⁷ Db⁷

Gm⁷(b5) C⁷alt. Fm⁷ A^b7(#11) Gm⁷(b5) C⁷alt. ³ = ³ Fm⁷ Only Played in Solos

Interlude (Piano Play Melody with Guitar):

Fm¹¹ Eb¹¹ Db¹¹ Bm¹¹

Fm¹¹ Eb¹¹ Db¹¹ Bm¹¹

Fm¹¹ Eb¹¹ Db¹¹ Bm¹¹

Fm¹¹ Eb¹¹ Db¹¹ 4 C⁷alt.

FORM:

Intro/ Head/ Interlude

Guitar Solo over form (AABA), with modulations

Last Chorus of Guitar Solo, play melody over LAST A, then

Repeat Interlude... jam on it and we'll fade the recording

The Bucket Kicker

Transcribed Quentin Angus 2013

Gilad Hekselman

Medium Up Swing ♩ = 230

Measures 1-4 of the piece. The music is in 4/4 time with a key signature of two flats (Bb and Eb). The tempo is marked as Medium Up Swing with a quarter note equal to 230 beats per minute. The notation shows a melodic line in the right hand and a bass line in the left hand.

Measures 5-8. Measure 5 starts with a treble clef and a key signature change to one flat (Bb). The right hand features a triplet of eighth notes. The bass line continues with a steady eighth-note pattern.

Measures 9-12. Measure 9 starts with a treble clef and a key signature change to two flats (Bb and Eb). The right hand features a triplet of eighth notes. The bass line continues with a steady eighth-note pattern.

Measures 13-16. Measure 13 starts with a treble clef and a key signature change to one flat (Bb). The right hand features a triplet of eighth notes. The bass line continues with a steady eighth-note pattern.

Measures 17-20. Measure 17 starts with a treble clef and a key signature change to two flats (Bb and Eb). The right hand features a triplet of eighth notes. The bass line continues with a steady eighth-note pattern. Chord symbols are provided below the bass line: Cm7, F7, and Bbmaj7.

2

21

Musical notation for measures 21-24. Measure 21 starts with a G7 chord in the bass clef. The melody in the treble clef consists of eighth and quarter notes. Measures 22-24 continue the melodic line with various rhythmic patterns and accidentals.

25

Musical notation for measures 25-28. Measures 25-26 feature a triplet of eighth notes in the treble clef. Measures 27-28 continue the melodic development with eighth and quarter notes.

29

Musical notation for measures 29-32. Measures 29-30 feature a triplet of eighth notes in the treble clef. Measures 31-32 conclude the section with a final melodic phrase and a double bar line.

Ralph's Piano Waltz

Transcribed Quentin Angus 2009

John Abercrombie

Med Waltz ♩ = 120

Guitar intro- played freely

5

9

13

17

21

25

29

Intro Groove- Repeat 3 times (or until cue)- Open bass solo

Am⁷ F^Δ#⁵

33

Am⁷ F^Δ#⁵

37 **A** Am⁷ F^Δ4⁵

41 Am⁷ F/A Am⁷ F/A

45 **B** F⁶⁹ Em⁷

49 E^b6

53 **C** D^b/C

57

61 **D** Am⁷ h F^Δ4⁵

65 Am⁷ F/A Am⁷ F/A

69 Am⁷ F/A Am⁷ F/A

Repeat B C and D for solo's F/A

73 CODA- repeat until melody que

After Solo's B C and D twice then coda

Am⁷ F/A Am⁷ F/A

77 Am⁷ F^Δ4⁵

81 Am⁷ F/A Am⁷ F/A

85 Am⁷ F^Δ#5 rit.

89 Am⁷ F/A Am⁷ F^Δ#5

The musical score consists of three staves of music. The first staff (measures 81-84) features a melodic line with notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. Chord annotations above the staff are Am⁷, F/A, Am⁷, and F/A. The second staff (measures 85-88) continues the melodic line with notes C4, B3, A3, G3, F3, E3, D3, C3. Chord annotations above the staff are Am⁷, F^Δ#5, and rit. (ritardando). The third staff (measures 89-92) features a melodic line with notes B3, A3, G3, F3, E3, D3, C3, B2, A2, G2, F2. Chord annotations above the staff are Am⁷, F/A, Am⁷, and F^Δ#5. The piece concludes with a double bar line and a fermata over the final note.

All The Things You Are

Jerome Kern

Arranged Quentin Angus

Fast Jazz ♩ = 250

Intro (Open Vamp)

The musical score is written in treble clef with a 7/4 time signature. It consists of five staves of music. The first staff begins with a double bar line and a repeat sign, followed by a series of eighth notes. Above the staff are the chords $D\flat 7(\sharp 9)$ and $C 7(\sharp 9)$. The second staff continues the eighth-note pattern, with $D\flat 7(\sharp 9)$ and $C 7(\sharp 9)$ chords above. The third staff features a more complex rhythmic pattern with sixteenth notes, also with $D\flat 7(\sharp 9)$ and $C 7(\sharp 9)$ chords above. The fourth staff is marked with a 5/7 time signature and includes the instruction "(5 over 7 Metric Modulation)". It contains a series of eighth notes with $D\flat 7(\sharp 9)$ and $C 7(\sharp 9)$ chords above. The fifth staff is marked with a 7/4 time signature and includes the instruction "Melody and solos in 7/4... end with Tag up a tone ($B\flat m 7$ $E\flat 7$ / $C m 7$ $F 7$ / $B\flat m 7$ $E\flat 7$ / $A\flat m a 7$)". The staff contains a few notes and rests, ending with a double bar line and repeat sign.

Suite for Sweets (Guitar Part)

Transcribed- Quentin Angus- 2009

Gilad Hekselman

Samba ♩ - 120

4

6

8

10

12

14

16

18

20

22 Free Time-
D^Δ/A C^Δ/A

24 B^Δ/A E^{7sus}/A

26 E⁷/A A B^{7#5#9}

28

30

32

34

36

38

40

42

44

46

48

50

52

54

56

58

60

62

64 **B**

66

68 **A**

70


72

74

76 **C** A C° D^bm C

78 E/B C° D^bm E^{bo}

80 E



The image shows a single musical staff with a treble clef and a key signature of three sharps (F#, C#, G#). The staff contains a whole note chord in the first measure, consisting of the notes E4, G#4, and B4. Above the staff, the number '80' is written above the first measure, and the letter 'E' is written above the chord. The staff ends with a double bar line.

Suite For Sweets (Lead Sheet)

Even 8ths

Gilad Hekselman

E D/E C/E F#m/E B7/E E E7

INTRO

E PEDAL RUBATO

5 A/E G/E F/E F#m/E B7/E E E7

9 Amaj7 C#7/F F#-7 F- E-7 A7 Dmaj7 C#7 F#- F- E- A7

INTRO

Amaj7 C#7/F F#-7 F- E-7 A7 Dmaj7 C#7 F#- F- E- A7

13 D/A C/A Bb/A B-/A E7/A Amaj7 B+7

Ballad

D/A C/A Bb/A B-/A E7/A Amaj7 B+7

17 E D/E C/E F#m/E B7/E E E7 A/E G/E

Rubato

E PEDAL RUBATO

22 F/E = 120 F#m/E B7/E Em

Guitar Sets up groove Tumbao-ish bass Line. X4

Fine Even 8ths X4→

2

26 Melody Played Lyrally legato

Treble clef: $\text{F}\sharp$, $\text{C}\sharp$, $\text{G}\sharp$. Measures 26-28. Triplet markings above notes. First ending bracket labeled A1.2 over measure 26.

Bass clef: Accompaniment. Chords: Emaj^7 , B^7/E , Emaj^7 , E , $\text{C}\sharp^7/\text{E}$, $\text{F}\sharp^7/\text{E}$, $\text{C}\sharp^7/\text{E}$, $\text{F}\sharp^7/\text{E}$.

29

Treble clef: Measure 29 has a quarter rest. Measure 30 has a triplet of eighth notes.

Bass clef: Accompaniment. Chords: $\text{F}\sharp^7/\text{E}$, $\text{F}\sharp^7/\text{E}$, $\text{B}\text{sus}^4/\text{E}$, C°/E . The word *SMILE* is written below the bass line in measure 30.

31

Treble clef: Measure 31 has a triplet of eighth notes. Measure 32 has a quarter rest.

Bass clef: Accompaniment. Chords: $\text{C}\sharp^7/\text{E}$, $\text{F}\sharp^7/\text{E}$, B^7/E , Emaj^7 .

34

Treble clef: Measures 34-36. Triplet markings above notes.

Bass clef: Accompaniment. Chords: E , B^7 , Cmaj^7 , E^7/B , $\text{C}^7/\text{B}^\flat$. Asterisks are present at the end of the bass line in measure 36.

38

Treble clef: Measures 38-41. Triplet markings above notes. First ending bracket labeled A3 over measure 38.

Bass clef: Accompaniment. Chords: Emaj^7 , B^7/E , Emaj^7 , E , $\text{C}\sharp^7/\text{E}$, $\text{F}\sharp^7/\text{E}$, $\text{C}\sharp^7/\text{E}$, $\text{F}\sharp^7/\text{E}$.

42

Treble clef: Measures 42-45. Triplet markings above notes.

Bass clef: Accompaniment. Chords: $\text{F}\sharp^7/\text{E}$, $\text{B}\text{sus}^4/\text{E}$, C°/E , $\text{C}\sharp^7/\text{E}$, $\text{F}\sharp^7/\text{E}$, B^7/E , Emaj^7 , B^7 , E^7 .

46 C 3

Amaj7 C° C#7 Cmaj7 Emaj7/B

-After the last solo play from A to C
 -Go to E-vamp for intro over it until Bar 9
 Then play ink to Fine

49

Solos on E Open → Cue C to end solo

C° C# D#° Solos on E Open → Cue C to end solo
E

Yo Mamma's Blues

Transcribed Quentin Angus 2009

Gilad Hekselman

Fast Swing ♩ = 260

Solo's on regular 'jazz' blues chord progression

The musical score is written in 12/8 time with a key signature of two flats (Bb and Eb). It consists of three staves of music.

The first staff is a solo line. Above the staff, the chord progression is indicated as Bb7, Fm7, and Bb7. The melody starts with a double bar line and a repeat sign, followed by a series of eighth and quarter notes.

The second staff is labeled "Ensemble hits-" and begins at measure 5. It features a rhythmic accompaniment with eighth notes and rests. Above the staff, the chord E is indicated.

The third staff is also labeled "Ensemble hits-" and begins at measure 9. It continues the rhythmic accompaniment. Above the staff, the chord progression is indicated as F, B7, Eb, Db, and G7. The staff concludes with a double bar line and repeat dots.

One More Song

Even 8th ♩ = 220

Gilad Hekselman

INTRO

The musical score is written for piano and bass. It begins with an **INTRO** section in 3/4 time, marked *mp*. The piano part features a melodic line with eighth notes and chords, while the bass part provides a simple accompaniment. The score is divided into measures, with measure numbers 3, 5, 9, and 13 indicated. Measure 5 includes a first ending bracket labeled $\Delta 1,2$. Measure 9 features a chord change to F-/C. Measure 13 includes a chord change to A^b.6 and a fourth-note chord G⁷. The piece concludes with a *Simile* instruction and an **On Cue** marking.

mp C-

mp

3 On Cue

Simile

5 $\Delta 1,2$

C-

Simile

9 F-/C

13 C- A^b.6 G⁷

G. Hex ©

2 20

C- F- Ebmaj

f

27

D7 G7sus G+7 C-7

mp

32

37 B

C7b9
Simile to A

mf

41

F-(#3)/C F-/C

45

A7/C

Musical notation for measures 49-52. Treble clef, key signature of two flats. Chord: $D^{\flat}maj^{7}(\flat 9)/C$. Bass line consists of rhythmic slashes.

Musical notation for measures 53-60. Treble clef, key signature of two flats. Chords: G^7sus , G^7 , $C-/G$. Bass line consists of rhythmic slashes.

Musical notation for measures 61-68. Treble clef, key signature of two flats. Chords: $F-$, $E^{\flat}maj$, D^7 , G^7sus , $G+^7$, $C-$, A° . Bass line consists of rhythmic slashes. **ff** dynamic marking. Measure 61 includes a **C** chord symbol in a box.

Musical notation for measures 69-76. Treble clef, key signature of two flats. Chords: $F-$, $E^{\flat}maj$, D^7 , $G+^7$, $A^{\flat 6}$. Bass line consists of rhythmic slashes. **p** dynamic marking. Measure 69 includes a **3** triplet marking. Measure 76 includes a **D** chord symbol in a box. *Simile to A* instruction.

Musical notation for measures 77-83. Treble clef, key signature of two flats. Chords: $A^{\flat 7}$, $A^{\flat \sharp 5}$, $A^{\flat 6}$. Bass line consists of rhythmic slashes.

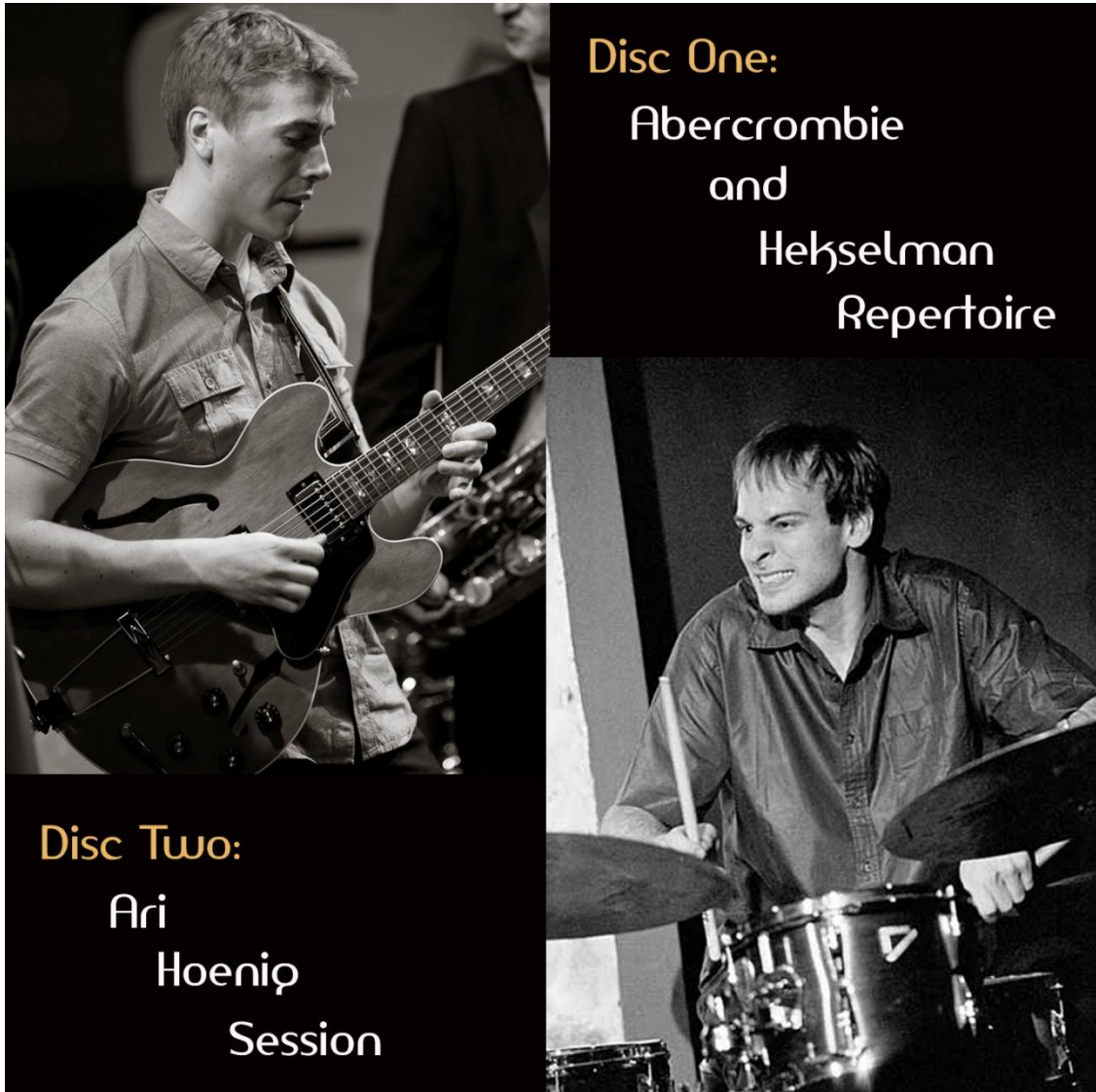
Musical notation for measures 84-90. Treble clef, key signature of two flats. Chords: $A^{\flat 7}$, $A^{\flat 7}$, G^7 , $C-$. Bass line consists of rhythmic slashes. A circled **0** symbol is present above the staff in measure 89.

Solos: AABCD

The first system of the solo consists of two staves. The upper staff is in treble clef with a key signature of two flats (B-flat and E-flat) and a common time signature. It begins with a whole note chord marked with a circled '0'. The melody continues with a dotted quarter note, followed by a half note chord marked 'Ab#5' with a slur underneath. The melody then consists of three quarter notes, followed by a quarter rest and a final eighth note. The lower staff is in bass clef and contains a series of rhythmic slashes representing a bass line.

The second system of the solo consists of three staves. The upper staff is in treble clef with a key signature of two flats and a common time signature. It begins with a double bar line and a repeat sign. The melody consists of a dotted quarter note, a half note chord marked 'A#6' with a slur underneath, a quarter rest, and a quarter note chord marked 'Ab6' with a slur underneath. The system concludes with a quarter rest and a final eighth note, followed by a double bar line and a repeat sign. The text 'TACET LAST X' and 'Repeat 4 times, fade slowly Fine' is written to the right of the staff. The middle staff is in treble clef and contains a series of rhythmic slashes representing a bass line. The lower staff is in bass clef and contains a series of rhythmic slashes representing a bass line. The text 'X4' is written above the upper staff.

Quentin Angus: CD4: Disc Two
Ari Hoenig Session



Happy

Straight 8ths Modern Jazz ♩ = 200

Quentin Angus

The musical score for "Happy" is written in 4/4 time with a tempo of 200 beats per minute. It consists of two systems of piano and bass staves. The piano part features a melodic line with eighth-note patterns and chordal accompaniment. The bass part provides a steady eighth-note accompaniment. Chord annotations are provided for the piano part at measures 16, 18, and 20.

Chord annotations for the piano part:

- Measure 16: 1. Ebsusadd3, B^b6, A^b/C, A^bmaj7
- Measure 18: 2. E^b(sus4), E^b
- Measure 20: E^b/G, F[#]m6, Em6, D^b/F

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2 25 G \flat 6 Eb/G C \sharp /F \sharp Emaj7

29 Eb/G F \sharp m6 Fm7 Em6 Db/1:

33 G \flat 6 Eb/G F \sharp (add2) Emaj7(\sharp 11)

Drum Solo (Just Guitar/ Piano):

37 Eb/G F \sharp m6 B/G Eb/G Abm11 Bbm11 *p*

41 B \flat m11 Bmaj7(\sharp 11) B/C A/B \flat B/C \sharp Bass Enters:

45 Dmaj7(\sharp 11) Ebm11 D/E G6

49 Cm6 A(add2)/C \sharp Dm7 Dbmaj7(\sharp 11) G \flat /B \flat

53 Eb/G F \sharp m6 B/G Eb/G A \flat m11 Bbm11

57 B \flat m11 Bmaj7(\sharp 11) B/C A/B \flat B/C \sharp

61 Dmaj7(#11) E>mi11 D/E G⁶ 3

Repeat 3 X:

65 Cm⁶ A(add2)/C# Dm⁶ G/B

4 Over 7 Modulation:

67 Cm⁶ A(add2)/C# Dm⁶ G/B

69 A>C Bmaj7(#11) Amaj7(#11) Bbm11

72 Abm⁷ Eb/G F#m⁶

73 Cm7(b6)

78

No Drums:

81 4 over 5 Modulation:

84 Back to Regular Time:

4 87

91

95

99 Ebsusadd3 Fm11 Abm6 E7/G

103 B6 Fm6 Gbmaj7

107 Abm6 G/B A7(maj7(#11)) Fm(maj7)

111 B6 Cm6 D7/B

115 Bbm6 C#/A A7m6 B/G D7(maj7(#11))

119

121 Bmaj7(#11) Fm6 Gb6

125 Abm6 G/B Abmaj7(#11) Fm(maj7)

129 Bmaj7(#11) Cm6

133 Bbm6 Abm6

137 D[♯]maj7(♯11)

5

On Cue:

141 Cm⁶ D[♯]/B B[♭]m⁶ C[♯]/A

144 A[♯]m⁶ B/G D[♯]maj7(♯11)

147 Fm7(♭6) Cm¹¹

151 Bmaj7(♯11) D[♯]maj7(♯11)

155 Fm7(♭6) Cm¹¹

159 Bmaj7(♯11) 1. D[♯]maj7(♯11)

163 2.

164 D[♯]maj7(♯11) A[♯]maj7(♯11)

168 Fmaj7(♯11) A[♯]maj7(♯11) A[♭]maj7(♯11)

How Deep is the Ocean

Medium Swing ♩ = 180

Arranged by Quentin Angus

Intro:

Emaj7 A⁶ G⁶ F⁶ F[♯](sus4) G(sus4) A(sus4) B(sus4)
 5 Emaj7 A⁶ G⁶ F⁶ F[♯](sus4) G(sus4) A(sus4)
 9 Emaj7 A⁶ G⁶ F⁶ F[♯](sus4) G(sus4) A(sus4) B(sus4)
 13 Emaj7 A⁶ G⁶ F⁶ D^{b6} B⁶
 16 A^{b6} G7susadd3

19 **A** Cm⁷ Dm^{7(b5)} G⁷ Cm⁷ Am^{7(b5)} D^{7alt.}
 23 Gm⁷ Am^{7(b5)} D^{7alt.} Gm⁷ Fm⁷ B^{b7}
 27 B^{7m7} E^{b7} E^{b7m7} A^{b7}
 31 Cm^{7(b5)} F⁷ B⁷ B^{b7} Dm^{7(b5)} G^{7alt.}

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2

35 **B** Cm7 Dm7(b5) G7 Cm7 Am7(25) D7alt.

39 Gm7 Am7(b5) D7alt. Gm7 Fm7 B7

43 Bbm7 Gm7(b5) C7alt. Fm7 Db7

47 Ebmaj7 G/B Cm7 F7 Fm7 Bb7 Emaj7

Interlude/ Ending:

50 Emaj7 B7(sus4) B7 Amaj7(#11)

54 Emaj7 A6 G6 F6 F#(sus4) G(sus4) A(sus4) B(sus4)

58 Emaj7 A6 G6 F6 Db6 B6 Ab6

62 Fine (Lead out): G7susadd3

Solos over regular form.... head out from D.S. -to- Fine

Outro

Swung Funk ♩ = 80

Quentin Angus

The musical score is written for piano and consists of five systems of music. The key signature has one sharp (F#) and the time signature is 4/4. The tempo is marked 'Swung Funk' with a quarter note equal to 80 beats per minute. The score begins with a boxed letter 'A' above the first measure. The first system (measures 1-3) includes a 'PIANO' dynamic marking above the staff. Chords are Cm7, Am7(b5), Ab7, G7, and Cm7. The second system (measures 4-5) includes chords Cm7, Am7(b5), Ab7, G7, and B°7. The third system (measures 6-7) includes chords Cm7, Am7(b5), Ab7, G7, and Cm7. The fourth system (measures 8-9) includes chords Cm7, Am7(b5), Ab7, G7, B°7, and Cm7. The fifth system (measures 10-11) includes a 'Break' section in measure 10 and chords Ab7, G7, Cm7, and a piano dynamic marking 'p<' in measure 11. The score features a complex melodic line in the right hand with many triplets and a steady bass line in the left hand.

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2 *NO DRUMS*

12

N/C (Piano and Bass double bass line)

13

14

DRUM FILL

f

B ENSEMBLE HITS

15

mf
Cm7

Am7(b5)

16

17

Am7(b5)

18 ----Break---- | 3

Chords: $A\flat 7$, B/G , $Cm 7$

Dynamics: *mp*, $Cm 7$

19 **A**

Chords: $A\flat 7$, $G 7$, $Cm 7$

21 PIANO

Chords: $Cm 7$, $A m 7(\flat 5)$, $A\flat 7$, $G 7$, $Cm 7$

Dynamics: *PIANO*

23

Chords: $Cm 7$, $A m 7(\flat 5)$, $A\flat 7$, $G 7$, $B\flat 7$

25 PIANO

Chords: $Cm 7$, $A m 7(\flat 5)$, $A\flat 7$, $G 7$, $Cm 7$

Dynamics: *PIANO*

27 rit.

Chords: $Cm 7$, $A m 7(\flat 5)$, $A\flat 7$, $G 7$, $F 7(\flat 9)$

Dynamics: *rit.*

Falling

Quentin Angus

Breakbeat (Straight) ♩ = 225
Intro

4 **A** $\text{\textcircled{A}}$

6

8

10 **B**

14

17 $D^{maj7}(1\#)$ G A^{m6} $D^{bmaj7}(add13)$ $A^{bmaj7}(\#11)$
Voice Chord Where Symbols are placed:

20 A^{m7} B^{bm6} $C7(\#5)$ **C**

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2

Acoustic Guitar

23

25

TO CODA

27

28 **A**

30

32

A Solo Form (A-B repeated, and C on CUE)

34 Fm^7 Fm^7


38 $Bmaj7(\sharp 11)$ $Bmaj7(\sharp 11)$ $D\flat(add2) E\flat(add2)$


43 $E\flat(add2) F(sus4) B\flat(add2) A\flat maj7(\sharp 11) D\flat(add2) E\flat(add2) E\flat(add2) F(sus4) B\flat(add2) A\flat maj7(\sharp 11)$

C ON CUE (end of each solo)

48 Gm^{11} $B\flat/B$

After Last Solo: D.S. Al Coc

55  CODA



57

59

Piano

Falling

Quentin Angus

Breakbeat (Straight) ♩ = 225

Intro

Musical notation for the Intro section, measures 1-3. The piece is in 4/4 time with a key signature of two flats (Bb and Eb). The right hand plays a sequence of chords: Bb7, Eb7, and Bb7. The left hand plays a bass line consisting of Bb, Eb, and Bb.

4 **A** Bass Enters

Musical notation for section A, measures 4-6. The right hand continues with chords Bb7, Eb7, and Bb7. The left hand enters with a bass line: Bb, Eb, Bb, Eb, Bb.

Musical notation for section A, measures 7-9. The right hand continues with chords Bb7, Eb7, and Bb7. The left hand continues with the bass line: Bb, Eb, Bb, Eb, Bb.

10 **B**

Musical notation for section B, measures 10-13. The right hand plays a melodic line with eighth notes and quarter notes. The left hand plays a bass line with eighth notes and quarter notes.

Musical notation for section B, measures 14-16. The right hand continues with a melodic line. The left hand continues with a bass line.

Voice Chord Where Symbols are placed:

17

Musical notation for section B, measures 17-19. The right hand continues with a melodic line. The left hand continues with a bass line.

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2

Piano

19 $D\flat$ maj7(add13) A \flat maj7(11) Am⁷ Bbm⁶

22 **C**

25 TO CODA \oplus

28 **A**

31

A Solo Form (A-B repeated, and C on CUE)
NB- REPEAT 4 X

34 Fm⁷ Fm⁷

38 Bmaj7(#11) Bmaj7(#11)

42 **B** -----(Eb Mixolydian)----- (F Mixolydian)----- (Ab Lydian)-----
 D^b(add2) E^b(add2) E^b(add2) F(sus4) B^b(add2) A^bmaj7(#11)

45 -----(Eb Mixolydian)----- (F Mixolydian)----- (Ab Lydian)-----
 D^b(add2) E^b(add2) E^b(add2) F(sus4) B^b(add2) A^bmaj7(#11)

C ON CUE (end of each solo)
Gm¹¹ B>B

48

After Last Solo: D.S. Al Coda

55 ⊕ CODA

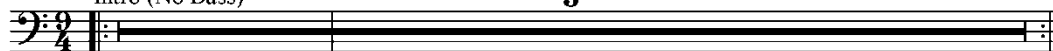
58

Falling

Breakbeat (Straight) ♩ = 225

Quentin Angus

Intro (No Bass) 3



4 **A**



7



10 **B**



13



16



19



22 **C**



25 TO CODA



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28 **A**

30

32

PIANO SOLO FIRST (A SECTION ONLY PIANO)

Solo Form (A-B repeated, and C on CUE)

NB- REPEAT 4 X

34 **A** Fm7 Fm7


38 Bmaj7(#11) Bmaj7(#11)

42 **B** -----(Eb Mixolydian)----- -----(F Mixolydian)----- -----(Ab Lydian)-----
 D2(add2) E2(add2) Eb(add2) F(sus4) B2(add2) Abmaj7(#11)

45 -----(Eb Mixolydian)----- -----(F Mixolydian)----- -----(Ab Lydian)-----
 Db(add2) Eb(add2) E2(add2) F(sus4) Bb(add2) Abmaj7(#11)

48 **C** ON CUE (end of each solo)
 Gm11 B7/B

After Last Solo: D.S. Al Coda

55  CODA

58



Dreamscape

Medium Straight 8ths Funk ♩ = 115

Quentin Angus

Intro

F#m7 E Dmaj7 F#m7 E Dmaj7(♯11)

5 **A** F#m7 E Dmaj7 F#m7 E Dmaj7(♯11)

9 F#m7 E Dmaj7 F#m7 E Dmaj7(♯11)

13 **B** C D Bb C

15 C D Bb A2 Ab

17 C D Bb C

19 C D B Bb A Ab

21 **C** F#m7 E Dmaj7 F#m7 E Dmaj7(♯11)

25 F#m7 E Dmaj7 F#m7 E Dmaj7(♯11)

The musical score is written in 4/4 time with a key signature of one sharp (F#). It consists of an Intro, Section A (measures 5-9), Section B (measures 13-19), and Section C (measures 21-25). The guitar part is in the treble clef, and the bass part is in the bass clef. Chord diagrams are provided above the notes for each measure. Section B features a melodic line with various chords including C, D, Bb, A2, and Ab. Section C includes a bass line with a complex rhythmic pattern of eighth notes and chords.

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29 **D** Bm¹¹ B^bm¹¹ G^bm¹¹ Fm¹¹ Dm¹¹ Bm¹¹

33 Bm¹¹ B^bm¹¹ G^bm¹¹ Fm¹¹ Dm¹¹ Bm¹¹

37

40 **E** F[#]m⁷ E Dmaj⁷

42 F[#]m⁷ E Dmaj⁷(#11)

44 F[#]m⁷ E Dmaj⁷ TO CODA F[#]m⁷ E Dmaj⁷(#11)

Solos

48 F[#]m⁷ E Dmaj⁷(#11) F[#]m⁷ E Dmaj⁷(#11)

52 F[#]m⁷ E Dmaj⁷(#11) F[#]m⁷ E Dmaj⁷(#11)

56 Cmaj⁷ Dmaj⁷ B^bmaj⁷ C/A>

60 Cmaj⁷ Dmaj⁷ B^bmaj⁷ C/A>

64 Bm⁷ B^bm⁷ Fm⁷ Dm⁷ Bm⁷ F[#]m⁷

68 Bm⁷ B^bm⁷ Fm⁷ Dm⁷ Bm⁷ F[#]m⁷

After Last Solo: DC Al Coda

♩ CODA

72 F#m7 E Dmaj7(#11) Cmaj7(4#11) Bbmaj7(#11) Dm(b6)

3

Musical notation for a CODA section, measure 72. The notation is on a single staff in treble clef with a key signature of one sharp (F#). The melody consists of eighth and quarter notes. Chord symbols are placed above the staff: F#m7, E, Dmaj7(#11), Cmaj7(4#11), Bbmaj7(#11), and Dm(b6). The piece ends with a double bar line.

Juncture

Straight ♩ = 115

Quentin Angus

A

5

B

9

Fmaj7

Ebmaj7(#11)

11

D7(sus4)

13

Fmaj7

Ebmaj7(#11)

15

D7(sus4)

C

17

Guitar:

Piano/ Bass:

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2 19

p *f*

p *f*

21 **D** JUST GUITAR

mp

23

PIANO ENTERS

25

27

29 BASS ENTERS

31 DRUMS ENTER

33

35 3

37 **E**

39 Guitar Harmony (Up a 5th)

41 **A**²

Solo Section (Start Soft... Eventually Build to Rhythm Below):

53 $F^{#}maj7(\sharp 11)$ $E^{#}maj7(\sharp 11)$

55 $D7(sus4)$ $Bm7(b13)$ $Bb^{#}maj7(\sharp 11)$

On Cue (Solo Continues) [Ease into the Bass Line]

57

4 61

Measure 61: Bass clef, single staff. The melody consists of eighth and quarter notes with rests.

65

Measure 65: Bass clef, single staff. The melody continues with eighth and quarter notes. A chord symbol $G\flat\text{maj7}(\sharp 11)$ is written above the staff.

68 **B**²

Measure 68: Grand staff (treble and bass clefs). The right hand plays a rhythmic pattern of eighth notes. A chord symbol $F\text{maj7}$ is written above the staff. A second measure of the system shows a chord symbol $E\text{maj7}(\sharp 11)$ above the staff.

70

Measure 70: Grand staff. The right hand continues with eighth notes. A chord symbol $D7(\text{sus4})$ is written above the staff.

72

Measure 72: Grand staff. The right hand continues with eighth notes. Chord symbols $F\text{maj7}$ and $E\text{maj7}(\sharp 11)$ are written above the staff.

74

Measure 74: Grand staff. The right hand continues with eighth notes. A chord symbol $D7(\text{sus4})$ is written above the staff.

76

Measure 76: Bass clef, single staff. The melody concludes with a half note. A chord symbol $D\flat\text{maj7}(\sharp 11\text{sus4})/F$ is written above the staff.

Appendix Nine: Transcriptions of my own Improvisations

In addition to the many transcription extracts included in chapters 1-3 (Volume One, pp. 14-117), a full transcription of one of my own improvisations has been provided on the following pages. This was notated from my rendition of Hekselman's *One More Song*, from Volume Two: CD4: Disc One, *Abercrombie and Hekselman Repertoire*, Track 9.

One More Song

Improvised Solo by Quentin Angus

Gilad Hekselman

Jazz Waltz ♩ = 210
Cm⁷

5 Fm/C

9 Cm⁷

13 Abm⁷ G⁷

17 Cm⁷

21 Fm⁷ Eb⁷ D⁷ G⁷

25 Cm⁷

29 Cm⁷

33 Cm⁷

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2

37

Musical staff 37-40: Treble clef, key signature of two flats (B-flat and E-flat). Measure 37 starts with a quarter rest, followed by eighth notes G4, F4, E4, D4, C4. Measure 38 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 39 has a quarter rest, followed by eighth notes G4, F4, E4, D4, C4. Measure 40 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Trills are indicated by a bracket with a '3' underneath in measures 38 and 40.

41 Cm⁷

Musical staff 41-44: Treble clef, key signature of two flats. Measure 41 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 42 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 43 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 44 has a quarter rest, followed by eighth notes G4, F4, E4, D4, C4, B3, A3, G3.

45 Abm⁷ G⁷

Musical staff 45-48: Treble clef, key signature of two flats. Measure 45 has a quarter rest, followed by a chord of Abm7 (B-flat, D-flat, F, Ab). Measure 46 has a whole rest. Measure 47 has a quarter rest, followed by eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 48 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3.

49 Cm⁷

Musical staff 49-52: Treble clef, key signature of two flats. Measure 49 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 50 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 51 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 52 has a quarter rest, followed by eighth notes G4, F4, E4, D4, C4, B3, A3, G3.

53 Fm⁷ Eb⁷ D⁷ G⁷

Musical staff 53-56: Treble clef, key signature of two flats. Measure 53 has a quarter rest, followed by eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 54 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 55 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 56 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3.

57 Cm⁷

Musical staff 57-60: Treble clef, key signature of two flats. Measure 57 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 58 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 59 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 60 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3.

61 Cm⁷

Musical staff 61-64: Treble clef, key signature of two flats. Measure 61 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 62 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 63 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3. Measure 64 has eighth notes G4, F4, E4, D4, C4, B3, A3, G3.

65 C⁷(9)

Musical staff 65-68: Treble clef, key signature of two flats. Measure 65 has a quarter rest, followed by a chord of C7(9) (C, E, G, Bb, D, F). Measure 66 has a quarter rest, followed by a chord of C7(9) (C, E, G, Bb, D, F). Measure 67 has a quarter rest, followed by a chord of C7(9) (C, E, G, Bb, D, F). Measure 68 has a quarter rest, followed by a chord of C7(9) (C, E, G, Bb, D, F).

69 Fm⁷

Musical staff 69-72: Treble clef, key signature of two flats. Measure 69 has a quarter rest, followed by a chord of Fm7 (F, Ab, Cb, Eb). Measure 70 has a quarter rest, followed by a chord of Fm7 (F, Ab, Cb, Eb). Measure 71 has a quarter rest, followed by a chord of Fm7 (F, Ab, Cb, Eb). Measure 72 has a quarter rest, followed by a chord of Fm7 (F, Ab, Cb, Eb).

73 Ab⁷/C

Musical staff 73-76: Treble clef, key signature of two flats. Measure 73 has a quarter rest, followed by a chord of Ab7/C (Ab, Cb, Eb, F, Ab). Measure 74 has a quarter rest, followed by a chord of Ab7/C (Ab, Cb, Eb, F, Ab). Measure 75 has a quarter rest, followed by a chord of Ab7/C (Ab, Cb, Eb, F, Ab). Measure 76 has a quarter rest, followed by a chord of Ab7/C (Ab, Cb, Eb, F, Ab).

77 $D\flat/C$

81 G^7 Cm/G

85 $\sharp G^7$ Cm/G

89 Fm^7 $E\flat^7$ D^7 G^7

93 Cm^7 $Am^7(\flat 5)$

97 Fm^7 $E\flat^7$ D^7 G^7

101 Cm^7 $Am^7(\flat 5)$

105 Fm^7 $E\flat^7$ D^7 G^7

109 $A\flat^7$

113

117

121

125

129

133

137

141

145

149

153

157 Cm⁷

161 Fm/C

165 Cm⁷

169 A^bm⁷ G⁷

173 Cm⁷

177 Fm⁷ Eb⁷ D⁷ G⁷

181 Cm⁷

185 Cm⁷

189 C⁷(⁹)^b

193 Fm⁷

6

197 *Ab7/C*

201 *Db/C*

205 *G7* *Cm/G*

209 *G7* *Cm/G*

213 *Fm7* *Eb7* *D7* *G7*

217 *Cm7* *Am7(25)*

221 *Fm7* *Eb7* *D7* *G7*

225 *Cm7* *Am7(25)*

229 *Fm7* *Eb7* *D7* *G7*

233 *A7*

