Improvised Counterpoint:
A study of contrapuntal strategies and interchangeable roles between two soloists in jazz improvisation

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Abstract

Contrapuntal improvisation was an integral part of jazz at its inception in New Orleans and has continued to provide communal spontaneity to the music ever since. In particular, Dixieland, Cool Jazz and Free Jazz have maintained multi-voice, contrapuntal improvisation, however the music’s focus often shifts to an individual jazz soloist, removing opportunities for collective dialogue in the moment. In our current period, exploring, cultivating and evolving this improvisatory practice is of great value to the collaborative sound of jazz and its future. This research (recording and supporting exegesis) investigates melodic counterpoint between two jazz soloists, simultaneously improvising over a common form, harmony and tempo. It draws from an extensive body of literature on interaction in jazz, which commonly explores the rhythm section interacting with one soloist. Whilst detailed analyses of interaction between two simultaneous soloists exist, they are often limited. This artistic research in music (ARiM) aims to contribute to the field by identifying a systematic method of analysing and performing improvised counterpoint, in transcribed examples of selected musicians and myself. Applying this to performance encourages equal levels of influence from both soloists who must react to each other in the moment.

An initial ‘outside-in’ investigation into the improvised counterpoint of three selected ‘Cool Jazz’ musicians (Lee Konitz, Gerry Mulligan and Jim Hall) aims to identify improvisatory strategies that lend coherence to their counterpoint. This will assemble a series of strategies that can be separated into comping and soloing roles depending on the aims of the improviser. Having developed this through practice, a second ‘inside-out’ investigation will observe the same strategies in my own performance, demonstrating coherent counterpoint and influences of the selected musicians. Further reflection upon my performance will then explore transitions between roles, revealing interactive ‘triggers’ that influence role changes in the other musician.

Using the metaphor of jazz improvisation as conversation, this paper compiles a contrapuntal syntax of eleven strategies, developed from the selected musicians,
and a framework of four common triggers for role transition found in my performance. These are articulated through transcription analyses and recordings. Although this is a case study of improvised counterpoint inherent to my performance and that of selected musicians, it aims to provide a model for analysing and developing cohesive counterpoint, between two equal soloists, in any improvising musician.
Acknowledgments

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Declaration

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

Signed: Jack Beeche August 2015
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Chapter 1 – Introduction

The improvised solo coming out of one musician, with others supporting him is a dead end. It has all been done. In front of us we have many years of collective improvised effort, the intuitive and adult collaboration between peers. (Warne Marsh, cited in Chamberlain 2003, p. 250)

Contrapuntal improvisation, between multiple soloists, was an integral element of jazz music at its inception in the early twentieth century (Rinzler 2008, p. 18). Whilst counterpoint and ensemble interaction have since remained present in many styles of jazz, the advent of bebop shifted focus from collective jazz ensembles, to the individual soloist (Shim 2007, p. 38). Garret Michaelsen (2013, p. 2) attributes this change to the industry’s celebration of bandleaders and soloists rather than ensembles, musical analyses of single line solos (Schuller 1958; Martin 1996), and pedagogical methods that focus on developing soloist skills and theory.

However, Paul Rinzler’s 1988 analysis of the Phil Woods Quartet re-visited ensemble interaction in jazz. Following Rinzler came a stream of studies in this field by such authors as Berliner (1994); Monson (1996); Sawyer (2003) and Hodson (2007). In particular, Monson’s ‘Improvisation as Conversation’ (1996, p. 73) and analyses of counterpoint conducted by Hodson (2007, p. 119); Shim (2007, p. 172); Clark (2014, p. 39) and Voss (2013; 2014), have generated an avenue for my artistic research in music (ARiM) into ‘conversational’ interaction in improvised counterpoint. This research intends to re-examine the communal spontaneity historically present in jazz music so that it can continue to evolve in our current period. This improvisatory practice offers additional opportunities for collective dialogue in the moment, that are not present when improvising as an individual soloist.

The first aim of this ARiM is to investigate interaction between two simultaneous soloists, rather than an accompanying rhythm section and one soloist. The second, to identify a set of practical devices that are inherent to improvised counterpoint, by investigating three seminal improvisers from the Cool Jazz period and their influence on my performance. A key method of this ARiM is observing these
improvisers from the ‘outside’, assimilating aspects into my own performance and reflecting upon them from the ‘inside’.

**Research Question One:**

*What comping and soloing strategies are inherent to the improvised counterpoint of Lee Konitz, Gerry Mulligan and Jim Hall, and how have they influenced my performance?*

Taking an ‘outside-in’ look at transcriptions of Lee Konitz, Gerry Mulligan and Jim Hall, will observe a series of contrapuntal strategies that encourage cohesive interplay between these musicians and an additional soloist. These strategies, and their resulting roles, are central to this ARiM as they provide a method for both analysis and development of improvised counterpoint. Due to the varying influence each strategy imparts on the counterpoint, they will be separated into the roles of comping and soloing. Those that imply a strong melodic continuation are considered soloing, whilst those that serve an accompanying purpose are considered comping. The role-based strategies will present a musical syntax that can be practised in order to promote interactive cohesion in improvised counterpoint. Further ‘inside-out’ analysis of my own performance will observe this syntax, demonstrating cohesive counterpoint and influences of the selected musicians. In practice, this syntax presents opportunities for both soloists to transition between the interchangeable roles of comping and soloing. Examining points where roles change will highlight the musical events that trigger role transitions, leading to a second research question:
Research Question Two:
What musical events trigger transitions between comping and soloing in my examples of improvised counterpoint?

Further reflection on my performance will draw from the metaphor of ‘...jazz as a musical language’ (Monson 1996, p. 73) to investigate points of role transition, and the musical events that trigger them. It will be argued that these transitions are much like engaging in a ‘conversation’. Just as turn-taking participant frameworks have been developed in language (ibid., p. 82), this study aims to develop a contrapuntal framework of musical triggers that prompt role interchange. This framework of role interchange, and the contrapuntal strategies developed from key musicians, will be articulated in analyses and recordings, demonstrating cohesive improvised counterpoint within my performance.

1.1 Key Terms

Improvised Counterpoint
Counterpoint is traditionally defined as: ‘A term used in the fourteenth century to describe the combination of simultaneously sounding musical lines according to a system of rules’ (Sachs and Dahlhaus 2001). However, Salzer and Schacter (1969, p. xvii) warn that this perspective is narrow and misleading, ignoring the presence of counterpoint in other forms of music. By removing the associations and rules of Western Art music from the above definition, one is left with: ‘...the combination of simultaneously sounding musical lines’. In this basic form, counterpoint can be found in any music with multiple parts, from examples of traditional African song to contemporary popular music.

In jazz, improvised counterpoint (two simultaneous lines) may therefore replace the strict rules of species counterpoint with the common practice of jazz.

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1 ibid.
2 Species counterpoint involves five restrictive rules that govern the composition of contrapuntal lines in relation to each other and the original cantus firmus (Salzer and Schacter 1969).
improvisation. When two lines are simultaneously improvised over a common form, harmony and pulse, improvised counterpoint can occur (Konitz, cited in Hamilton 2007, p. 57). For the purpose of this study, improvised counterpoint will refer specifically to melodic lines improvised simultaneously by two soloists who share a common form, harmony and pulse.

**Interaction**

Interaction between two musicians is at the centre of improvised counterpoint. Paul Rinzler (2008, p. 31) defines interaction in jazz as ‘…the spontaneous and improvised musical reactions of one musician to what another musician in an ensemble has performed’. He continues by observing that it may be a one off event or an ongoing process between musicians. For this study, interaction will be viewed as an ongoing series of spontaneous reactions between two soloists.

**Cohesion**

The success of improvised counterpoint may be viewed by the overall cohesiveness of the resulting two-part solo. ‘Cohesion’ is defined by the *Oxford Dictionary Online* as ‘…the action or fact of forming a united whole’ (2014). Whilst the term cohesion is common in the study of interaction (Sawyer 2003, p. 33; Voss 2013), it presents problems due to its subjective nature. Gunther Schuller (1958, p. 8) addresses this by providing evidence of thematic development in Sonny Rollins’s solo on ‘Blue Seven’. Thematic development, common in Western composition, becomes Schuller’s evidence of cohesion. Similarly, this study will identify contrapuntal strategies that demonstrate cohesion in the overall two-part solo.

**Projection, Convergence and Divergence**

Three intertwined terms: ‘projection’, ‘convergence’ and ‘divergence’, are presented by Garrett Michaelsen in *Analyzing Interaction in Jazz Improvisations of the 1960s* (2013). He uses projection to ‘…refer to the ways in which musical streams suggest their continuation’ (ibid., p. 52). Interactive responses can be convergent if they

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3 ‘Common practice jazz’ or ‘standard practice jazz’ refers to using the harmonic and rhythmic form of a composition as a structure for improvisation (Hodson 2007, p. 116).
suggest similar continuation, or divergent if dissimilar (ibid., p. 59). Whilst projection, convergence and divergence are central to Michaelsen’s argument, they will be used here to discuss relationships between two lines of improvised counterpoint in the narrative accompanying each analysis.

**Comping and Soloing**

The terms ‘comping’ and ‘soloing’ will be used to define which role is employed by a soloist and therefore the degree of influence imparted upon the counterpoint. Hal Crook (2004, p. 23) defines comping as: ‘...to improvise the musical accompaniment for a solo, or to improvise in a more or less secondary role... while musically supporting and interacting with a soloist’. And, soloing as ‘...assuming the primary or leading role of the performance’ (ibid.). These terms describe the influence of each strategy on the contrapuntal solo. If a musician is establishing, converging or diverging with a projection, they will be considered soloing. Supporting a projection, whilst not affecting its outcome, will be considered comping.

For this paper, soloing should not be confused with ‘soloist’, which refers to the individuals participating in improvised counterpoint. Similarly comping within the counterpoint should not be confused with a rhythm section accompanying soloists.

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4 Michaelsen importantly notes that convergence and divergence can exist simultaneously on numerous levels, being convergent on one and divergent on another (2013, p. 60).
1.2 Background and selected musicians for this study

It has long been acknowledged that improvisation permeates the history of both Western and non-Western music (Ferand 1961; Nettl 1974; Alperson 1984; Moore 1994; Gould & Keaton 2000). Further, improvisation that involves two or more musicians demands a certain degree of interaction (Merriam 1964, p. 27), therefore establishing counterpoint. It could thus be said that improvised counterpoint is historically present in many forms of music. In jazz itself, improvised counterpoint in a harmonic context has been a feature of two particular genres: ‘Early Jazz’\(^5\) (Rinzler 2008, p. 18) and ‘Cool Jazz’ (Meadows 2003, p. 262). Whilst the musicians selected for this study (Lee Konitz, Gerry Mulligan and Jim Hall) emerged from ‘Cool Jazz’ ensembles of the 1950s, they often drew influences from early jazz music as well (Chamberlain 2004, p. 250; Mulligan 1995, p. 30). These artists are by no means the only exponents of improvised counterpoint. However, they present a diverse range of contrapuntal devices that emerged from ensembles led by Lennie Tristano, Gerry Mulligan and Jimmy Giuffre respectively. Below, accounts from the musicians themselves highlight distinguishing characteristics of improvised counterpoint and put these ensembles into historical context.

As bebop emerged in the 1940s, Dixieland’s contrapuntal approach gave way to an evolution of the melodic line (Shim 2007, p. 38). Amongst the bebop musicians, pianist and teacher Lennie Tristano developed his own approach to counterpoint within a small ensemble that notably featured Lee Konitz:

*The boppers discarded collective improvisation [of Dixieland] and placed the emphasis on the single line... Perhaps the next step after bebop will be collective improvisation on a much higher plane because the individual lines will be more complex. (Tristano, cited in Shim 2007, p. 39)*

After leaving Tristano, Konitz continued this contrapuntal approach throughout his career. He believed that within a common chord progression ‘...two simultaneous lines that are strong will form a good counterpoint’ (Konitz, cited in

\(^5\) Early Jazz is also known as New Orleans Jazz, Dixieland or Chicago Jazz.

Mulligan’s initial approach to improvised counterpoint was to undertake a comping role on the baritone saxophone, by defining harmony in place of the missing piano in his quartet (Mulligan 1995, p. 31).6 In this ensemble the counterpoint developed from a form of accompaniment into interactive dialogue between the two soloists (Fine 2010, p. 242).

Just as the absence of a piano provided Mulligan with an impetus to improvise contrapuntally, Jimmy Giuffre’s second drum-less trio explored counterpoint between reeds7 (himself), guitar (Jim Hall) and trombone (Bob Brookmeyer).

Giuffre’s idea – at least after Brookmeyer joined us – was to have three linear instruments improvising collectively. He believed it didn’t make any difference whether or not the group had bass or drums. (Jim Hall 1990, p. 6)

Discussing his music Giuffre explained that ‘... the harmony is the result of the line... my approach is contrapuntal’ (Shim 2008, p. 211).

These accounts highlight two distinguishing characteristics of improvised counterpoint. First, it is contextualised within harmony and meter (established in common practice jazz by a song form) that is stated by a rhythm section (Tristano, Mulligan) or solely by the contrapuntal lines themselves (Giuffre). Second, there is a necessity for two (or more) interacting soloists of equal or fluctuating influence.8 The ensembles of Tristano, Mulligan and Giuffre contributed to the development of improvised counterpoint in the careers of Lee Konitz, Gerry Mulligan and Jim Hall. Recordings of these artists9 will be the focus of musical analyses in chapter 2.

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6 The result of a booking in a club with no piano.
7 Giuffre played clarinet, tenor and baritone saxophone.
8 This study will be limited to two soloists and explores the interchangeable roles of comping and soloing within the counterpoint, therefore observing varying degrees of influence.
9 Improvising with additional artists: Richie Kamuca, Mark Turner, Peter Bernstein, Paul Desmond, Bob Brookmeyer and Pat Metheny.
1.3 Literature Review

As the study of improvised counterpoint requires two simultaneously interacting soloists, it situates itself amongst the broad landscape of literature on interaction in jazz. Within this field it contributes to a more distinct niche that investigates interaction between individuals of equal influence, rather than a rhythm section interacting with one soloist. Its aim of identifying contrapuntal devices borrows from improvisatory method books in order to contribute a specific method for analysis and development of improvised counterpoint. Further, it is situated amongst literature that views jazz through the metaphor of language by investigating 'conversational' role interchange.

Interaction in Jazz Ensembles

Central to this research is investigation into interaction in jazz ensembles, a vast field that includes qualitative studies (Dybo 1999; Rinzler 1988; 2008; Sawyer 2003; Haywood 2014) and mixed-methods of qualitative and quantitative analysis (Berliner 1994; Monson 1996; Shim 2007; Hodson 2007; Michaelson 2013; Voss 2013; 2014; Clark 2014). Due to this study's mixed-method analytical approach, it sits amongst the latter literature. Nonetheless, the requirement of two equal soloists in improvised counterpoint puts it in a similar context to Haywood (2014, p. 18) who observes individuals as ‘...equal parts in one cohesive musical creation’. Short examples featuring two equal soloists also appear in Berliner (1994); Monson (1996) and Michaelson (2013). Moreover, full analyses of improvised counterpoint appear in Hodson (2007); Shim (2007) and Morones (2008). Perhaps the most relevant work to date is Dan Voss’s (2013; 2014) online blog, exploring improvised counterpoint between Lee Konitz and Warne Marsh.

Paul Berliner (1994) and Ingrid Monson (1996) have authored influential texts that most commonly explore interaction between an accompanying rhythm section and one soloist. Despite that, both present brief analyses of interaction between multiple soloists. Berliner discusses interplay between equally influential individuals in the 1960s Miles Davis Quintet (1994, p. 709), whilst Monson explores an example of pianist Jaki Byard momentarily joining Joe Farrell as a soloist (1996, p.
Garret Michaelsen also acknowledges the presence of duet passages in the 1960s Miles Davis quintet, without providing analytical examples (2013, p. 174).

Full analyses of improvised counterpoint (two soloists simultaneously improvising, in tempo, over harmonic form) can be found in Hodson (2007); Shim (2007) and Morones (2008). Robert Hodson’s discussion of the Bill Evans Trio performing ‘Autumn Leaves’ (2007, p. 128) observes several contrapuntal strategies, with the piano and bass taking turns to play overlapping phrases. In comparison, Shim’s analysis of Lennie Tristano and guitarist Billy Baur performing ‘Out on a Limb’ (2007, p. 172), features simultaneous soloing rather than the call and response seen in Hodson. Eric Morones’s (2008) collection of Paul Desmond solos contains a contrapuntal exchange with Don Elliot on ‘Jazzabelle’. His analysis is clearly aimed at the music student rather than academic reader, however it is an example of improvised counterpoint that features Desmond who is later analysed in this study. Unfortunately ‘Autumn Leaves’, ‘Out on a Limb’ and ‘Jazzabelle’ are solitary examples of improvised counterpoint, with each author quickly moving on to different topics.

Dan Voss offers detailed analyses of Warne Marsh and Lee Konitz’s interaction in two online articles: A Quick Look at Improvised Counterpoint (2013) and Lee and Warne Duo Transcriptions (2014). His work presents more examples than any other author (totalling three) and includes some of the strategies outlined in this study. It is also the first work reviewed to specifically feature Lee Konitz.

Finally, a recent study of the bass player Scott Lafaro by Rowan Clark (2014 p. 39) searches for examples of ‘conversational counterpoint’ in the Bill Evans Trio. Similar to Hodson (2007, p. 128), Clark cites ‘Autumn Leaves’ as the trio’s clearest example of improvised counterpoint. Still, he states that this is

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10 Individual contrapuntal strategies will be detailed in chapter 2.
11 Desmond is featured along with Gerry Mulligan in Chapter 2.
12 Hodson and Shim go on to analyse group interaction in free jazz recordings (‘Free Jazz’, ‘Ascension’, ‘Intuition’) which whilst being highly contrapuntal are not relevant to this study due to their free harmonic form.
unique, finding only one brief contrapuntal exchange in his analyses of five other recordings.\(^\text{13}\)

In summary, Berliner, Monson and Michaelsen provide only brief examples of interaction between two simultaneous soloists. Hodson, Shim, Morones and Clark each provide one example of improvised counterpoint, whilst Voss provides three that feature Lee Konitz. Although all works are influential, this research exists in the context of Haywood, as an extension of Hodson, Shim, Morones, Clark and most importantly, Voss. This ARiM will extend the current body of research by analysing multiple\(^\text{14}\) examples of improvised counterpoint selected from three musicians who, prior to this, have been investigated only briefly.\(^\text{15}\)

**Identification of strategies**

Initial aims of this research are to identify and define contrapuntal strategies used by selected jazz musicians. The identification of improvisatory techniques is common to Rinzler (1988); Crook (1991; 2004); Richardson (2006); Hodson (2008); Galper (2011) and Voss (2013), all of whom use varying methods of analysis to demonstrate improvisatory techniques relevant to their topics. Of these authors, Crook (2004, p. 48) has been the most influential, providing a comprehensive list of motif development techniques and definitions. Additionally Rinzler, Hodson, Galper and Voss contribute definitions for individual strategies in chapter 2.

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\(^{13}\) Clark (2014, p. 39) finds a four bar example of conversational counterpoint in the Bill Evans Trio’s ‘Alice in Wonderland’.

\(^{14}\) Seven contrapuntal solos, transcribed from the selected musicians are featured in chapter 2. One additional solo transcribed from my performance is featured in chapters 3 and 4. All eight solos are provided in the appendices, in full.

\(^{15}\) The key musicians are Lee Konitz, Gerry Mulligan and Jim Hall.
The Conversational Metaphor

When investigating interaction in jazz improvisation, many authors use the metaphor of music as language (Bailey 1992, p. 106; Monson 1996, p. 73; Berliner 1994, p. 348; Sawyer 2003, p. 31; Hodson 2007, p. 8; Clark 2014, p19). Clark and Monson are particularly influential to this ARiM. Clark’s ‘Conversational Counterpoint’ demonstrates specific parallels between the language of improvised theatre and improvised counterpoint (2014, p. 19). Similarly, Ingrid Monson compares ‘turn-taking’ conversational frameworks with the musical framework of interaction in jazz (1996, p. 82). Her research focuses on ‘...relatively fixed rhythm section roles against the freer role of improvising soloist’ (ibid.). In this study the musical frameworks become more specific, exploring role interchange between two soloists within improvised counterpoint. By combining Clark and Monson’s metaphors, conversational frameworks will be compared with a specific contrapuntal framework for role interchange in examples of my performance.
1.4 Methodology

The two key methodologies that ground this exposition are musical analysis of interaction in jazz and artistic research in music, including its sub-sets: research-led practice, practice-led research and practice-based research. Using these methodologies in this case study of improvised counterpoint, will require a mixture of both qualitative and quantitative research.

Analysis

The analysis style chosen for this ARiM has been used by Berliner (1994), and since by Monson (1996); Hodson (2007); Michaelsen (2013) and Voss (2013). It features short musical examples, extracted from full transcriptions, that demonstrate the topic of discussion. Each example presents relevant instruments in a musical score, with annotations\(^\text{16}\) marking points of focus (Berliner 1994, p. 658). Michaelsen and Voss have added further annotations of numbers and abbreviations\(^\text{17}\) to highlight their points. All examples in this exegesis are in 4/4 time, except where indicated. Accompanying these musical examples is a bar by bar written commentary, using common jazz vocabulary that numerically relates pitches to harmony (Potter 1990, p. 64).

Berliner’s analysis method\(^\text{18}\) will be used when identifying contrapuntal strategies in transcriptions of Lee Konitz, Gerry Mulligan and Jim Hall. It will also be present when analysing my own performance, identifying influences, and exploring transitions between roles in improvised counterpoint. Due to this focus on my performance, a brief explanation of artistic research follows.

\(^{16}\) Annotations include text, brackets, boxes, arrows and lines.

\(^{17}\) A full list of contrapuntal strategies and their abbreviations is provided in table 2.1.

\(^{18}\) Including modifications of Michaelsen (2013) and Voss (2013).
Artistic Research in Music (ARiM)

As this exegesis accompanies a performance outcome and contains analyses of both selected musicians and myself, it combines ‘...the artistic and the academic’ (Borgdorff 2012, p. 3), utilising interrelated methods of artistic research. Further, it attempts to address each of Borgdorff’s seven criteria for artistic research: intent, originality, enhancement of knowledge, research question, context, method and documentation (ibid., pp. 209-212). As for the different stages of artistic research, Smith and Dean (2009) define three interrelated terms:

1. Research-led practice: ‘...scholarly research [that] can lead to creative work’ (ibid., p. 7).
2. Practice-led research: ‘...practice leading to research insights’ (ibid., p. 5).
3. Practice-based research: ‘...in practice-based research the creative work acts as a form of research’ (ibid.).

Smith and Dean do not see these as separate processes, but as an interwoven web, with each stage informing the other (ibid., p. 2). Therefore the identification of contrapuntal strategies and their separation into roles is considered ‘research-led practice’, as it takes an ‘outside-in’ viewpoint, providing material that facilitates cohesive counterpoint. Analysis of my own performance acts as ‘practice-led research’, taking an ‘inside-out’ view that aims to provide insight into my musical influences, and musical events that trigger changes of roles within counterpoint. The accompanying recordings will be considered ‘practice-based research’ being creative works that stand as research in themselves.
Qualitative and Quantitative Research

This study utilises both qualitative and quantitative research due to the combination of notated musical analysis and descriptive commentary. Specifically, it is a case study of descriptive research that is quantitative in nature, but uses a mixed-method of both. Definitions of qualitative research include: interpretive observation of the subject in its natural environment (Denzin & Lincoln 1994, p2) or put simply, studies of ‘…personal stories and the ways in which they interact’ (Glesne & Peshkin 1992, p. 1). Whereas quantitative research ‘…uses numbers and statistical methods’ (King, Keohane & Verba 1994, p. 3–4); or, careful, objective sampling strategies and experimental designs (Glesne & Peshkin 1992, p. 6).

Distinctions may appear clear in these definitions, however Wilson and Natale (2001, p. 1) claim that even these become unclear when put into research context. For example, musical analysis could be considered an objective sampling of data and therefore quantitative, or an incomplete, interpretive description of sounds that represents pitch and rhythm but not tone colour or stylistic traits, therefore qualitative. Similarly, the list of comping and soloing strategies could be considered quantitative as it contains five comping and six soloing strategies, or qualitative as an interpretation of the roles being fulfilled by each strategy. Taking a broader viewpoint, this research investigates musical examples, aiming to categorise strategies in order to demonstrate the variability of roles. It is therefore descriptive research that is quantitative in nature, but involves some degree of qualitative interpretation, particularly in regards to the aims of each musician.

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19 Kervin (2006, p. 70) defines a case study as the 'detailed investigation of a specific person, place or thing'.
20 ‘As the name suggests, descriptive research seeks to describe an outcome of interest and its patterns. It is the most basic form of quantitative research’ (Kervin 2006, p. 59).
1.5 Chapter Summary

This exegesis contributes to current literature by investigating interaction between two equal soloists, specifically identifying contrapuntal strategies that can be developed in practice. It will investigate improvised counterpoint in my performance through two complimentary stages of ARiM. Chapter 2 will utilise research-led practice to compile a series of contrapuntal strategies from transcriptions of Lee Konitz, Gerry Mulligan and Jim Hall. Strategies will be separated into the roles of comping and soloing, forming a musical syntax that can be used for analysis and performance. Chapter 3 will then use practice-led research to investigate improvised counterpoint within my performance. This aims to demonstrate influences of the key musicians and coherent counterpoint, by identifying the same syntax of strategies. As the separation of strategies into roles defines whether a musician is comping or soloing, role transition points can be clearly identified. Chapter 4 will investigate which musical events trigger these role changes using Monson’s (1996, p. 73) metaphor of improvisation as conversation. Key to the following analyses are the terms: comping, soloing, projection, convergence and divergence.
Chapter 2 – Research-led Practice: A syntax of contrapuntal strategies found in selected musicians

After a preliminary examination of Lee Konitz, Gerry Mulligan and Jim Hall’s improvised counterpoint, eleven commonly used improvisatory strategies have been identified, each fulfilling one of two roles: comping or soloing. This chapter defines each strategy and observes it in transcriptions of the selected musicians, presenting a musical syntax for coherent improvised counterpoint. Initially comping strategies will be addressed, referring to passages where musicians take the supportive role (Crook 2004, p. 23), including:

1) Riffing
2) Guide Tones
3) Walking Bass Lines
4) Forward Motion
5) Call and Response

Second, soloing strategies (ibid.) that project a musical idea or converge upon an established projection will be presented, including:

1) Canon
2) Target Tones
3) Cadence Points
4) Subdivisions
5) Rhythmic Pulse
6) Motif Development

Of these soloing strategies, motif development is expanded into six sub-categories, as detailed by Hal Crook (ibid., p. 48): variation, fragmentation, extension, rhythmic displacement, augmentation and diminution. Table 2.1 lists each strategy along with a brief description, citation and abbreviation used in analysis.

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21 It is important to restate that soloing should not be confused with the participating soloists. Similarly comping should not be confused with the accompanying rhythm section. These terms refer to roles fulfilled by the two soloists, within improvised counterpoint.
Table 2.1: Contrapuntal strategies separated into comping and soloing roles including six sub-categories of motif development. This table includes a brief description, reference and abbreviation that will be used in analysis.

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<tr>
<th><strong>Comping Strategies</strong></th>
<th>Strategies used to accompany or support the second soloist by defining harmony and pulse</th>
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<tbody>
<tr>
<td><strong>Term</strong></td>
<td><strong>Description</strong></td>
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<tr>
<td>Riffing</td>
<td>A rhythmic phrase outlining the harmony and pulse</td>
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<tr>
<td>Guide Tone Lines</td>
<td>Long note durations, following the underlying harmony</td>
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<tr>
<td>Walking Bass Lines</td>
<td>Crotchet or minim pulse that outlines the harmony and meter</td>
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<tr>
<td>Forward Motion</td>
<td>Melodic phrases starting on an up beat and targeting beat 1 or 3</td>
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<tr>
<td>Call and Response</td>
<td>Exchange of phrases between the two soloists</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Soloing Strategies</strong></th>
<th>Contrapuntal strategies used to encourage coherent interaction between two simultaneous soloists</th>
</tr>
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<tbody>
<tr>
<td>Canon</td>
<td>Responding with the same or similar melodic phrase</td>
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<tr>
<td>Target Tones</td>
<td>Targeting the same pitch, influenced by the previous phrase or form</td>
</tr>
<tr>
<td>Cadence Points</td>
<td>Targeting form based cadence points</td>
</tr>
<tr>
<td>Subdivisions</td>
<td>Maintaining a flow of the same subdivisions</td>
</tr>
<tr>
<td>Rhythmic Pulse</td>
<td>Implying or changing to a new pulse</td>
</tr>
<tr>
<td>Motif Development</td>
<td>Developing motives between two soloists</td>
</tr>
<tr>
<td>Original Motif</td>
<td>Refers to the original motif that will be further developed</td>
</tr>
<tr>
<td>Variation</td>
<td>Same rhythm, different melody</td>
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<tr>
<td>Fragmentation</td>
<td>Segment of a motif</td>
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<tr>
<td>Extension</td>
<td>Extension of the original motif</td>
</tr>
<tr>
<td>Rhythmic Displacement</td>
<td>The same rhythm starting on a different beat</td>
</tr>
<tr>
<td>Augmentation</td>
<td>Longer note lengths</td>
</tr>
<tr>
<td>Diminution</td>
<td>Shorter note lengths</td>
</tr>
</tbody>
</table>
2.1 Comping Strategies

Riffing

Riffs - Short repeated segments of sound, deployed singly in call and response, in layers, as melody, as accompaniment and bass line. (Monson 1999, p. 31)

The *New Grove Dictionary of Jazz* (Bradford Robinson 2001) defines a ‘riff’ as a short melodic ostinato that is repeated either intact, or varied to accommodate harmonic changes. Riffs often repeat a small selection of notes that outline important harmonic pitches or arpeggios, as well as state the meter. Example 2.1 illustrates Lee Konitz riffing as accompaniment to Richie Kamuca on ‘Tickle Toe’ (1967).

Example 2.1: Konitz, ‘Tickle Toe’ (1967), bars 17–24

Konitz establishes a riff between Bb and G in bars 17–19 outlining the Bb minor tonality and a minim pulse. He then switches to a series of arpeggios, this time outlining Eb minor and a crotchet pulse in bars 21–24. In this example Konitz is

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22 Supplementary CD, track 1.
simplifying the harmony into large key areas, perhaps deciding to contrast Kamuca’s melody, which defines each individual chord.²³

**Guide Tones**

Hal Crook defines guide tones²⁴ as a chord's unstable tones, consisting of the 3rd, 7th and altered 5th in a four-part chord (Crook 1991, p. 48). They outline essential harmonic qualities and are often played in moving guide tone lines, commonly consisting of long note durations, played in a stepwise fashion through the harmonic changes. Guide tone lines can involve three levels of sophistication (Crook 1991, p. 48):

1) Guide tones only (3rds, 7ths, altered 5ths)
2) Guide tones, roots and perfect 5ths (chord tones)
3) Guide tones, roots, perfect 5ths and allowable tensions (chord sound)

Example 2.2 features Gerry Mulligan comping Paul Desmond with guide tone lines²⁵ on ‘All the Things You Are’ (1962).

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²³ Further examples of Konitz and Kamuca comping with riffs, either on repeated intervals or arpeggios, can be found in 'Tickle Toe' at bars 9–11, 33–39, 57–62, 81–82, 87–93, and 113–119.

²⁴ The abbreviation GT will represent guide tones throughout annotations in the following excerpts.

²⁵ The guide tone line in example 2.2 uses 5ths and allowable chord tones, therefore existing in Crook's (1991) 3rd level of sophistication (chord sound).
Example 2.2: Mulligan, ‘All the Things You Are’ (1962), bars 17–23

In bars 17–20 Mulligan plays ascending minims, from the 5th of A-7 to the 3rd of D7, before inserting a fill that ends on the 5th of Gmaj7 and ascending to the chord’s 7th. Mulligan then inserts another descending fill that ends in bar 21 on the 11th of F#-7 before ascending chromatically to the chord’s 5th and then the 3rd of B7 in bar 22. Alternatively bars 21–22 could be seen entirely as B7, implying the dominant chord for 2 bars.

Example 2.3 removes fills and chromatic embellishments, leaving the skeleton of Mulligan’s guide tone line as three streams of minims ascending through the harmony in two bar groups.

Example 2.3: Mulligan, ‘All the Things You Are’ (1962)
Guide tone skeleton of bars 17–21

26 Supplementary CD, track 2.
Walking Bass Lines

Defined in the *New Grove Dictionary of Jazz*, walking bass lines\(^{27}\) provide ‘...pulse, harmony and counter-melody’ through regular streams of crotchets (Schuller 2014). They are traditionally performed by a bass player, yet are used in the following example as a comping strategy on baritone saxophone. Walking bass lines can be varied by emphasising beats 1 and 3 to convey a ‘half-time’ feel, or a broken stream of crotchets that imply the crotchet pulse without stating every beat of the bar (Berliner 1994, p. 353). Example 2.4 illustrates Mulligan’s broken walking bass line, descending through the harmony, projecting a strong sense of crotchet pulse and forward motion.

Example 2.4: Mulligan, ‘All the Things You Are’ (1962), bars 53–56\(^{28}\)

On a broad scale Mulligan is harmonically outlining the key of G major, but when looking in detail he also defines the 3\(^{rd}\) of A-7 (bar 53 beat 3), the 5\(^{th}\) and 3\(^{rd}\) of D7 (bar 54) before playing the 5\(^{th}\) and 3\(^{rd}\) of GMaj7 (bar 55). Rhythmically, Mulligan projects a broken crotchet pulse by playing on beats 1 and 3 of bar 53 before anticipating beat one of bar 54 and playing beat 2. He finishes the phrase on beats 1, 2 and 4 of bar 55 with rhythmic embellishments on the up beats of 2 and 4. By playing on all four beats of the bar at various points, Mulligan is defining a crotchet pulse rather than the minim pulse seen earlier in example 2.3. His use of quaver anticipations provides momentum into the following down beat, a devise similar to forward motion.

\(^{27}\) The abbreviation WB will represent walking bass throughout annotations in the following excerpts.

\(^{28}\) Supplementary CD, track 3.
Forward Motion

Rhythmic forward motion is a comping strategy that creates momentum through the control of tension and release (Galper 2011, p. 19). It is created by starting phrases on weak beats (2, 4 or any up-beat) and releasing this tension by concluding on the strong beats 1 or 3 (ibid., p. 47). Example 2.5 illustrates Jim Hall’s use of rhythmic forward motion when comping trombonist Bob Brookmeyer on ‘I Hear a Rhapsody’ (1999).

Example 2.5: Jim Hall, ‘I Hear a Rhapsody’ (1999), bars 52–56

After chordal comping in bar 52, Hall begins a period of forward motion, playing the up-beat of 4 to propel into beat 1 of bar 53. For the next three bars Hall plays the same rhythm, preceding beats 1 and 3 with an up-beat quaver (except bar 54, beat 1). Each up-beat generates momentum that is resolved on the following downbeat. Used as a comping strategy, Hall’s forward motion defines the song’s harmony and meter, contributing rhythmic momentum to Brookmeyer’s solo.

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29 The abbreviation FM will represent forward motion throughout annotations in the following excerpts.
30 Supplementary CD, track 4.
31 Further examples of both Hall and Brookmeyer’s use of forward motion can be found in bars 5–6, 37–41, 47–49, 59–65 and 88–91 of ‘I Hear a Rhapsody’.
Call and Response

Call and response, or ‘antiphony’, describes reciprocal exchanges between musicians (Berliner 1994, p. 358). It is a common musical device found in many forms of music, particularly traditional music from Africa (Dundes 1973, p. 90). In improvised counterpoint, call and response may feature several other comping strategies, played in between responses to the other musician; or, soloing strategies where two soloists take turns playing phrases (Berliner 1994, p. 111; Rinzler 1988, p. 156). For this research, it is considered a ‘large-scale’ comping strategy when not presenting a clear projection. Should it present a projection, it would fall under the soloing strategies canon or motif-development. Example 2.6 illustrates call and response between Gerry Mulligan and Paul Desmond in bars 37–52 of ‘All the Things You Are’ (1962).
Example 2.6: Gerry Mulligan, ‘All the Things You Are’ (1962), bars 37–52

In example 2.6 Mulligan uses several comping strategies, interspersed with solo response phrases to Desmond. Initially he uses walking bass to define a crotchet pulse in bars 39–40, and a minim pulse in bar 43. Bars 45–46 could be described as a guide tone line due to the length of notes, especially if one interprets the D natural on bar 46 as an anticipation of the following Bb7 chord. Bar 47 includes a riff that arpeggiates Bb7 before outlining a minim pulse in bars 48–50 with both walking bass and forward motion. In between comping phrases Mulligan interjects contrapuntal responses to Desmond’s solo in bars 40–41, 44 and 51.

32 Supplementary CD, track 5.
2.2 Soloing Strategies

Until now, only comping strategies have been identified. These feature low levels of interaction as they aim to support and leave space for the other soloist’s projections. The following six soloing strategies feature high levels of interaction, influencing, and in turn being influenced by the other melodic line.

Canon

Historically, canon referred to a set of instructions for musicians regarding the performance of a composition (Mann et al. 2014). By the sixteenth century, the instruction to imitate a melody at an intervallic or temporal distance became so common that the term canon was specifically attached (ibid.). Example 2.7 shows Gerry Mulligan and Paul Desmond interacting with canon by imitating, displacing and transposing a descending scalar phrase.

Example 2.7: Gerry Mulligan, ‘Out of Nowhere’ (1962), bars 17–26

\[\text{Example 2.7: Gerry Mulligan, ‘Out of Nowhere’ (1962), bars 17–26}^{33}\]

\[\text{Supplementary CD, track 6.}\]
At bar 18, Mulligan initiates a period of improvised canonic imitation, playing a descending G major scale that starts on E and resolves on D in bar 19. Desmond imitates this phrase from one tone above, descending through the scale but altering it rhythmically before ascending an Eb mixolydian scale. Interestingly, Mulligan’s responding phrase in bars 20–21 finishes in almost rhythmic unison. Desmond initiates another descending scale from F# on beat 1 of bar 23, which Mulligan this time transposes up a third to A and displaces to beat 4 of bar 23. Desmond responds one more time, descending from D on beat 1 of bar 25. Mulligan answers this phrase on the up-beat of 2, descending from E, but now alters his melodic shape signalling an end to nine bars of improvised canon.34

Target Tones

Melodic target tones describe interactive responses that match certain pitches from the other melodic line. Dan Voss (2013) discusses this in relation to classical voice leading, using the term ‘voice exchange’. However, example 2.8 examines interactive, rather than voice leading choices, therefore using the term ‘target tones’. As is the case with many examples, there are several strategies at play between saxophonists Lee Konitz and Mark Turner in example 2.8 (guide tone lines, motif-development), but in this case the focus is on target tones.

34 Mulligan and Desmond enter another period of canon in the bars 67-74 of the same recording. A brief example of canon can also be found in Jim Hall and Bob Brookmeyer’s counterpoint on ‘I Hear a Rhapsody’ (1999), bars 91-94.
35 The abbreviation TT will represent target tones throughout annotations in the following excerpts.
In bar 3, Turner presents the first target tone (C), initiating a period of interaction where the musicians converge on both target tones and melodic direction. Konitz responds with a C in bar 4, descending to Bb in bar 5, which Turner uses to predict an A where both musicians converge. Turner continues, descending with a D to G in bar 6, the D becoming a new target tone which Konitz plays in bar 7. Konitz then descends chromatically towards C upon which the musicians converge in bar 8. Turner now changes direction, ascending from E to F, influencing Konitz’s G in bar 9 where they converge. In bar 9 Turner also plays a D, which both musicians converge upon in bar 10. This pattern of being influenced by both the target tones and melodic direction continues until bar 14. Target tones focus on a ‘micro-view’ (Crook 2004, p. 30) of pitch convergence whereas cadence points expand into the ‘macro’.

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36 Supplementary CD, track 7.
38 Micro viewing observes content and execution in the moment, its opposite macro view, observes content and execution over longer periods of time (Crook 2004, p. 30).
Cadence Points

Convergence at cadence points is influenced not only by the other soloist, but also the structure of a song form (Rinzler 1988, p. 157). These points commonly exist at the beginning of a new section (bar 9 of a song with 8 bar sections) or at strong harmonic resolutions (resolution to the tonic chord in bar 7 of an 8 bar section). This strategy expands upon target tones (example 2.8), further including phrase resolutions and strong references to harmony. Example 2.9 is drawn from the second chorus of improvised counterpoint in Lee Konitz’s ‘Palo Alto’ (2001), this time featuring guitarist Peter Bernstein.

Example 2.9: Konitz, ‘Palo Alto’ (2001), bars 47–58

Whilst Bernstein’s chorus of counterpoint does not show the same level of convergence as Turner’s (example 2.8), there are strong resolutions at cadence points, defined by both the form and harmony. Beat 1 of bar 48 features harmonic convergence by both musicians, Konitz playing the 3rd and Bernstein the 5th of Bbmaj7. Both musicians briefly interrupt their phrases in this bar, heightening the

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39 The abbreviation CP will represent cadence points throughout annotations in the following excerpts.
40 Supplementary CD, track 8.
sense of release, before aiming ahead to the new structural unit at bar 50. On beat 1 of bar 50 Konitz and Bernstein target C, the 5th of Fmaj7, before starting new melodic projections. These phrases diverge until bar 58 when they meet again on beat 1 of the next unit, once again targeting C, the 5th of Fmaj7.41

Cadence points and target tones hold much in common, both being influenced by song form, harmony and the other soloist’s melodic line. The use of different strategies in the same recording (examples 2.8 and 2.9 are both from Konitz’s ‘Palo Alto’) may give further insight into each improviser’s interactive thought process (Turner versus Bernstein), working primarily on either a micro or a macro level.

Subdivisions
The soloing strategy subdivisions, involves control and variation of what Hal Crook refers to as ‘rhythmic density’42 (Crook 1991, p. 29). Changes of subdivision raise or lower rhythmic density, creating an interactive projection that can initiate responses from the other soloist. Example 2.10 demonstrates Konitz and Turner interacting with subdivisions on the final chorus of ‘317 East 32nd’ (2001), bars 48–66.

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41 Further examples of cadence points can be found in Konitz’s ‘Tickle-Toe’ (1967) bars 61 and 81, and Jim Hall’s ‘All the Things You Are’ (1999) bars 27 and 55.
42 High rhythmic density uses many notes of short lengths (quavers, triplets, semiquavers), whereas low density uses less notes, of longer lengths (crotchets, minim) and rests.
Prior to bar 48, different rhythmic densities have been used with Konitz playing quavers, crotchets and minims; and Turner using longer durations of over two beats. In bars 48–50 Konitz introduces triplets, developing them further in bars 51–52. Turner responds to this new subdivision by playing triplets in bars 53–54,

43 Supplementary CD, track 9.
before returning to a low rhythmic density that outlines beats 1 and 3 of bars 57–59. Konitz converges with Turner, similarly outlining beats 1 and 3 before playing a repeated quaver phrase at bar 60. Turner then converges with Konitz’s repeated quavers in bars 61–63. A final interaction of subdivisions occurs in bars 65–66 where Konitz returns to triplets, echoed by Turner in bar 66.44 Similar to melodic target tones and cadence points, subdivisions can be thought of as a micro view of rhythmic interaction, the macro of which, is ‘rhythmic pulse’.

**Rhythmic Pulse**

Hal Crook defines rhythmic pulse45 as a pattern of attacks that mark the meter of each bar (2004, p. 27). Utilising this contrapuntal strategy, musicians can play phrases that imply a new meter, therefore influencing the phrasing of the other soloist. Example 2.11 demonstrates Jim Hall and Pat Metheny’s use of rhythmic pulse as a soloing strategy in the final 12 bars of melody and the beginning of contrapuntal solo, on ‘All the Things You Are’.

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44 Another example of subdivisions as a soloing strategy exists in bars 11–12 of Konitz’s solo on ‘317 East 32nd’ (2001).

45 The abbreviation RP will represent rhythmic pulse throughout annotations in the following excerpts.
Example 2.11: Hall, ‘All the Things You Are’ (1999), bars 31–37

In bars 31–35 Metheny is defining ‘time in 1’ by emphasising the first beat of each bar and using up-beats to create forward motion. Over this pulse Jim Hall plays the melody in 3/4 time until bar 37, where he initiates the contrapuntal solo by converging upon Metheny’s rhythm. Now, with both musicians playing beats 1, the up-beat of 2 and the up-beat of 3 a new 6/8 swing pulse is defined (example 2.12).

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46 Supplementary CD, track 10.
47 ‘Time in 1’ is defined by outlining beat one of each bar giving a steady but loose quality (Crook 2004, p27).
Example 2.12: Hall, ‘All the Things You Are’ (1999), bars 37–45, 6/8 swing

Bars 37–44 display convergence on the new 6/8 pulse until bar 45 where Hall re-introduces crotchets in 3/4. Metheny converges two bars later, establishing a 3/4 crotchet pulse in bars 47–50. He then diverges into a dotted crotchet 2-feel at bar 51, continuing the to and fro of different pulses.

By varying rhythmic attacks, Hall and Metheny are able to define the rhythmic pulse of their contrapuntal solo in different ways. Interactive convergence establishes each new pulse, providing moments of coherence and release; whereas divergence creates tension, allowing for transitions into different rhythmic pulses.

48 Supplementary CD, track 11.
2.3 Motif development

Motif development is a compositional technique that involves the repetition and development of small thematic units. These units (motifs) are usually comprised of two to eight notes, with no significant rests between them (Crook 2004, p. 33).

Crook further defines motif development as:

...when at least one musical element of a motif is the same as (or very similar to) that of a previous motif, establishing continuity, while the other musical elements change to create something new for the sake of interest.

(Crook 1991, p. 86)

Crook outlines the following six sub-categories of motif development in jazz improvisation (2004, p. 48):

1) Variation
2) Fragmentation
3) Extension
4) Rhythmic Displacement
5) Augmentation
6) Diminution

Each sub-category contains requirements as to what part of the original motif is changed and what remains the same. 1–4 require repetition of some or all of the original rhythm, 5–6 require repetition or transposition of the original melody.

Variation (V)

Variation involves repetition of the original motif’s entire rhythm, with one or more melodic notes changed to create interest (ibid., p. 41). Variation includes inversion (up-side down), retrograde (backwards), retrograde inversion (up-side down/ backwards) and transposition.

Fragmentation (F)

Fragmentation is the repetition of a portion, but not entirety, of the original motif’s rhythm (ibid., p. 43).
Extension (E)
Extension could be considered the opposite of fragmentation, involving the repetition of the original motif’s rhythm with the addition of extra notes before or after (ibid., p. 47).

Rhythmic Displacement (RD)
Rhythmic displacement repeats the original motif’s rhythm at a different location in the bar (ibid., p. 43). Due to the natural emphasis of beats 1 and 3 in 4/4 time, rhythmic displacement of two full beats repeats the original emphasis, somewhat diminishing the effect. Displacement of any other length (1, 3 or ½ beats) significantly alters the emphasis within the motif, hence making the development more noticeable.

Augmentation (A)
Until now Crook’s motif development strategies have required the rhythmic repetition of the original motif with changes to pitch, length or location in the bar. Augmentation changes the original rhythm by lengthening one or more notes, whilst maintaining the original or transposed melodic shape (ibid., p. 45).

Diminution (D)
Diminution could be considered the opposite of augmentation, whereby the motif maintains its original or transposed melodic shape with one or more notes shortened in duration (ibid.).

Example 2.13 illustrates the combination of motif development strategies: variation, extension, fragmentation, rhythmic displacement and diminution in Gerry Mulligan and Paul Desmond’s improvised counterpoint on ‘Out of Nowhere’ (1962), bars 35–44.
Example 2.13: Mulligan, ‘Out of Nowhere’ (1962), bars 35–44

Desmond’s first motif (M1) from bars 35–36 is responded to by Mulligan in bar 37 with a fragment, transposed up a step (variation) and diminished by reducing its crotchetts into quavers. Desmond answers Mulligan with rhythmic displacement, (moving M1 to beat 4) and diminution (removing rests from the motif’s beginning and crotchetts from its end) before adding an extension to the motif (a descending Eb major arpeggio in bar 39). In bar 40 Mulligan responds, this time varying a fragment of Desmond’s developed M1 (transposing it down a step) and varying a second fragment (ascending in bar 41). Again Desmond answers with a transposed fragment (bar 41, beat 4) that continues into a new crotchet motif (M2). Mulligan responds one more time in bar 42, beat 4, with a transposed fragment of M1 that is followed by crotchetts, a variation of Desmond’s new motif (M2).

49 Supplementary CD, track 12.
2.4 Chapter Summary

This ARiM of improvised counterpoint is more than a note-by-note transcription analysis. It explores musical structures that facilitate cohesive counterpoint between two soloists and the events that trigger interactive choices. Utilising research-led practice, it has defined eleven strategies that form a contrapuntal syntax for analyses of my performance in the following chapters. These strategies have been separated into comping (those that support the other soloist) and soloing (those that interact directly with the other soloist).
Chapter 3 – Practice-led Research: Contrapuntal syntax in my performance

The exegesis to this point has taken an ‘outside-in’ viewpoint, identifying a contrapuntal syntax of comping and soloing strategies in transcriptions of Lee Konitz, Gerry Mulligan and Jim Hall. This chapter now identifies the same syntax from the ‘inside-out’, demonstrating cohesive improvised counterpoint and observing influences of said musicians in my performance. The trio used for these examples features myself on alto saxophone, guitarist Dan Mamrot and drummer Aaron McCoullough. The analysis itself is drawn from our recording of ‘The Gift’ (Beeche 2015). Four transcribed excerpts are analysed, initially identifying soloing strategies: rhythmic pulse, canon and motif development in example 3.1. These are followed by subdivisions, cadence points and target tones in example 3.2. Compig strategies: call and response, walking bass lines and riffing, will be identified in example 3.3; and finally, lines and forward motion in example 3.4.

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50 More details are available in Appendix J Program Notes for Recordings.
51 Strategies are summarised using abbreviations in each example.
3.1 Soloing

Example 3.1 features the soloing strategies of rhythmic pulse, canon and motif development. Rhythmic pulse is presented in bars 26–29, demonstrating the influence of Jim Hall, where the guitar initiates a three beat phrase across the 4/4 meter. The saxophone converges upon this in bars 27–28 before diverging in bar 29. This divergence features an ascending phrase that is played in canon by the guitar in bar 30, similar to Mulligan in example 2.7. The saxophone’s phrase continues with a G minor arpeggio, labelled motif one (M1), which the guitar develops, descending a G minor 7 arpeggio in bar 31. Motif development of this kind is a particularly common strategy found in all three selected musicians and frequently in this analysis of ‘The Gift’.

Soloing Strategies - RP, C, MD

52 See examples 2.11 and 2.12.
53 See examples 2.8, 2.12 and 2.13.
54 Supplementary CD, track 13.
The soloing strategies of subdivisions, cadence points and target tones are particularly common in contrapuntal solos of Lee Konitz as seen previously in examples 2.8, 2.9 and 2.10. These strategies are similarly displayed in example 3.2. The saxophone’s motif (M2) in bar 32 consists of consecutive up-beats, which can also be considered a change of subdivisions to up-beat crotchets. The phrase changes direction, ascending in bar 33, where the guitar converges, also playing up-beats. At bar 35 the saxophone re-introduces quaver subdivisions, with which the guitar converges in bar 38. Amongst this stream of interaction, both soloists converge upon the structural cadence points of bar 36, clearly outlining the key centre F major, and then A minor in bar 40. Further, bar 40 features a convergence of both musicians on the target tone of E (5th of A-7).

Soloing Strategies - SD, CP, TT

55 Supplementary CD, track 14.
3.2 Comping

Example 3.3 shows a distinct similarity to Gerry Mulligan in example 2.6, featuring the large-scale comping strategy call and response. Within this are two smaller-scale strategies, walking bass lines and riffing. The saxophone adopts a comping role to the guitar’s call phrases, playing a 2-feel walking bass line in bars 58–60 and riffing from bars 64–68. In between these comping phrases it briefly responds to the guitar at bars 61, 63 and 69; however, refrains from engaging in continuous soloing dialogue as seen earlier in examples 3.1 and 3.2.

Example 3.3: Beeche, ‘The Gift’ (2015), bars 58–69

Comping Strategies - CR, WB, R

Supplementary CD, track 15.
Example 3.4 features the final two comping strategies: guide tone lines and forward motion. Rather than playing traditional guide tones with long note durations, the saxophone uses rhythmic and melodic embellishment similar to that of Gerry Mulligan in example 2.2. These can be found in two bar pairs, the first of which is at bar 82, where the minor 3rd of C-7 becomes the flat 7th of F13 in 83, descending to the 3rd of Bbmaj7 in 84. Bars 85 and 86 follow chromatic root movement of Eb7 to D-7, following which the 5th of Db7 and tonic of Gb7 are outlined in bars 87–88. A melodically embellished guide tone line revolves around the 3rd of F7 in bar 89, the tonic of Bbmaj7 in bar 90, becoming the flat 7th of C13 in bar 91. The comping strategy of forward motion concludes chorus 2, as the saxophone begins a phrase on the up-beat of 3 in bar 91 targeting the tonic of Fmaj7 on beat 1 of bar 92. Forward motion is particularly common to Jim Hall, as seen in example 2.5.

Example 3.4: Beeche, ‘The Gift’ (2015), bars 82–92
Comping Strategies - GT, FM

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57 Guide tone lines of Hal Crook’s ‘3rd level of sophistication’ (2004, p. 48), see chapter 2.1.
58 Supplementary CD, track 16.
3.3 Chapter Summary

These examples show evidence of contrapuntal syntax in my performance, highlighting the influences of Lee Konitz, Gerry Mulligan and Jim Hall. Although only single examples of each strategy are shown, there are numerous occurrences in ‘The Gift’, detailed in table A.1 of appendix H. As these strategies are separated into comping and soloing it can also be ascertained which role is being employed at any given time. Observing these roles in ‘The Gift’ has exposed frequent fluctuations of both musicians between roles. These points of transition, and the motives behind them, are the focus of the following chapter.

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59 Contrapuntal syntax consists of the eleven strategies defined in chapter 2.
Chapter 4 – A Contrapuntal Framework: Musical events that trigger transitions between roles

Whilst examining points of role transition in my trio’s recording of ‘The Gift’, it became apparent that certain musical events act as triggers for change. Further investigation revealed four common triggers within the improvised counterpoint that prompt role changes: the composition’s structural points (4.1), comping (4.2), projections (4.3) and the absence of a projection (call and response, 4.4). These can be thought of as conversational exchanges by using Monson’s metaphor of improvisation as language (1996, p73). In fact, Monson’s parallel between language and musical frameworks (ibid., p. 82) can be developed to construct a contrapuntal framework from the above four triggers. Using this metaphor, there are times when musicians refer back to the topic area (compositional structure), pause together (comping), discuss themes in depth (projections) or move quickly to and fro, clarifying facts, before establishing the next theme (call and response).
4.1 Compositional Structure

As both musicians improvise over a predetermined harmonic form, the compositional structure itself imparts influence upon which role is employed. This is demonstrated in table 4.1 where seven of twelve possible cadence points (grey) are defined with comping (green). Further, the contrapuntal solo begins and ends with both musicians comping, essentially ‘bookending’ the solo. Comping at cadence points has the effect of enhancing natural resolutions and additionally provides a structural reference mark for the other musician. In a conversation, it can be thought of as referring back to the topic to prevent confusion. In this case the composition itself becomes a trigger for transitions to comping.

Table 4.1: Comping and Soloing Roles in ‘The Gift’ (Beeche 2015)
Points of role transition are demonstrated by changes in colours. Of note are the comping bars (green) commonly found at structural points (grey boxed bar numbers).

<table>
<thead>
<tr>
<th>Bar No.</th>
<th>24</th>
<th>28</th>
<th>32</th>
<th>36</th>
<th>40</th>
<th>44</th>
<th>48</th>
<th>52</th>
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<tbody>
<tr>
<td>Sax</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guitar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chorus 2

<table>
<thead>
<tr>
<th>Bar No.</th>
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<th>62</th>
<th>66</th>
<th>70</th>
<th>74</th>
<th>78</th>
<th>82</th>
<th>86</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Guitar</td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key</th>
<th>Soloing</th>
<th>Start/ end of solo</th>
<th>Comping</th>
<th>Start/ end of comp</th>
<th>Rest</th>
<th>Composition Cadence Point</th>
</tr>
</thead>
</table>

---

60 Beeche: bars 24, 48, 58 and 70; Mamrot: bars 24, 36 and 48.
61 ‘The Gift’ is composed of two 12 bar A sections and one 10 bar B section, providing three structural cadence points per chorus. 2 choruses improvised by 2 soloists results in 12 possible cadence points.
62 Bars 24-25 and 90-91.
4.2 Comping

There are two occasions in ‘The Gift’ where both musicians simultaneously undertake a comping role for more than one bar. In conversation these could be thought of as pauses in dialogue, where each person waits for the other to continue. Projections that follow these cases are not triggered by musical events, rather they result from the absence of a solo projection. This can be thought of as a ‘first off the mark’ opportunity to present a new projection, as observed in example 4.1. With both musicians comping in bars 24–25 the guitar presents the first divergence in bar 26, projecting its new rhythmic pulse of a recurring 3/4 phrase across the 4/4 meter. This change triggers the saxophone’s transition to soloing, converging with the 3/4 phrase in bar 27. In this case, the guitar’s transition to soloing is triggered by the role situation or conversational pause, in contrast to the saxophone’s change, which results from the projection of a new rhythmic pulse.


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63 Bars 24–25 and 64–65.
64 Supplementary CD, track 17.
4.3 Projections

Of the four triggers for role transition, the presentation of a projection is the most common. There are three possible reactions to a projection. The first is transitioning from comping to soloing, which marks convergence with a projection, occurring 6 times throughout ‘The Gift’. The second is transitioning from soloing to comping, driven by the decision to leave space for the continuation of the other soloist’s projection. A third option is to diverge from the projection by initiating a dissimilar projection. This does not appear in ‘The Gift’, possibly due to the lack of cohesion it would give the counterpoint.

Transitions to comping and soloing, both triggered by projections from the guitar, are demonstrated in example 4.2. The saxophone’s transition to comping in bar 58 is triggered by a combination of the structural cadence point and the guitar’s slide from G in bar 57, to C on beat one of bar 58. Hearing this slide as a new projection, the saxophone changes to comping with walking bass, leaving room for the guitar to continue. A new guitar projection of descending quavers in bars 60–61 triggers the saxophone’s return to soloing, playing quavers in canon at bar 61. Upon hearing this convergence, the guitar switches back to chordal comping at bar 63, initiating a period of call and response.

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65 Bars 27, 49, 62, 73, 79 and 84.
66 This occurs 8 times, in bars: 36, 44, 58, 63, 64, 78, 82, and 87.
As demonstrated in the above example, projections act as triggers for role transitions in both directions. Musicians therefore have the option to converge with projections (in which case both musicians solo), or not to interact with the projection (in which case one is soloing and the other comping). This can be likened to engaging in conversation about a common topic (both soloing), or listening as somebody speaks, before replying in turn (one soloing one comping). A third option, uncommon in improvised counterpoint, would be diverging with a dissimilar projection. This may lack cohesion, comparable to introducing an unrelated topic to a discussion, resulting in confusion or even being considered impolite.

67 Supplementary CD, track 18.
4.4 Absence of a clear projection: Call and Response

When no clear projection is presented, the fourth common trigger for role transitions (call and response) can be found. In this instance roles change every bar or two, in quick exchanges, until a clear projection is established.

In bars 64–65 of example 4.3 both musicians await the emergence of a new projection with comping. Instead of immediately introducing a new projection, a period of call and response follows, within which roles quickly transition to and fro. The guitar attempts to initiate dialogue by playing short call phrases at 66 and 68, however the saxophone continues comping until its response in bar 69. This triggers the guitar to play a longer call in bars 70–71, after which both musicians converge upon the new projection of M2 in bar 73.

Example 4.3: Beeche, 'The Gift' (2015), bars 63–73

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68 Supplementary CD, track 19.
The call and response in bars 66–72 is triggered by the absence of a clear projection, resulting in frequent transitions to and fro between comping and soloing. This can be likened to periods of quick conversational exchange between two people trying to establish facts, or clarify meaning. Once a new theme or projection is established, the conversation continues.

### 4.5 Chapter Summary

The above examples identify musical events that trigger role transitions in improvised counterpoint, much like participating in a conversation. As in any good conversation, both participants should be courteous, engaged, articulate and informed on the given topic. Taking turns to speak is common practice in language frameworks (Monson 1996, p. 82). There are however, times when both people speak at once out of enthusiasm, confusion or even discontent. Topics are often referred back to, developed or changed. These language frameworks act as a metaphor for improvised counterpoint in my performance. This chapter has therefore presented a similar contrapuntal framework where both musicians refer back to the composition at structural points and use projections with which to converse, either in turn or at the same time. Moments of pause provide the opportunity to present a new projection, whereas periods without a clear projection result in quick exchanges before establishing a new theme. The four triggers for these transitions are: the compositional structure, role situations (comping), projections and the absence of a projection (call and response).
Chapter 5 – Conclusion

This exegesis set out with two aims: to investigate interaction between two equal soloists, and to present a set of improvisatory devices that are inherent to improvised counterpoint. Its overarching purpose was to expose a method that facilitates development of this improvisatory practice, in current and future periods of jazz. This intent was addressed in the first research question by analysing transcriptions of Lee Konitz, Gerry Mulligan, Jim Hall and later myself. Having found eleven contrapuntal strategies common to the selected musicians, it became clear that there were two distinct roles being employed. This developed into a key feature of the research as it separated strategies into the roles of either comping and soloing, therefore defining which role is being employed. Whilst the contrapuntal strategies defined in chapter 2 demonstrate how two melodic lines interact cohesively, the roles employed give further insight into aims of the improvisers. These eleven strategies presented a contrapuntal syntax for interactive dialogue that chapter 3 identified in my performance. Observing this syntax in my examples of improvised counterpoint recognised interactive coherence and influences of the selected musicians. A key method of this research has been taking an ‘outside-in’ viewpoint on the selected musicians, followed by an ‘inside-out’ viewpoint on my own performance.

During the course of this study, frequent transitions between comping and soloing roles raised a second research question: What musical events trigger transitions between comping and soloing in my examples of improvised counterpoint? By investigating points of role interchange, it was possible to observe musical events that triggered role changes in the other musician. Drawing from Monson’s (1994, p. 73) conversational metaphor, I have presented a framework of four common triggers for role transitions found in my improvised counterpoint. An understanding of these triggers offers the improviser control of roles and musical

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69 Research Question One: What comping and soloing strategies are inherent to the improvised counterpoint of Lee Konitz, Gerry Mulligan and Jim Hall, and how have they influenced my performance?
cues that can influence another musician. Presented as a method for practice and analysis, the syntax provides details of how to improvise counterpoint cohesively, whilst the framework suggests when certain roles could be employed.

The culmination of this research is the presentation of recordings\textsuperscript{70} that demonstrate cohesive improvised counterpoint and influences of the selected musicians. These recordings feature the trio outlined in chapter 3 as well as a duo and quartet, each offering different ensemble opportunities for role interchange.\textsuperscript{71} The recorded performances aim to present chapter 2’s syntax of eleven contrapuntal strategies and chapter 4’s framework of four triggers for role interchange.

Whilst this ARiM builds upon the vast body of literature on interaction in jazz, it presents detailed analyses of one specific avenue: improvised counterpoint. This is briefly touched upon by Hodson (2007); Shim (2007); Morones (2008), Clark (2014) and Voss (2013; 2014) but has not yet been explored in depth, let alone as artistic research. Further, analyses have been presented of three selected musicians in addition to myself, providing a more comprehensive view of improvised counterpoint than that of one musician alone. By utilising the intertwined stages of ARiM, I have presented a systematic method for analysis and practice that is similar to Crook’s (1991; 2004) improvisational methods. I have also have extended Monson’s (1996) conversational frameworks providing a specific framework for role based dialogue in improvised counterpoint.

The specificity of this project has forced certain limitations upon the scope of study, each of which presents opportunities for further research. Limiting improvised counterpoint to in-tempo, harmonic, form-based jazz, ignores the possibility of its presence in music that allows freedom in some, or all of these areas. Similarly, associations of the selected musicians with the ‘Cool Jazz’ idiom has prevented investigation of improvised counterpoint in other genres, particularly Early Jazz and Free Jazz. Limiting this research to two soloists could now be

\textsuperscript{70} See appendix K for track list and attached CD Improvised Counterpoint Recordings.

\textsuperscript{71} Further details can be found in Appendix J Program Notes for Recordings.
expanded into full ensemble improvised counterpoint, or comparisons of counterpoint in different ensembles (duo, trio and quartet). The exploration of harmonic strategies would further extend my research, which was limited to melodic counterpoint. Finally, ARiM that is centred upon my own performance, presents findings specific to myself. Whilst this work is grounded in three musicians who have performed improvised counterpoint over their entire careers, my research is a personal case study. It is intended that this model be used for the development of improvised counterpoint in any musician, or as the basis for a case study of someone else. This may present a completely new set of findings that would enhance and contribute further to the language of improvised counterpoint presented here, cultivating and evolving the collaborative sound of jazz that was so integral to the music at its inception.

Just as musical events trigger changes of roles, this project has triggered a development in my performance, which now focuses on large-scale interactive triggers that cue improvised changes in key, form and composition. This ‘large-scale’ counterpoint is the avenue of further research that my practice will continue to explore.
References


Beeche, J 2015, Golden Blue, Independent, Melbourne.


Borgdorff, H 2006, The debate on research in the arts, Kunsthøgskolen i Bergen, Bergen.


Ferand, ET 1961, Improvisation in nine centuries of western music: an anthology with a historical introduction, Arno Volk Verlag, Cologne.


Galper, H 2011, Forward Motion, Sher Music, Petaluma.


Hall, J & Metheny, P 1999, Jim Hall & Pat Metheny, Telarc, Beverley Hills.


Appendices

Appendix A    Konitz (1967), ‘Tickle Toe’
Lee Konitz (tenor saxophone) and Richie Kamuca (tenor saxophone)

TICKLE TOE

Konitz, L. (1967). The Lee Konitz Duets’ Milestone
Appendix B  Mulligan (1962), ‘All The Things You Are’
Gerry Mulligan (baritone saxophone) and Paul Desmond (alto saxophone)

All the Things You Are

Last 2 choruses, beginning at 4’ 15”
Appendix C

Hall, (1999) ‘I Hear a Rhapsody’
Jim Hall (guitar) and Pat Metheny (guitar)

I HEAR A RHAPSODY

Appendix D  Mulligan (1962), ‘Out of Nowhere’
Gerry Mulligan (baritone saxophone) and Paul Desmond (alto saxophone)

OUT OF NOWHERE
Appendix E  Konitz (2001), ‘Palo Alto’
Lee Konitz (alto saxophone) and Mark Turner (tenor saxophone)
Appendix F  Konitz (2001), ‘317 East 32nd’
Lee Konitz (alto saxophone) and Mark Turner (tenor saxophone)
Appendix G  Hall (1999) ‘All the Things You Are’
Jim Hall (guitar) and Pat Metheny (guitar)

All The Things You Are

Contrapuntal solo data for trio recordings of ‘The Gift’ (Beeche 2015)

Table A.1: Contrapuntal solo data for ‘The Gift’ – Trio, totalling 68 Bars. The location of each strategy, number of occurrences, and number of bars is listed for individual musicians and both soloists.

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<thead>
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<th>Strategy</th>
<th>Examples (bar numbers)</th>
<th>Total Occurrences</th>
<th>Total Occurrences for both soloists</th>
<th>Total bars in the solo</th>
<th>Total bars for both soloists</th>
<th>Frequency used, 68 bar total</th>
<th>Frequency used for both soloists, 136 bar total</th>
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<td><strong>Comping Strategies</strong></td>
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Table A.2: Comping and Soloing Role Changes in 'The Gift' – Trio – 68 bars

### Chorus 1

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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key</th>
<th>Soloing</th>
<th>Start/ end of solo</th>
<th>Comping</th>
<th>Start/ end of comp</th>
<th>Rest</th>
<th>Composition Cadence Point</th>
</tr>
</thead>
</table>

Table A.3: Totals for role use in 'The Gift' – Trio – 68 bars

<table>
<thead>
<tr>
<th>'The Gift' - Trio</th>
<th>Bars Comping</th>
<th>Bars Soloing</th>
<th>Bars Rest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beeche</td>
<td>26 (38.2%)</td>
<td>40 (58.9%)</td>
<td>2 (2.94%)</td>
<td>68</td>
</tr>
<tr>
<td>Mamrot</td>
<td>20 (29.4%)</td>
<td>47 (69.1%)</td>
<td>1 (1.5%)</td>
<td>68</td>
</tr>
<tr>
<td>Total</td>
<td>46 (33.8%)</td>
<td>87 (63.97%)</td>
<td>3 (2.21%)</td>
<td>136</td>
</tr>
</tbody>
</table>
Jack Beeche (alto saxophone) and Dan Mamrot (guitar)

The Gift - Trio

Jack Beeche (2015)
Appendix J  Program Notes for Recordings

The exegesis accompanying these recordings started out with two clear aims: First, to investigate interaction between two simultaneous soloists, rather than an accompanying rhythm section and one soloist. Second, to identify a set of practical devices, inherent to the improvised counterpoint of selected musicians and myself. These aims developed into the first research question: What comping and soloing strategies are inherent to the improvised counterpoint of Lee Konitz, Gerry Mulligan and Jim Hall, and how have they influenced my performance? Answering this question resulted in a contrapuntal syntax of eleven strategies that were separated into the roles of comping and soloing. Not only do these strategies expose interactive coherence between the two soloists, they also enable distinction of which role is being employed at any given time. Frequent transitions between these roles raised a second research question: What musical events trigger transitions between comping and soloing in my examples of improvised counterpoint? Exploring ‘conversational’ role transitions in my performance resulted in a contrapuntal framework of four common triggers of role interchange. Chapters 3 and 4 presented this syntax of strategies and framework of triggers as a systematic method for analysis of my trio performing ‘The Gift’ (Beeche 2015). These analyses can be used as a guide for examining the recordings presented here, featuring three ensembles (duo, trio and quartet) that offer varied opportunities for the contrapuntal soloists. Whilst differences between ensembles are not the focus of this research, they do present various applications of improvised counterpoint, particularly in regards to role use. These recordings aim to present said strategies and frameworks in coherent improvised counterpoint, as well as the influences of Lee Konitz, Gerry Mulligan and Jim Hall in my performance.

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72 See chapter 2.
73 Chapter 4 utilises Monson’s (1996, p. 82) metaphor of jazz improvisation as language.
74 Track 10 on the accompanying CD.
Ensembles

Personnel for the trio and quartet in the featured recordings resulted from an initial period of investigation, in duo format, with a variety of musicians in Melbourne. Whilst improvised counterpoint is possible with any musician, choosing a well-suited improviser was beneficial. During workshops I was listening for three things: a tone colour that would blend well with my saxophone sound, an approach to improvisation that was interactive both melodically and harmonically, and a melodic language rooted in tradition but not reliant on pre-conceived ideas. Guitarist Dan Mamrot was selected because he fulfilled each of these prerequisites, and additionally shared a similar set of influences, in particular: Jim Hall. After rehearsing as a duet for several months Aaron McCoullough joined us on drums, forming a bass-less trio, and later a quartet with Gareth Hill on bass. Both ensembles recorded original compositions and jazz standards in February 2015 for an upcoming album Golden Blue.

The third ensemble is a duo with guitarist Stephen Magnusson, with whom I had lessons throughout my studies. We worked specifically on improvised counterpoint, as well as large-scale forms of interactive communication, including: varying harmony, form and tempo. In December 2014 and February 2015 we recorded an upcoming album of original compositions, jazz standards and free improvisations. Contrapuntal examples from the duo, trio and quartet are presented here as the performance requirement of my research.

These three ensembles offer varied opportunities for improvised counterpoint, as do the compositions and arrangements. Some tracks were arranged with composed introductions, codas and pre-structured solo orders. Others use the composition as a general form, allowing more room for interaction through improvised arrangements that fluctuate in and out of counterpoint. The jazz standards in particular were loosely improvised, often relying on free, interactive improvisation to determine which song would be played. Different levels of arrangement present a variety of role use, from frequent interchange to static roles. However, even static roles utilise varied contrapuntal strategies, only with less frequent role interchange. Listening to these recordings whilst reading the following commentary is advised.
Tracks

1 - ‘The Gift’ (Beeche) – Quartet

‘The Gift’ was recorded by each ensemble, allowing comparisons over the same composition. This quartet version was pre-arranged with a rubato intro, followed by the melody and one chorus of improvised counterpoint (beginning at 1:42) before a saxophone solo (2:31). Aside from bar 2 of counterpoint, the saxophone adopts a soloing role for the entire chorus with the guitar frequently transitioning between both roles. Strategies particularly common are call and response, canon and motif development, drawing influences from Gerry Mulligan and Lee Konitz.

2 - ‘Wings’ (Beeche) – Quartet

Similar to the quartet recording of ‘The Gift’, ‘Wings’ features an arranged intro/coda and a pre-determined solo structure. Its two chorus contrapuntal solo (3:00) follows the bass solo and leads into one chorus of saxophone solo (4:12) before the final melody and coda. The counterpoint presents a balance of comping and soloing by the two musicians, commonly utilising call and response, subdivisions and riffing. Again, this track draws influences from Gerry Mulligan and Lee Konitz.

3 - ‘Secret Love’ (Fain) – Trio

The trio recording of Sammy Fain’s ‘Secret Love’ resulted from free improvisation between the guitar and saxophone, without having a pre-determined composition in mind. The guitar begins improvising over an effect-pedal’s sustained B, before playing an ascending whole-tone at 1:24. I hear this as a quote from ‘Secret Love’, playing the first phrase in E major (hearing the sustained B as dominant) and immediately correct to Eb Major as the guitar responds in Eb (original key). From here the full melody is played rubato until 3:39 where I bring in the tempo, comping with walking bass and beginning the improvised counterpoint. There are frequent transitions between roles by both musicians, commonly utilising walking bass, motif development, canon, target tones, cadence points and subdivisions. Whilst this track displays the influences of all selected musicians, it is particularly

75 Duo, Trio and Quartet.
reminiscent of Jim Hall’s duets with Bob Brookmeyer or Pat Metheny due to the frequent role transitions.

4 - ‘Golden Blue’ (Beeche) – Duo

‘Golden Blue’ is a duet with Stephen Magnusson, beginning with a short guitar introduction followed by the song’s melody. Solo structure was pre-determined with a guitar solo (2:10, saxophone comping) until the bridge (3:14), where the saxophone solos before playing the final eight bars of melody. Comping during the guitar solo features all comping strategies within a large-scale call and response. These responses feature canon, subdivisions and motif development. During the saxophone solo, roles are largely static with a moment of motif development interaction at 3:26. Gerry Mulligan influences the improvised counterpoint on this track, due to the chiefly comping role with short responses.

5 - ‘I’ll Remember April’ (de Paul) – Duo

Before recording, Magnusson and I listed several jazz standards we might play and then proceeded to freely improvise between them. ‘I’ll Remember April’ resulted from an edited part of this take, and aside from presenting the melody at the beginning and end, features un-structured solo orders. Both musicians frequently transition between comping and soloing, employing all contrapuntal strategies along the way. All three selected musicians influence this track, particularly seen in comping strategies from Mulligan and soloing strategies from Konitz. Jim Hall’s influence can be heard in passages where both musicians use the subdivision strategy, playing consecutive crotchet or dotted crotchet phrases.

6 - ‘Love Theme From a Zombie Film’ (Beeche) – Duo

This track has a simple, pre-determined structure with defined saxophone (0:51) and guitar (1:40) solos. Roles are mainly static in the saxophone solo, however call and response in the guitar solo employs all comping strategies and responses to the guitar that utilise subdivisions, motif development and rhythmic pulse. Again, due to the static comping role of the saxophone in the guitar solo, this track draws
influence from Gerry Mulligan. Jim Hall’s influence can be seen in the use of varied rhythmic pulses: 1-feel, broken crotchet and full 3/4 pulse.

7 - ‘Light Blue’ (Monk) – Trio

Similar to ‘Secret Love’, this track began as a free improvisation in C major until 0:26 where guitar quotes the melody to ‘Light Blue’. The saxophone immediately converges upon this composition, comping the guitar with embellished guide tones, walking bass, forward motion and call and response phrases, before playing the melody in unison at 0:57. After a brief solo the saxophone reverts to comping at 1:55 where the counterpoint begins with roles frequently switching to and fro. The melody is slowly reintroduced from 3:27 until the track’s end. Jim Hall and Gerry Mulligan influence this recording, which employs all comping strategies and frequent use of subdivisions.

8 - ‘Solar’ (Davis) – Quartet

Miles Davis’s ‘Solar’ was agreed upon before recording this track, however every other element was improvised, including rubato introduction, solo order, use of counterpoint and coda. Whilst the introduction is contrapuntal, it is not until 2:40 that tempo is established and the improvised counterpoint really begins. The interactive dialogue mostly employs soloing strategies until the saxophone loosely quotes the song’s melody (3:32–3:53), before a sustained note that leads into the guitar solo. At 5:30 the bass plays an ascending line, triggering the guitar solo’s end and a new contrapuntal section where both musicians comp, awaiting a new projection. At 6:01 convergence upon soloing strategies begins, featuring canon and subdivisions before the saxophone leads into a solo at 6:54. Following is a bass solo (7:42), featuring comping strategies: guide tone lines and riffing from the saxophone. The final melody is reintroduced at 8:59 leading into a coda in C minor that features the soloing strategies subdivisions and motif development. Whilst all influences are present throughout ‘Solar’, Konitz’s influence is particularly evident through the saxophone’s primary use of soloing strategies, especially motif development.
9 - ‘Scooping’ (Beeche) – Trio

‘Scooping’ features an improvised introduction, followed by a simple, pre-arranged structure (saxophone solo followed by guitar) and mostly static roles. During the guitar solo, the saxophone employs comping strategies: riffing and guide tone lines, along with call and response interaction. The final sixteen bars of the guitar solo (4:31) include role interchanges and soloing strategies: cadence points, canon, motif development and target tones. After the final melody, a coda in B minor features contrapuntal strategies: riffing, canon, motif development, subdivisions and target tones. Overall it is Mulligan’s influence that is evident here, heard in the comping strategies and call and response in the guitar solo; and canon in the coda.

10 – ‘The Gift’ (Beeche) – Trio

The final track offers an alternate recording of ‘The Gift’ in trio format. This accompanies the analyses in chapters 3 and 4, but can also be compared to the quartet (track 1), offering different ensemble approaches to improvised counterpoint on the same composition.

Whilst comparison of improvised counterpoint between ensembles is not an initial aim of this study, it does reveal distinctly different preferences for role use by both soloists. Generally, duo and trio examples utilise more comping than quartet, possibly due to the lack of bass in these ensembles. Similarly, the quartet examples feature more soloing by both musicians. It can therefore be determined that the ensemble format affects which roles are utilised, further influencing which strategies are used. This then affects how, and how often, role transitions take place in performance. Further, the different preferences for roles in various ensembles affect which of the selected musicians is more influential on my performance. Lee Konitz tends to be more influential on quartet performances due to his preference for soloing strategies. Gerry Mulligan and Jim Hall become particularly influential in duo and trio settings, due to the frequency of comping and interchanges between roles.
These recordings demonstrate the accompanying exegesis’ syntax of contrapuntal strategies and framework for role transitions in my performance. They draw influences from the selected musicians (Lee Konitz, Gerry Mulligan and Jim Hall), attempting to both reference the focal genre ‘Cool Jazz’ and extend improvised counterpoint beyond. The freely improvised introductions draw influences from Free Jazz, ‘Scooping’ is influenced by jazz-rock ensembles\textsuperscript{76} and the bass-less trio offers a freer sound that is becoming more popular in today’s period of jazz.\textsuperscript{77} These recordings are just one step in the cultivation and evolution of improvised counterpoint, celebrating opportunities for spontaneous collaborative dialogue amongst musicians.

\textsuperscript{76} For example: Happy Apple, The Bad Plus and Alas no Axis.

\textsuperscript{77} For example: the Paul Motian Trio, Ron Miles Trio and Jeff Ballard Trio.
Appendix K  Improvised Counterpoint Recording (CD)

**Duo**
Jack Beeche – alto saxophone  
Stephen Magnusson – guitar  
Recorded by Niko Schauble, December 2014 and February 2015.  
Mixed by Yen Nguyen, August 2015.

**Trio**
Jack Beeche – alto saxophone  
Dan Mamrot – guitar  
Aaron McCoullough – drums  
Recorded, mixed and mastered by Yen Nguyen, February 2015.

**Quartet**
Jack Beeche – alto saxophone  
Dan Mamrot – guitar  
Aaron McCoullough – drums  
Gareth Hill – bass  
Recorded, mixed and mastered by Yen Nguyen, February 2015.  
All compositions by Jack Beeche (2015) unless otherwise noted
Track Listing:
1- The Gift – quartet
2- Wings – quartet
3- Secret Love – trio (Fain)
4- Golden Blue – duo
5- I'll Remember April – duo (de Paul)
6- Love Theme From a Zombie Film – duo
7- Light Blue – trio (Monk)
8- Solar – quartet (Davis)
9- Scooping – trio
10- The Gift – trio
Appendix L  Audio for examples (Supplementary CD)

The CD labeled *Supplementary CD* provides accompanying excerpts for notated examples in chapters 2, 3, and 4. Each track contains the musical examples only, providing ease of location within the original recording.

**Track Listing:**

1- Example 2.1: Konitz, ‘Tickle Toe’ (1967), bars 17–24
2- Example 2.2: Mulligan, ‘All the Things You Are’ (1962), bars 17–23
3- Example 2.4: Mulligan, ‘All the Things You Are’ (1962), bars 53–56
4- Example 2.5: Jim Hall, ‘I Hear a Rhapsody’ (1999), bars 52–56
5- Example 2.6: Gerry Mulligan, ‘All the Things You Are’ (1962), bars 38–52
6- Example 2.7: Gerry Mulligan, ‘Out of Nowhere’ (1962), bars 17–26
7- Example 2.8: Konitz, ‘Palo Alto’ (2001), bars 2–10
8- Example 2.9: Konitz, ‘Palo Alto’ (2001), bars 47–58
9- Example 2.10: Konitz, ‘317 East 32nd’ (2001), bars 48–68
10- Example 2.11: Hall, ‘All the Things You Are’ (1999), bars 31–37
11- Example 2.12: Hall, ‘All the Things You Are’ (1999), bars 37–45, 6/8 swing
12- Example 2.13: Mulligan, ‘Out of Nowhere’ (1962), bars 35–44