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COUNTERPOINT IN JAZZ PIANO
WITH SPECIFIC RELATION TO
THE SOLO WORK OF FRED
HERSCH

B B HEINEN

PhD

2019

COUNTERPOINT IN JAZZ PIANO
WITH SPECIFIC RELATION TO THE
SOLO WORK OF FRED HERSCH

BRUNO BENJAMIN HEINEN

A thesis submitted in partial fulfilment of
the requirements of Manchester
Metropolitan University for the degree of
Doctor of Philosophy

Department of Music
Manchester Metropolitan University
In collaboration with the Royal Northern
College of Music

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Preface

The following report is a critical commentary on my practical submission, which forms the substantial portion of my doctoral research. This consists of two published studio albums (detailed below), as well as a video of my solo *Mr. Vertigo* concert, recorded live at the RNCM on 21st March 2018.

Changing of the Seasons

Commissioned by the *Camerata Alma Viva* string ensemble, *Changing of the Seasons* is a re-imagining of Vivaldi's 'Four Seasons', written in the form of a jazz piano concerto for piano and string orchestra.

The album was released on the 24th February 2017 on the Babel Label, and launched at Lauderdale House, London. The work was performed live at Kings Place, London, and excerpts from the work were also performed live on BBC radio 3, for the programme *In Tune*.

Mr. Vertigo

Mr. Vertigo forms the culmination of my central doctoral research. It is a solo album exploring many different facets of composed/improvised counterpoint, including an examination of counterpoint using overdubs, pre-recorded material and post-production effects.

The album was released on the 23rd March 2018 on the Babel Label, and launched at Kings Place, London. The subsequent nine-date tour through March/April 2018 of the UK and Italy included concerts in Cardiff, Sheffield, Manchester, Cornwall, and Malta, as well as a live broadcast and interview on Radio Rai 3, Milan.

Also included on the accompanying flash drive, are the audio examples discussed in the following report (details below).

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Abstract

My doctoral aim was to develop a solo piano language of my own in which I improvise contrapuntally, and to use the work of the American pianist Fred Hersch as a starting point for my research. My study of Hersch's style was informed by a NWCDTP-funded trip to New York, in which I heard Hersch play at the Village Vanguard, and spent two afternoons with him, discussing his contrapuntal approach. Through analysis of Hersch's work, and comparisons with other notable contrapuntal pianists (Lennie Tristano, Keith Jarrett and Brad Mehldau), several personal aspects of his use of counterpoint became apparent. His detailed practice of the Bach chorales has given Hersch the contrapuntal tools necessary to improvise several parts simultaneously, and his exploration of tension and release through marked 'arrival points' is particular to Hersch. However, it is his use of counterpoint as a route to surprising himself, and by extension the listener, that has informed my own practice and compositional/improvised outputs. I set out to write, practice and improvise contrapuntally using this central model as inspiration. My explorations were wide-ranging: writing a re-imagining of the Vivaldi *Four Seasons* for piano and string orchestra, exploiting multiple aspects of counterpoint, as well as composing a portfolio of solo compositions, which explored two-part counterpoint, counterpoint using overdubs, contrapuntal post-production techniques, as well as counterpoint as concept in the form of a musical discourse with an original Stockhausen music box. These outputs were documented in the form of two published albums (*Changing of the Seasons* and *Mr. Vertigo*), as well as a live tour, which included a recorded performance at the RNCM. I set out to explore counterpoint not only in a melodic sense, but also in a rhythmic, harmonic and conceptual way, challenging the nature of counterpoint itself.

Chapter 1 - Introduction

My aims and objectives for my doctoral project were twofold:

- 1) My principal aim was to create my own contrapuntal language in order to build my own solo project in which I improvise contrapuntally.
- 2) My secondary objective was to explore the solo work of the underrated contrapuntal jazz pianist Fred Hersch.

These two aims are not mutually exclusive, quite the contrary. My analysis of Herschian counterpoint, an interview conducted with him, and transcriptions of his work collectively inform my own contrapuntal playing. Moreover, my contrapuntal compositions and practical contrapuntal performance outputs have influenced and informed my analysis of Hersch's approach.

In this report I will begin by outlining Hersch's approach: the nature in which he utilizes tension and release through 'arrival points', his views on counterpoint as a freeing device, and the way in which it can be used as a route to the surprising. I will then compare these techniques to those of the three most commonly cited exponents of contrapuntal jazz piano; Keith Jarrett, Brad Mehldau and Lennie Tristano. This will include analysis of accumulated data in the form of three conducted interviews: with Hersch himself, Ethan Iverson (a student of Hersch) and Liam Noble (a recognized European exponent of counterpoint). I will provide evidence of how these data have been absorbed into my own work, both compositional and improvisatory, through the analysis of two published albums: *Changing of the Seasons*¹ and *Mr Vertigo*.² I will highlight how this

¹ Bruno Heinen. *Changing of the Seasons*.

² Bruno Heinen. *Mr. Vertigo*.

has led to my own innovations in the area: counterpoint using overdubs and pre-recorded material building on the work of Bill Evans and Jason Moran. I will be posing pertinent research questions: is counterpoint only melodic? In what ways can it be rhythmic? In what ways can it be harmonic? Can counterpoint, in fact, be perceived as the relationship of any two musical entities? I will discuss the nature of the dissemination of my research, and will finally speculate where the project could go from here.

Chapter 2 - The Herschian approach

In this chapter I will be examining Herschian contrapuntal improvisation. I will explore the Herschian approach: surprising improvisation achieved through counterpoint, rooted in the rigorous study of the Bach Chorales. I will consider his influences and how these have shaped his practice and style. I will also discuss his 'going for a goal approach' to counterpoint, and consider whether this leads to Paul Bley's notion of genuine improvisation: 'a composer who works in real time'.¹ In other words, counterpoint as a way of generating improvised material without relying on undigested pre-existing vocabulary (for further discussion on the subject of genuine improvisation, see *The Art of Improvisation and the Aesthetics of Imperfection*).² Finally, I will briefly outline how Hersch's teachings have impacted on my own work, although I will be discussing this in depth in chapter 4.

Fred Hersch has been honoured by the industry's most prominent institutions. He is an eight-time Grammy nominee and was awarded 'Jazz Pianist of the Year 2016' by the Jazz Journalists Association. He was also cited 'the most arrestingly innovative pianist in jazz over the last decade' by *Vanity Fair*.³ In 2006 Hersch became the first artist in the 75-year history of New York's renowned jazz venue, the Village Vanguard, to play a weeklong engagement as a solo pianist. His contrapuntal solo work prompted *All About Jazz* to write: 'when it comes to the art of solo piano in jazz, there are two classes of performers: Fred Hersch and everybody else'.⁴ However, although Herschian counterpoint is innovative, it is often overlooked.

There is surprisingly little in the way of published critical scholarly analysis of his work, and he has arguably gained less appreciation from the wider public in the same way than have his former students, Brad Mehldau or Ethan

¹ Len Lyons. *Paul Bley - Improvising Artist*.

² Andy Hamilton., pp.168-185.

³ David Friend. *Full-CD Stream Exclusive: Jazz Pianist Fred Hersch's Triumphant Return*.

⁴ Dan Bilawsky. *Fred Hersch: Solo*.

Iverson. Reference to his contrapuntal playing is also frequently neglected, with the three most commonly cited exponents of counterpoint in jazz piano being Lennie Tristano, Keith Jarrett and Brad Mehldau.⁵⁶

There are two notable journalistic publications on Hersch. In 2010, David Hajdu published an article on Hersch in the *New York Times* magazine entitled 'Giant Steps: The Survival of a Great Jazz Pianist'.⁷ The article describes his style only superficially, and it is rather centred on Hersch's personality and battle with illness. Contemporary jazz pianist and former student of Hersch, Ethan Iverson, also published an interview with him in his blog *Do The M@th*.⁸ This largely explores his development as a musician and his views on music in general. Unlike Hajdu and Iverson, I am placing emphasis on the innovative way in which he uses counterpoint: a route to surprising himself, and by extension, the listener.

I have been in contact with Hersch for a number of years, and in March 2016, heard seven sets of Hersch playing with his trio at the Village Vanguard, and spent two afternoons with him at his studio in New York, exchanging thoughts on solo jazz piano counterpoint, performance practice, and composition. I began by asking him if he was always interested in contrapuntal playing:

I always wanted to use my left hand, always. I have recordings of me at 19 and I'm trying to do that, you know, and back then, of course, I listened to everything, there was a used record store and I would just buy any album that had a piano player on it, for \$2 or something, all the way back to Teddy Wilson and all those guys, I wasn't into stride yet, but I listened to Bill Evans like the Village Vanguard Sessions, I thought that was

⁵ Neil Olmstead. *Berklee Today*.

⁶ Adam Fulara. *The model of counterpoint improvisation and the methods of improvisation in popular music*.

⁷ David Hajdu. *Giant Steps — The Jazz Pianist Fred Hersch*.

⁸ Fred Hersch. *Interview with Fred Hersch*.

awesome, but what I found the most interesting was his left hand...just the way that he used the left hand to shape the right hand, I found that really really interesting...If you look at where Bud Powell put his left hand, Bill moved it up, left room for the bass player to be more interactive, used voice – leading, I found that really really interesting. And then I discovered some modern two – handed piano players like Danny Zeitland and Art Landy and people that are not so famous, but that used their left hand more often than not. And then of course I listened to very early Keith Jarrett solo albums and early Chick stuff, but I also listened to Cecil Taylor, I loved Cecil Taylor, so it wasn't just one thing or another, it was just everything.⁹

We can establish from this that Hersch was always interested in a contrapuntal approach, wanting to use the full possibilities of his left hand from an early age, and seeking out other pianists who shared this desire (the most notable of these being Bill Evans, whose innovations we will be examining in depth in the following chapters).

Evans, Taylor, Zeitland and Landy all used their left hand in interesting and distinctive ways, but was there a defining source that enabled Hersch to develop his own contrapuntal language? 'My biggest single influence is probably Bach'.

The influence of Bach on the solo work of Hersch is apparent throughout his solo work. I will be providing evidence of this through the analysis of a solo rendition of the Johnny Green jazz standard 'Body and Soul', rendered in four-voice counterpoint, recorded during my time with Hersch. The importance of Bach on Hersch's approach is also evident in his teaching

⁹ Fred Hersch. Interviewed by Bruno Heinen on 29th and 30th March 2016.

methods: 'The only books I ever ask anybody to buy, as a student...ever...are the Charlie Parker omni book and the book of Bach chorales...that's the bible of voice leading'.

Hersch recounts his method for absorbing the contrapuntal voice - leading described:

I ask students to play soprano and the bass, alto and the bass, up to the fermata...one phrase. Alto-tenor, soprano-tenor. You do the six pairs of two. And then you do the groups of three. Soprano-alto-tenor, soprano-tenor-bass, alto-tenor-bass, soprano-tenor-bass. Then you put the whole phrase together. Then you do the same thing with the next phrase. Or you can play three parts and sing one.

This rigorous and practical analysis of the chorales is conspicuous in the example of his contrapuntal improvisation over the jazz standard 'Body and Soul' recorded during my time with him (audio example 1.1).

As with the Bach chorales, Hersch renders the example in four clear, distinct and strong lines of equal importance. There is canonic material passed between voices, for example, the descending melodic idea in the alto voice at 0:39 returning in the tenor voice at 0:41. Hersch uses chord inversions to allow for linear and strong bass movement (for example the descending bass line using first inversion voicings from 0:43 to 0:47). In other words Hersch explores voice-leading as defined by Jane Clendinning: 'the linear progression of melodic lines and their interaction with one another'.¹⁰ I will provide evidence of my own synthesis of this kind of chorale-inspired approach in the movement 'Autumn' from my album *Changing of the Seasons*, which I will be discussing in later chapters.

Before playing the piece, we can hear Hersch outline an ergonomic consideration. For the purpose of sustaining four parts, he divides the fingers

¹⁰ Jane Clendinning. and Elizabeth Marvin., p.A73.

on each hand into voices:

Fingers three, four and five on your right hand are your soprano, thumb and first finger on your right hand are your alto, thumb and first finger on your left hand are your tenor, and fingers three, four and five on your left hand are your bass.

This way of thinking enables Hersch to carry four independent voices throughout the rendition. Hersch's ergonomic reasoning of voices within the fingers not only demonstrates the influence of the Bach's chorale writing on his approach, but also reflects Hersch's inclination towards melody and song: 'When push comes to shove, you know melody (not in a stupid way) is kind of where I live'.

On the second afternoon of our time together in Hersch's studio, he asked me if I would like to play to him. I played the Eubie Blake jazz standard 'Memories of You'. After playing, Hersch asked me if I knew the words to the song I had played, I did not. He explains the importance of learning lyrics to the songs we play in the introduction to his articles in *Keyboard Magazine*: 'Call me old-fashioned, but I can't over-emphasize the importance of knowing the lyrics to every song you play; this awareness will help you to shape the melody, and rhythmic contexts'.¹¹

Hersch then, is interested in improvising singable lines that interact in a contrapuntal way. Considering this, we might frame the above Herschian example of 'Body and Soul' as using improvised 'florid counterpoint', as defined by Johann Joseph Fux: 'a combination of all four species contrived in as beautiful and singable a way as possible'.¹² This is not to say that Hersch's contrapuntal improvisations adhere to the strict rules of counterpoint outlined by Fux, quite the contrary, but interesting to note that both Fux and Hersch consider contrapuntal lines in vocal terms.

¹¹ Fred Hersch. 'Solo Keyboard Columns'. *Keyboard Magazine*, (227).

¹² Johann Joseph Fux. Alfred Mann. and John St. Edmunds., p.104.

We have established the major influence on Hersch's contrapuntal voice leading as Bach. But I was also interested in his views on improvisation in general, how his understanding of counterpoint help him achieve his goals, and what I could take away from my time with him to assist me in my primary aim of building my own contrapuntal solo language.

There are at least two ways in which the qualities of 'surprise' may be reached in Hersch's work and my own. Firstly, the use of counterpoint in the history of jazz pianism is a rarity. Pianists such as Bud Powell, Wynton Kelly, Thelonious Monk, Red Garland, McCoy Tyner, Herbie Hancock, Chick Corea, Ahmed Jamal, Erroll Garner and Horace Silver do not employ counterpoint as their primary tool for improvisation. Indeed, as outlined above, there are only three contemporaries of Hersch that are most commonly cited as contrapuntal pianists. The use of counterpoint when improvising then, is itself uncommon and surprising

Secondly, surprise may be found in the way improvisation reaches unexpected places via the use of counterpoint, and it is this 'type' of surprise that forms a key part of this project's objectives: Hersch uses counterpoint as a device to take his improvisations to unfamiliar places. The rules of traditional species counterpoint set out by Fux and employed by Bach have formed the groundwork for Herschian language. The Bachian model of counterpoint adheres to strict governance, exacting and rigorous application. We have established that the study of this style has informed Hersch's contrapuntal playing, but the Herschian model of improvised counterpoint as a route to the unexpected however, couldn't be more different:

You can't be afraid...it's going for a goal and you know that you're going to get somewhere that makes sense. It's got to be, kind of, experience and faith, and not having any fear about it.

In relying on faith, experience and overcoming fear, we can surmise that he is a soloist who takes risks. Hersch uses counterpoint as a way of entering uncharted territory, encouraging the risk involved in Bley's notion of genuine

improvisation. The assumption that an improviser inherently takes risks might appear to be self-evident. Steve Lacy is quoted as saying improvising is 'nothing but risk'.¹³ However, this is not always true of improvisers. There are varying degrees of genuine improvisation:

I can almost tell when a pianist is playing things that they have worked out, whether it's a lick, or the first rubato half chorus of a ballad, you can tell if it's canned or not. That's kind of antithetical to the spirit of the whole thing to me.

As Hersch outlines above, one can hear when a musician is playing 'canned' introductions or pre-learned musical licks note for note. Count Basie for example, does not appear to share Hersch and Lacy's view on the importance of taking risks: 'Well, if you find a note tonight that sounds good, play the same damn note every night!'¹⁴

¹³ Steve Lacy. and Jason Weiss., p.140.

¹⁴ Stanley Dance., p.104.

(2a.
Fred

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solo piano



FRED HERSCH

Do You Hear Voices?

Greetings and welcome to Solo Piano. In the months ahead, I'll be exploring many facets of solo playing, including improvisation, technique,

harmony, practicing suggestions, and style. Although my strength is in jazz and classical styles, I sincerely hope that you will apply my ideas to your own music, whatever your

piano interest may be. If you'd like me to address a particular subject, write to me in care of *Keyboard* and I will do my best to accommodate you.

Ex. 1. "Body and Soul," with standard changes.

E♭m7 B♭7♭9 E♭m7 A♭9 D♭maj6 G♭7 D♭maj7/F Edim

Ex. 2. Break your tunes down to two voices. It opens them up to new harmonic interpretations, and works on hand independence to boot.

Ex. 3. Following the implied harmonies can lead to entirely new sounds.

Ex. 4. With four independent parts and smooth voice-leading, the tune takes on a new, fuller character.

"Body and Soul," words by Edward Heyman, Robert Sour, and Frank Eyton. Music by John Green. Copyright © 1930 Warner Bros. Inc. (Renewed). Rights for the extended renewal term in the United States controlled by Warner Bros. Inc., Herald Square Music, and Druropetal Music. Canadian rights controlled by Warner Bros. Inc. Extended term of Copyright deriving from Edward Heyman assigned and effective January 1, 1987 to Range Road Music Inc. and Quartet Music Inc. All Rights Reserved.

Hersch article *Do You Hear Voices* – Keyboard Magazine)

In the above excerpt (2a) from Hersch's series of instructive articles in *Keyboard Magazine*, he gives guidance on building to the kind of four-voice improvisation over 'Body and Soul' recorded during our time together. In Ex.2 he argues that breaking the melody and harmony into just two voices 'opens them to new harmonic interpretations'. In Ex.3, he states that

'following the implied harmonies can lead to entirely new sounds', and that fleshing these out into four voices leads to a 'new, fuller character' in Ex.4. The key word in these statements is new. Counterpoint is used as a tool for discovery. Hersch not only values this notion of unpredictability, but also sees it as integral to the spirit of the music. This in itself is not unique to Hersch. Many jazz musicians share this sentiment. Dave Brubeck is quoted as saying 'Jazz stands for freedom: take chances, and don't be a perfectionist'¹⁵. What is surprising about the Herschian approach, however, is that he uses counterpoint as a way of achieving this.

There are a wealth of factors that lead to the notion of surprise. In his publication *Surprise: The Poetics of the Unexpected from Milton to Austen*, Christopher R. Miller states that 'surprise denotes both an internal feeling and an external event'.¹⁶ There are many factors involved leading to the perception of this feeling within different parties, for example, within the performer/practitioner or audience/listener. As outlined above, Hersch uses counterpoint in a surprising way-as a vehicle for discovery. The impression of surprise within the listener is a different matter, and far harder to establish. Quantifying surprise amongst audience members would be dependent on the 'surprising' passage(s)/moment(s) deviating from preconceived expectations (harmonic/rhythmic/melodic) amongst audience members. These will have been informed by the individuals' previous listening experiences. We might also analyze a 'surprising' passage/moment as contrary to 'rules' established earlier in the piece or improvisation. For the purposes of this report, however, I am interested in surprise as the notion that improvised counterpoint can lead the performer/composer to unexpected places, which is contrary to our perception of the Fux/Bach model of counterpoint. It is also contrary to the expectations set by the wealth of non contrapuntal jazz pianists listed above, as well as the three most commonly cited contrapuntal pianists, who use counterpoint in different ways (which will be outlined in chapter 3). In chapter 4, I will be detailing the ways in which my own outputs have been influenced by this model: The

¹⁵ Amy Duncan. 'Jazz Stands For Freedom' – Dave Brubeck.

¹⁶ Christopher R. Miller., p. 5.

exploration of the unexpected within improvisations/compositions, driven by the use of contrapuntal devices.

Improvised counterpoint then, can be used as a tool to explore the new and the unfamiliar, and this concept put forward by Hersch has had a profound impact on my own work. This is the single most important consideration I have taken from my time spent with him. I will be detailing the ways in which I have synthesized this concept into my own language in the following chapters.

We have discussed how Hersch in some respects relies on faith and experience when improvising contrapuntally, but he also describes his approach as 'going for a goal'. I delved deeper, and asked Hersch if he is thinking harmonically, in lines, or arrival points when improvising contrapuntally. He replied 'I think, all of those'. The premise of thinking harmonically and in linear when improvising contrapuntally is perhaps not surprising. The noteworthy aspect of his thought process is the way in which Hersch uses counterpoint to build towards the goal of arrival points, and the way in which these arrival points are structured in real time during a performance.

Below is an analysis of a transcription (2b) Hersch gave me of the solo from his 'Ballad' from the album *Songs Without Words*¹⁷ (audio example 1.2) I have annotated the score with an indication of where the contrapuntal tension is released at arrival points. In this context I am defining an arrival point as a harmonic and stylistic moment of release from contrapuntal tension (harmonic in the sense of a resolution, or a marked landing at the root of the chord. stylistic in terms of a weighted voicing of the chord, followed by a musical breath as in bar 33 beat 1). I am aware that the annotated arrows on the score occur at what may be perceived to be subjective points of arrival, and that others might be found by looking at the

¹⁷ Fred Hersch. *Songs Without Words*.

score alone. My choice of these particular arrival points has been informed by the way in which the piece is performed, as much as by analyzing the transcription. I have noted only the clearest pairing between harmonic resolution and moments of performed interruption to the flow of contrapuntal movement on the score below.

(2b. Fred Hersch – Transcription of the solo section of 'Ballad')

1st Chorus

29

32

35

38

41

loco

8va

3

3

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The musical score is presented in five systems, each with a grand staff (treble and bass clefs). The piece is in 3/4 time and features a key signature of two flats (B-flat and E-flat). Measure numbers 43, 45, 47, 49, and 51 are indicated at the start of their respective systems. The notation includes various rhythmic patterns, including eighth and sixteenth notes, and rests. Specific performance instructions include '8va' (octave up) and 'loco' (loco playing). Red arrows point to specific notes in measures 43, 45, and 49. Trill ornaments are present in measures 45 and 49. Triplet markings are used in measures 43 and 49.

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53

53

55

55

57 2nd Chorus

57 2nd Chorus

59

59

61

61

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The musical score consists of five systems of piano accompaniment. Each system has a treble and bass clef staff. Measure numbers 63, 65, 67, 69, and 71 are indicated at the start of their respective systems. The score includes dynamic markings such as *8va* and *loco*. Red arrows highlight specific notes in the bass line: one in measure 64 (Bb), one in measure 65 (Bb), one in measure 70 (Bb), and one in measure 71 (Bb). The music is characterized by intricate contrapuntal patterns and frequent chromaticism.

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There are two conclusions to be drawn from the analysis of tension and release in the improvisation of the work. The first is that Hersch is not only able to improvise contrapuntally, but is able to structure the release of contrapuntal phrases in real time during a solo: The opening phrases of the solo are just a few bars long. Then from bar 46 the contrapuntal phrases

lengthen from one to the next. There is a three-bar phrase, followed by a four-bar phrase, followed by a five-bar phrase. These building phrase lengths crescendo (through a series of shorter phrases) to the 'peak' of his solo at bar 64. There is then a six bar phrase where the tension dissipates. This is followed by three quieter, shorter, one-bar phrases, leading us skillfully back into the head. Unusually, the arrival points at bar 36, bar 41 and Hersch's all important 'peak' arrival point at bar 64 do not fall on the first beat of the bar. The 'peak' arrival point is perhaps most unusual, falling on the second quaver of the bar. This leads me to the second conclusion: once again, Hersch uses contrapuntal improvisation to arrive at the unpredictable.

The concern with structuring phrases of a solo is not unique to Hersch. Bill Evans, for example, states in a 1979 interview 'the problem is to be clear, and get down to basic structure'.¹⁸ Hersch's innovation however, is finding unpredictable solutions to the problem through the use of counterpoint: 'Its something that really only the piano can do well, there are guitarists who can do it, sort of, but limited, so I've always felt like it was the great thing to exploit'.

How then, have I synthesized the Herschian approach into my own work, and has it lead to any innovations in the area of improvised counterpoint?

Since interviewing Hersch, I have followed his example of practising the Bach chorales as outlined above. I have also spent time on other contrapuntal exercises of my own; improvising a line in one hand alongside a written line in the other (then swapping hands), practice of set contrapuntal exercises as outlined in *Berklee Jazz Piano*,¹⁹ and practice through composition. Compositional work has included writing a reimagining of the Vivaldi *Four Seasons* for piano and string orchestra (for the album *Changing of the Seasons*), as well as a portfolio of original works for solo piano (for the album *Mr. Vertigo*). Writing for thirteen strings enabled me to practice

¹⁸ Marian McPartland. *Bill Evans on Piano Jazz*.

¹⁹ Ray Santisi. and Rajasri Mallikarjuna., pp.78-80.

thinking in linear terms, which in turn has aided my contrapuntal improvisation. I will be coming back to this point in chapter 4.

All of these techniques have been instrumental in achieving my primary aim for the project: To create and develop my own contrapuntal language to use in my solo project, focused on contrapuntal improvisation.

In my solo album and the subsequent live tour of the material, I explore many aspects of counterpoint (I will be examining this work in detail in later chapters). I strip two-part improvising down to its extreme by using only the index finger on each hand in my improvisation *Hommage à Kurtág*. I explore the rhythmic contrapuntal relationship between two simultaneous underlying time signatures in my composition *Daydreamer* (a concept I will be coming back to). I take the overdubbing techniques set out by Lennie Tristano and Bill Evans to an extreme with multiple overdubbed lines in my composition *In Kochi*, and I investigate the harmonic contrapuntal relationship of two major chords in *Mirage*.

At the core of these explorations however, are possible answers to the central Herschian question: can counterpoint be used as a tool to discover new territory, and surprise the listener?

Chapter 3 - Hersch and his contemporaries

In this chapter I will be exploring Herschian counterpoint further, and comparing his approach with the three most commonly cited exponents of contrapuntal jazz piano; Lennie Tristano, Keith Jarrett and Brad Mehldau. This analysis will include a wealth of material gathered in three interviews: with Hersch himself, with Ethan Iverson (a former student of Hersch), and the British contrapuntal pianist Liam Noble.

As established above, Hersch uses counterpoint as a way of exploring the unknown, surprising himself and achieving genuine improvisation. He improvises contrapuntally in structured phrases, releasing contrapuntal tension at marked intervals throughout the solo. How then, does his approach differ from that of Tristano, Jarrett and Mehldau?

Eunmi Shim states that 'contrapuntal interplay was indeed the most essential element that Tristano's group retained from the trio years'.¹ However when performing solo, Tristano largely explores two-part counterpoint, as in the middle section of 'You Don't Know What', from his solo concert: *Tivoli Gardens Concert Hall*.² This two-part texture is also evident on his 1962 album *The New Tristano*³ (audio example 2.1). The album consists of seven solo piano tracks, largely original compositions based on standards. They are linear explorations, but the counterpoint is consistently rendered in only two voices. Rhythmic interest comes solely from the right hand melodic improvisation, with the left hand voice largely taking the role of a walking bass line.

Aside from his more traditional solo and trio playing, Tristano had begun experimenting with multi-tracking in the early 1950's. The most notable pianistic contrapuntal exploration to come out of these early experiments is

¹ Eunmi Shim., p.47.

² Lennie Tristano. *Concert in Copenhagen*.

³ Lennie Tristano. *The New Tristano*.

his rendition of 'Turkish Mambo' from the 1956 album *Lennie Tristano*.⁴ Tristano embarks on a pioneering exploration, layering three piano tracks on top of each other (audio example 2.2). It came out of necessity as Tristano explains: 'There is no other way I could do it so that I could get the rhythms to go together the way I feel them...there are some things I'd rather do myself because there are some things I want to do that others are not capable of doing with me'.⁵

As suggested above, the piece is concerned with rhythmic relationships, with the layered tracks exploring 7 beat, 3 beat, and 5 beat interlocking phrases respectively, phasing in and out of a pulsating crotchet beat (as outlined on the score below). Liam Noble outlined this kind of rhythmic contrapuntal playing during my interview with him: 'With rhythmic counterpoint I think sometimes you're just putting one thing on top of another...It's trying to interlock different lines rather than separate them as Bach would separate lines'.⁶ Jane Clendinning's definition of voice-leading outlined in chapter 2 specifies the interaction between lines as integral to the nature of counterpoint. Although the layered parts in Tristano's 'Turkish Mambo' were recorded separately, I am still considering their relationship as rhythmically contrapuntal. Firstly, one might assume that Tristano had the contrapuntal relationship of these rhythms in mind when writing them. Secondly, In this report I am arguing that once more than one line/rhythm is heard simultaneously, they have a mutual effect on one another, even if this is merely a perceived relationship on the part of the listener. I am therefore interested not only in real-time/performed contrapuntal interactions, but also in the nature of how pre-recorded musical elements can impact on one another from the perspective of the listener. I will be discussing this aspect of counterpoint in greater depth in chapter 4.

⁴ Lennie Tristano. *Lennie Tristano*.

⁵ Eunmi Shim. (2007)., p.92.

⁶ Liam Noble. Interviewed by Bruno Heinen on 5th September 2017.

(3a. Representation of rhythmic counterpoint in 'Turkish Mambo')

'TURKISH MAMBO' RHYTHMIC CONTENT

LENNIE TRISTANO

The musical notation shows four staves in 4/4 time. The first staff, 'CROTCHET PULSE', consists of a continuous sequence of quarter notes. The second staff, 'PIANO OVERDUB 1', features a melodic line of eighth notes with accents. The third staff, 'PIANO OVERDUB 2', shows a more complex rhythmic pattern with eighth notes, quarter notes, and accents. The fourth staff, 'PIANO OVERDUB 3', features a rhythmic pattern with eighth notes and accents, often in sync with the pulse.

The kind of rhythmic counterpoint explored above in 'Turkish Mambo' (3a) has had a direct influence on my composition 'In Kochi' from my solo album *Mr Vertigo*. I will be discussing this in more detail in the following chapter.

This is a very different kind of counterpoint to the melodically linear, Bachian counterpoint explored by Hersch in the examples above. Although the examples of Hersch's playing in the first chapter are linear and less rhythmically complex than Tristano's 'Turkish Mambo', this is not to say that Hersch is not concerned with rhythmic counterpoint, quite the contrary. He described his take on counterpoint in a rhythmic context during our interview:

Well, if you think of the piano as a drum-set. Now, the piano can be an orchestra, it can be a horn player, it can be a singer, it can be a big band, it can be many things, but if you think of the piano as a drum-set, and right hand lines are essentially your ride cymbal. Now the standard issue jazz thing with the ride cymbal and the voicings, it's like, just cymbal and snare. And when you start to add rhythms between the two hands, or when this becomes more active, it gives it a rhythmic lift...and so for instance I was saying the other night, I didn't really thrive so well in these macho jam sessions. I'm better when I can get away from bar

lines, and verticals. So the counterpoint helps me do that. When I'm playing really well I feel like it's almost one big hand, like a ten fingered hand, I don't really feel the separation. When I'm playing well there's just this easy dialogue.

Hersch went on to say that counterpoint is 'a textural thing, it's also a rhythmic thing as well as a melodic thing'. The examples given so far, however, are largely free of rhythmic interaction between parts. In the rendition of the Thelonious Monk composition *In Walked Bud* recorded during our time together, he demonstrates this more complete and holistic approach to counterpoint (audio example 2.3).

The Bachian, linear contrapuntal melodies are still present, and contrapuntal tension is still periodically released at arrival points, but there is also a clear rhythmic dialogue between parts. There are textural exchanges; octave passages, two-part sections, extremes of range and chordal explorations. The tune is in 4/4, but Hersch switches between playing off the 4/4 swing quaver and the triplet crotchet. He develops this use of the triplet crotchet, and keeps coming back to this idea throughout the example. He is arguably then, also exploring the contrapuntal rhythmic relationship of 4/4 against 3/4. This is a concept I develop in depth through the movement 'Spring' from my album *Changing of the Seasons*, as well as my composition 'Daydreamer' from my album *Mr Vertigo*, which I will be examining in detail in the following chapter.

Hersch then, not only uses counterpoint as a method of discovery, but also as a way to explore textural and rhythmic dialogue, whereas Tristano uses counterpoint either in two-parts for extended periods, or as a multi-layered rhythmic texture. As both of these forms of counterpoint are employed for entire tracks, I also conclude that Tristano is not concerned with tension and release in the same way as Hersch.

In his book *A Chromatic Approach to Jazz Melody and Harmony*, Dave Liebman states:

Tension and release is the basic life principle of opposing pairs as in yin and yang, night and day, life and death, etc. Artistically, this principle means that in a meaningful statement there should be a balance of excitement and quiescence, action and relaxation. It can be conceived as the act of a question being posed and subsequently answered...Closely allied to tension and release is the need for balance between pairs of musical aspects. One important pairing is simplicity vs. complexity...Great art has within it a comfortable balance between expectation and surprise.⁷

Hersch states that counterpoint can be a 'textural thing'. Liebman's appreciation of balance may be applied to textural tension and release. Liebman states that 'in a meaningful statement there should be a balance of excitement and quiescence, action and relaxation', but these opposing pairs do not necessarily need to occur in that order. Quite the opposite can be the case. It may also be the case that the introduction of an opposing pair builds tension rather than releasing it. Liebman's rationale of opposition of pairs as integral to the definition of tension and release only goes so far in exploring the issue. If a dense, contrapuntal passage is followed by a sparse homophonic passage, it could be argued that this follows Liebman's model, but if a listener's previous experience of the type of work performed is expecting a return to the density of the first passage, there may well be greater tension in this second sparse section. In the context of this report, however, I am not assigning specific textures/devices to tension and release. I am, rather, using Liebman's rationale of opposition of textural pairs as questions being posed and subsequently answered, as integral to the appreciation of the ways in which counterpoint can be used.

⁷ Dave Liebman., p.13.

Jarrett uses counterpoint as a textural device, which has one of two contrasting functions: either to build tension, or to release it. The latter is evident in his best known recording *The Köln Concert*,⁸ where he builds the tension over the first extended section through pulsating folk-like modal harmonic pedals with a melody and chordal accompaniment texture. After 14 minutes of this largely homophonic texture, he releases this tension through a lyrical, rubato contrapuntal section, rendered in two and three voices (audio example 2.4). Peter Elsdon refers to this releasing of tension as the ‘Chorale like passage – becoming more expansive’, and later refers to this passage as ‘exploratory’.⁹ The description of this exploratory passage as ‘chorale like’ is pertinent, clearly pointing to the influence of Bach on Jarrett’s playing. Jarrett’s association with the keyboard music of Bach is also evident through his many recordings of Bach’s works.

The contrapuntal approach of Hersch and Jarrett are both then rooted in the work of Bach, but how they use this Bachian language differs in one notable way; their respective use of tension and release.

The long, extended texturally contrasting sections of *The Köln Concert* outlined above are typical of Jarrett’s solo performances. He builds tension by exploring either homophony or polyphony for extended periods before releasing it with the contrasting texture. Although in this report I am looking at counterpoint in solo jazz piano, it is interesting to note that Jarrett also uses counterpoint in this way in a trio setting; as a way to build tension for an introduction of a standard (as in the ‘Days of Wine and Roses’ from his 1994 album *Keith Jarrett at the Blue Note*),¹⁰ or to release tension in a coda (as in ‘Never Let Me Go’ from his 1998 album *Tokyo ’96*).¹¹ In both cases, he largely reverts to a right hand melody and left hand chordal comping texture for the head and improvisation.

⁸ Keith Jarrett. *The Köln Concert*.

⁹ Peter Elsdon., p.95.

¹⁰ Keith Jarrett. *Keith Jarrett at the Blue Note the Complete Recordings*.

¹¹ Keith Jarrett. *Tokyo ’96*.

Jarrett's approach differs from Hersch's, in that Hersch improvises shorter sections, which both build and release tension through counterpoint within a structure of widening and diminishing 'arrival points' (as outlined in chapter one). Jarrett could be described as using counterpoint in a structural context, building tension or releasing it in large sections, whereas (in terms of tension and release) Hersch could be described as using counterpoint as a phrasing tool.

The American contemporary pianist and former student of Hersch, Ethan Iverson stated in our interview that Hersch had been a major influence on his piano playing. He went on to say: 'There is no question in my mind that Fred's contrapuntal playing has been a big influence on Brad Mehldau'.¹²

Hersch's influence is clearly evident on Mehldau's solo piano introduction to 'Body and Soul' from the 1999 Lee Konitz album *Another Shade of Blue*¹³ (audio example 2.5). As with Hersch's example of 'Body and Soul', we can hear multiple voices developed in a Bachian manner. As with Hersch and Jarrett, the keyboard music of Bach is clearly significant for Mehldau, also evident through his recent recording *After Bach*,¹⁴ which explores and build on Bach's keyboard music. The contrapuntal approach in these two renditions of 'Body and Soul', are in essence, very similar. Where Mehldau's version diverges from Hersch's example, is its harmonic language. Hersch's use of harmony is largely diatonic in comparison to Mehldau's. Mehldau uses chord inversions in much the same way as Hersch. His introduction starts at the top of the 'bridge' of the tune, and after the opening contrary-motion phrase, he lands on a D/F# chord, instead of the scored, rooted D major chord. This device is also used in Hersch's example above. However, instead of completing the scored III-VI-II-V-I progression employed by Hersch, he explores a series of descending II-V progressions, outside the changes of the tune, arriving harmonically distant from the score. He also makes use of Phrygian harmony later in the introduction, not explored by

¹² Ethan Iverson. Interviewed by Bruno Heinen on 28th May 2017.

¹³ Lee Konitz. *Another Shade of Blue*.

¹⁴ Brad Mehldau. *After Bach*.

Hersch. Further evidence of Mehldau's modern harmonic approach can be heard on the piano solo of 'In Walked Bud' from his 2016 duo album *Nearness*¹⁵ (audio example 2.6). Contrapuntal textures are employed around a tonic pedal, which underpins the first section of the solo. As with 'Body and Soul', the improvisation differs most from Hersch's version through the contrasting harmonic language. Mehldau slowly takes the listener further and further away from the scored harmony of Monk's composition, using polychords, Phrygian harmony and cycles of fourth and fifth relationships. Hersch's rendition of the same tune is starkly diatonic in comparison, instead sustaining interest through melodic and rhythmic counterpoint, with melodic and rhythmic ideas developed through multiple voices.

Brad Mehldau then, has been influenced by the Herschian approach, and develops his themes in a contrapuntal way through all voices in a Bachian manner, but employs a comparatively freer, modern harmonic language. I build on this Mehldau-like harmonic language in the *Changing of the Seasons* movement 'Winter', which I will be discussing in the following chapter.

Another contrasting aspect of Mehldau's use of counterpoint is its relationship with tension and release. In comparison to Hersch, Mehldau builds contrapuntal tension for far greater periods of time (in some cases lasting the entire length of a solo), before releasing it. This is evident in his rendition of 'Paranoid Android' from his 2004 album *Live in Tokyo*¹⁶ (audio example 2.7). He builds the contrapuntal tension from the start of the track until 11:36 before releasing it (a common trait of his solo playing).

Liebman states: 'If the artist exaggerates either the tension or the release aspects, the expressive power and ultimate communication of the statement will be weakened'.¹⁷ Hersch's use of tension and release is comparatively more expressive and communicative than Mehldau's therefore (according to

¹⁵ Joshua Redman. Brad Mehldau. *Nearness*.

¹⁶ Brad Mehldau. *Live in Tokyo*.

¹⁷ Dave Liebman., p.13.

Liebman). I propose my own examination of tension and release in the movement 'Summer' from my album *Changing of the Seasons*, which I will outline in the following chapter.

Hersch's contemporaries then, explore counterpoint in interesting and different ways: as a layered rhythmic study, as a textural tool or as a way of pushing harmonic boundaries. In comparison to his contemporaries, Hersch uses counterpoint as a route to genuine improvisation, through harmonically diatonic, texturally and rhythmically diverse structured phrases that release tension periodically.

How then, has my own path been shaped by the above?

Chapter 4 - My own contrapuntal language

In this chapter I will provide evidence of my synthesis and development of the contrapuntal approaches discussed above. I will be considering my contrapuntal language, both compositional and improvisatory, and will highlight how these have led to my own innovations in the area. I will be analyzing my varied approach to the application of counterpoint in jazz piano.

I have structured this chapter in terms of categories of contrapuntal aspects and performance practices, drawing arguments and observations across the timeline of the practical elements of my submission, rather than appraising them in the chronological order in which they were produced. The rationale for this exposition being a) the multiple underlying contrapuntal motivations present in many of the works submitted and b) to allow for a clearer discussion of my central research questions, separating out the different elements of my practice, approach and application of contrapuntal devices. These sections will cover contrapuntal composition in a Bachian/Herschian style, exercises in improvising contrapuntally, counterpoint using overdubs building on the work of Lennie Tristano and Bill Evans, rhythmic counterpoint as outlined in the previous chapter, and counterpoint using pre-recorded material, developing the work of pianist Jason Moran. I will also be discussing counterpoint as concept, and posing pertinent research questions: In what ways can counterpoint be rhythmic and harmonic? Can counterpoint in fact be the relationship of any two (or more) musical entities?

The relationship between the process of my contrapuntal composition and my improvised counterpoint is a beneficial one in both directions. I can't improvise what I can't hear. Therefore, taking the time to work on written counterpoint informs the language in which I improvise counterpoint in real time. Moreover, there have been instances whereby ideas for written

material have arisen during improvised contrapuntal moments at the piano. In other words, through the process of contrapuntal composition: exploring, refining and developing contrapuntal ideas over many sittings at the piano, I widen my language of counterpoint naturally through experimentation. I can then use these tools in real time during contrapuntal improvisations. By contrast, there have been instances where I have used ideas from a contrapuntal improvisation (during improvisatory sessions at home, or by reflecting on recorded performances) later, as the basis for new composition.

In this chapter, I will be referring to scores, transcriptions and recordings of two published albums: *Changing of the Seasons*, and *Mr. Vertigo*.

Changing of the Seasons

Following a commission from the *Camerata Alma Viva* string ensemble, the first six-month period of my PhD research was spent writing a re-imagining of Vivaldi's 'Four Seasons' for piano and string orchestra: *Changing of the Seasons*. Working on contrapuntal string writing at the piano was beneficial in terms of broadening my language of polyphony.

String writing in jazz tends to be rather hit and miss – and perhaps more miss than hit. In general jazz writers tend to go for one of two options when writing for strings—they either use the strings as surrogate horns, or go for the dreaded “string pad” effect...in reality string ensemble writing is all about counterpoint'.¹

My work takes the form of a jazz concerto for piano and strings. The string writing was largely scored (with the exception of the length of pauses in the latter section of 'Autumn' and the length between entries in the movement 'Summer'). My piano part however was only partially scored, with large sections left for improvisation.

¹ Ronan Guilfoyle. *The String Problem*.

Inspiration for the nature and format of my work *Changing of the Seasons* draws partly on Fred Hersch's arrangement of 'Lush Life' for piano and strings from his 1996 album *Passion Flower*² (audio example 3.1). Hersch's version of 'Lush Life' employs interacting contrapuntal lines between strings and piano as well as within the string parts themselves, with ideas passed between sections. Solo lines emerge from the texture, developing earlier ideas. In compositional terms, these are all elements that I employ in *Changing of the Seasons*. However, my piece builds on Hersch's work through further contrapuntal inspection, as well as exploratory improvisations: Hersch does not improvise over the string section. Following a short string introduction, Hersch simply plays Billy Strayhorn's work alongside the string ensemble. I, on the other hand, improvise large sections over written contrapuntal string lines.

Mr. Vertigo

Mr. Vertigo is my solo album: a diverse exploration of contrapuntal practices in jazz piano. It encompasses a broad range of contrapuntal approaches and recording/mixing techniques with a view to a possible answer to my central research question: can counterpoint be used as a route to the surprising?

Practice in composing in a Herschian/Bachian style

As outlined in the introduction to this chapter, practice in writing contrapuntally has been essential in building my own improvised contrapuntal language. This writing has drawn on, and developed the Bachian style employed by Hersch, as discussed in chapters 2 and 3.

In this report, I am citing Bach as the central classical composer in terms of a contrapuntal model. However, Bach is by no means the only classical influence on Hersch's (or my) contrapuntal performances/compositions. Hersch's composition 'Pastorale', recorded on his album *Alone at the*

² Fred Hersch. *Passion Flower*.

Vanguard,³ is dedicated to Robert Schumann. The contrapuntal texture employed throughout can clearly be traced to that employed by Schumann in his 'Romance in B flat minor', 'Sehr Markiert' Op. 28 for example. The influence of the way in which multiple voices are distributed between the right and left hands in bars 8-16 of Chopin's well-known Nocturne in B major, Op. 32, No.1 is also clearly visible when analyzing the contrapuntal texture and role of the left hand in the above transcription of Hersch's improvisation from his composition 'Ballad' for example.

Bach is by no means the only influence on my own contrapuntal outputs either. The contrapuntal aesthetic in bars 133-197 of Ravel's 'Ma mere l'Oye' No.3 for four hands for example, informed the language of my overdubbed layering in my composition 'In Kochi'. Equally, the harmonic language of Bartók's two-voice 'Invention Chromatique' No.145 from 'Mikrokosmos', played an influential role in my two-fingered improvisation 'Hommage à Kurtág'.

For the purposes of this appraisal, and in the interest of direct lineage of contrapuntal impact however, I am focusing on Bach as the primary source in terms of classical contrapuntal influence.

My arrangement of 'The Peacocks' for my album *Mr. Vertigo*, is an exercise in writing contrapuntally in two and three parts in a Herschian fashion (using Herschian counterpoint rooted in the writings of Bach, as previously outlined):

³ Fred Hersch. *Alone at the Vanguard*.

(4a. Score of 'The Peacocks' Jimmy Rowles arr. Bruno Heinen)

The Peacocks

Arr. B. Heinen

Jimmy Rowles

Open Introduction

Piano

The introduction consists of two measures in 4/4 time, marked 'Piano'. The key signature is three flats (B-flat major/C minor). The right hand has a melodic line starting on B-flat, and the left hand has a bass line starting on B-flat. Both hands end with a double bar line.

A

3

Bbm(maj7) Bbm7 Bbm6 Bbm(b6)

Pno.

Measures 3 and 4 of section A. Measure 3 features a Bbm(maj7) chord in the right hand and a Bbm7 chord in the left hand. Measure 4 features a Bbm6 chord in the right hand and a Bbm(b6) chord in the left hand. The right hand has a melodic line with eighth notes, and the left hand has a bass line with eighth notes.

5

Bbm(maj7) Gb7 Fm7 Bb7

Pno.

Measures 5 and 6 of section A. Measure 5 features a Bbm(maj7) chord in the right hand and a Gb7 chord in the left hand. Measure 6 features an Fm7 chord in the right hand and a Bb7 chord in the left hand. The right hand has a melodic line with eighth notes, and the left hand has a bass line with eighth notes.

7

Ebm7 Ab7

Pno.

Measures 7 and 8 of section A. Measure 7 features an Ebm7 chord in the right hand and an Ab7 chord in the left hand. Measure 8 features an Ab7 chord in the right hand and an Ab7 chord in the left hand. The right hand has a melodic line with eighth notes, and the left hand has a bass line with eighth notes.

9

Cm7(b5) F7 Bbm(maj7) Gb7 F7

Pno.

Measures 9 and 10 of section A. Measure 9 features a Cm7(b5) chord in the right hand and an F7 chord in the left hand. Measure 10 features a Bbm(maj7) chord in the right hand and a Gb7 chord in the left hand. The right hand has a melodic line with eighth notes, and the left hand has a bass line with eighth notes.

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2

11 **B** Cm⁷(b⁵) F⁷

Pno.

13 Cm⁷(b⁵) F⁷ Bbm⁶

Pno.

15 Eb⁷ Dbm⁶

Pno.

17 Eb^{maj7}

Pno.

18 Cm⁷(b⁵) F⁷

Pno.

C

Piano score for measures 19-30. The score is in B-flat major (three flats) and 3/4 time. It features a complex contrapuntal texture with multiple voices in both hands. Chord changes are indicated above the staff: Bbm(maj7) at measure 19, Bbm7 at measure 20, Bbm6 at measure 21, Bbm(b6) at measure 22, Bbm(maj7) at measure 23, Gb7 at measure 24, Ebm7 at measure 25, Fm7 at measure 26, Ab7 at measure 27, Cm7(b5) at measure 28, F7 at measure 29, and Bbm7 at measure 30. The piece concludes with a double bar line at the end of measure 30.

As we can see from the score above (4a), there is melodic Herschian contrapuntal dialogue between two (and occasionally three) parts within the arrangement. Comparisons can be made to the Hersch composition 'Little

Midnight Nocturne', as we can see from the transcription below (4b). My central left hand harmonic pattern is a direct development of Hersch's. Hersch however sustains the opening pattern of 'Little Midnight Nocturne' throughout. I, on the other hand develop the central left hand ostinato of 'The Peacocks', with the harmonic outline in bar 2 consisting of an inverse response to the pattern set out in bar 1.

(4b. Score of 'Little Midnight Nocturne' Fred Hersch)

Fred Hersch – Little Midnight Nocturne

Little Midnight Nocturne

Fred Hersch

Tenderly (♩ = 84)

pp
una corda

5

9

cresc.

13

p

poco rit.

17

cresc.

All music © and originally published by Fred Hersch Music (BM)
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ublished in he by F M Film und Mediascore Musi erlag mbH Berlin ermany M

The counterpoint employed in 'Autumn', from my album *Changing of the Seasons* also has its roots in the music of Bach. Below is a piano reduction (4c) of the opening of the central theme (audio example 3.2):

(4c. Piano reduction of 'Autumn' Bruno Heinen)

Autumn - (piano reduction) Bruno Heinen

Ballad ♩ = 40

Copyright © Bruno Heinen

As with the Bach chorales (and Hersch's renditions of 'Body and Soul' and 'Ballad'), there are four clear, distinct and strong lines of equal importance, and canonic material passed between voices. For example, the opening melodic idea in the soprano voice is passed and developed through the

voices (as marked on the score in red), and the melodic cell introduced in the tenor part in bar 8 is developed through the alto part in bar 9, and then inverted in succession in the tenor part in bars 10 and 11 (as outlined on the score in blue). Chord inversions are used to allow for linear and strong bass movement, as in the rising bass voice in the opening four bars and bars 10-12, or the falling bass line in bars 7-9 (as outlined on the score in green). Bachian use of contrary motion is employed, as marked on the score in orange. I also employ the Herschian use of unconventional arrival points, as marked on the score in purple in bars 5 and 6. The resolution in both cases lands on the second quaver of the bar in a surprising manner, just as with Hersch's 'Ballad' as outlined in chapter 2.

The central theme of 'Autumn' then, is my composed exercise in writing a four-part Bachian/Herschian realization, but this is not the only Bachian device I employ in the movement.

I include a 'storm' section within my work, which occurs between bars 201 and 226 (audio example 3.3). I describe this section through 6 beat falling semiquaver passages that are passed through the string voices in canon. Each semiquaver passage outlines a different harmony, with each harmony passed round the strings in contrapuntal succession.

(4d. 'Storm' section from 'Autumn' Bruno Heinen)

The image displays two pages of a musical score, labeled 44 and 45. Page 44 is titled 'A Min (maj7)' and page 45 is titled 'C Augmented (b2)'. Both pages are marked 'Full Score'. The score is written for a large ensemble, including strings, woodwinds, brass, and percussion. The notation is dense, featuring complex rhythmic patterns and melodic lines. The first staff on each page shows a rhythmic pattern of eighth notes. The subsequent staves show various instruments playing intricate passages. The score is presented in a standard musical notation format with treble and bass clefs, and various time signatures and key signatures indicated.

46 207 Ab 6/9 Full Score

209 Full Score 47

211 Full Score 48

213 B 6/9 Full Score 49

50 Full Score 215

51 Full Score 217

52 Full Score 219 F diminished

53 Full Score 221 Eb 6/9

Noted on the above score (4b), the piano part at the top of the score (and colour-coded), are the harmonies outlined by the strings at the moment they are first introduced, before being passed round the rest of the section. Each new harmonic outline is introduced before the previous harmony has finished, creating moments of tension in the overlap, and moments of release between them. I have marked the moments of harmonic tension at the bottom of the score. In relation to tension and release, Liebman discusses the need for 'a comfortable balance between expectation and surprise'.⁴ It is this dialogue that is explored in the passage above. The contrapuntal tension of two opposing overlapping harmonies is released as the previous one dissipates. The element of expectation comes as each new harmonic element is introduced, with a moment of tense overlap between harmonies, followed by the surprise of the new emerging chord as the previous element has ceased. I am therefore approaching this contrapuntal section in a Herschian manner: as a route to the surprising.

There may be a perceived natural progression from composing contrapuntally, to improvising counterpoint, but as outlined above, the

⁴ Dave Liebman., p.13.

influence works in both directions. In reality, this was not a chronological progression for me; rather the line between improvisation and composition was blurred from the outset, and resulted in mutual impact.

Exercise in improvising contrapuntally

My route to developing an improvised contrapuntal language has included exercises designed to achieve this. One of these practices has been improvising in one hand, while sustaining a written line in the other. As such, my composition 'Mr. Vertigo' (4e), was formulated over the course of my doctoral studies in order to practice freely improvising in the right hand alongside a simple written left hand ostinato:

(4e. Score of 'Mr. Vertigo' Bruno Heinen)

MR. VERTIGO

BRUNO HEINEN

The score is for piano and is written in 4/4 time. It consists of five systems of music. The first system is an 'INTRO - OPEN' with a D_m chord. The second system starts at measure 5 with a Bb^o/D chord and a $D7(\sharp 11)$ chord. The third system starts at measure 9 with a Bb^o/D chord and a D^b/D chord. The fourth system starts at measure 13 with an E^7/D chord, an A^7/D chord, and a D_m chord. The fifth system is a second ending for the D chord, labeled 'LAST TIME ONLY'. The bassline is a steady eighth-note pattern: D (quarter), F (quarter), A (quarter), B (quarter), D (quarter), F (quarter), A (quarter), B (quarter). The right hand features improvisation over this bassline, with various chords and melodic lines. The score includes chord symbols: D_m , Bb^o/D , $D7(\sharp 11)$, D^b/D , E^7/D , A^7/D , and D . The first ending is marked '1. IMPROV OVER BASSLINE' and the second ending is marked '2. LAST TIME ONLY'.

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Keeping the left hand ostinato steady, whilst freely improvising in the right hand was crucial to exercise the independence of the hands needed for contrapuntal improvisation.

The natural progression from this form of contrapuntal dialogue, was to practise improvising in two parts, as in my composition 'Hommage à Kurtág' (4f). The piece explores improvised pianistic counterpoint in its most simple form. I limit myself to two voices, with the entire piece and improvisation played only using the index finger on each hand:

(4f. Score of 'Hommage À Kurtág' Bruno Heinen)

HOMMAGE A KURTAG

BRUNO HEINEN

The musical score is written for piano and consists of four staves. The first staff is labeled 'PIANO' and begins with a 'FREELY' marking. It contains a melodic line with various ornaments and a fermata. The second staff is labeled 'PNO.' and starts at measure 7, continuing the melodic development. The third staff is labeled 'PNO.' and starts at measure 13, showing a more rhythmic and harmonic progression. The fourth staff is labeled 'PNO.' and starts at measure 16, marked 'FREE IMPROVISATION USING INDEX FINGERS ON EACH HAND', and contains a series of rhythmic slashes indicating improvisation.

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Below is an example of how my compositional exploration of the kind of Bachian canonic writing employed in the theme of 'Autumn', led to the ability to improvise in the same fashion (see image 4g). The melodic idea marked

on the excerpt in red in the top part is answered in the bottom part, and then again in the top part (audio example 3.4):

(4g. Excerpt of improvisation from Hommage À Kurtág)

HOMMAGE A KURTAG
EXAMPLE OF BACHIAN IMPROVISED TWO-PART COUNTERPOINT

BRUNO HEINEN

AUDIO 2:57 - 2:50

PIANO

Practice in writing contrapuntally, improvising one part alongside a written line, and improvising in two parts, allowed for the development of three-part contrapuntal improvisation to grow naturally in my playing. The synthesis of these contrapuntal exercises can be heard in my opening improvisation on James Taylor's composition 'Fire and Rain' from my album *Mr. Vertigo*.

Drawing on the model introduced by Lennie Tristano, Bill Evans, Herbie Hancock and others, I was interested in investigating the Herschian approach of counterpoint as a vehicle for exploration in the context of overdubbing and layering pre-recorded parts.

Counterpoint using overdubs

'International Blues' (image 4h) from the album *Mr. Vertigo* was recorded by overdubbing a Fender Rhodes track over a piano track recorded to click. The contrapuntal relationship between the Rhodes improvisation and the pre-recorded piano track draws on the overdubbing techniques first used by Lennie Tristano, and later developed by Bill Evans in his 1963 album *Conversations with Myself*⁵ and his 1967 album *Further Conversations with Myself*.⁶ The piano and Rhodes lines are in conversational contrapuntal

⁵ Bill Evans. *Conversations With Myself*.

⁶ Bill Evans. *Further Conversations with Myself*.

dialogue throughout. I left several weeks before overdubbing the Rhodes track in order to familiarize myself to my pre-recorded piano take. This enabled me to maximize the dialogue between the parts, answer piano phrases in the Rhodes track (audio example 3.5), and allow the two instruments to grow together to the central climax of the track (audio example 3.6).

(4h. Score of 'International Blues' Bruno Heinen)

INTERNATIONAL BLUES

MED SWING BRUNO HEINEN

PIANO

5

PNO.

9

PNO.

13

PNO.

17

PNO.

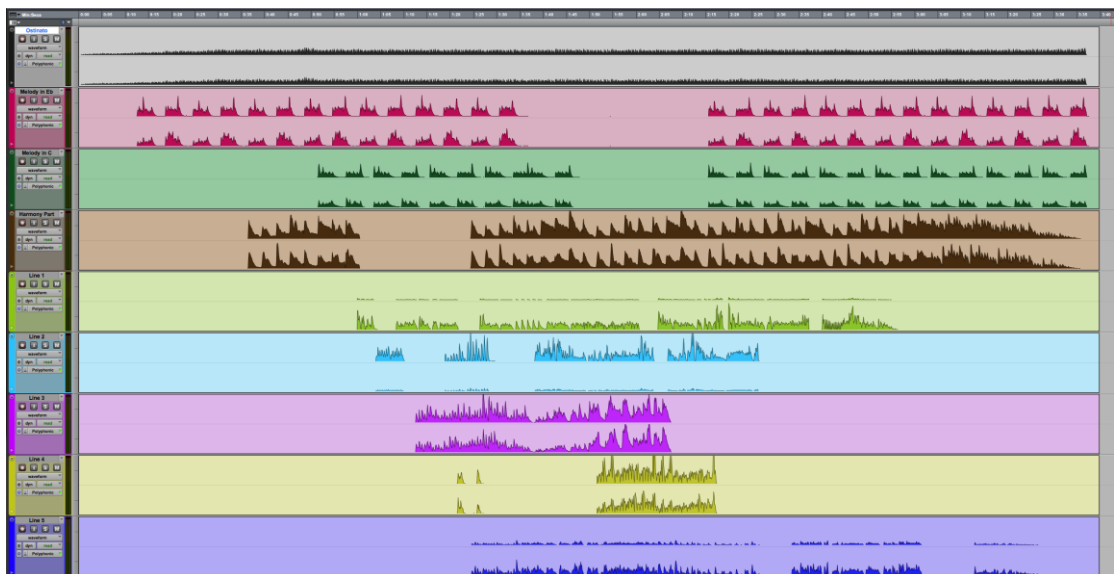
21

PNO.

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In the track 'In Kochi', from my album *Mr. Vertigo*, I also explore the overdubbing techniques set out by Evans. However, I have taken the concept to an extreme in the piece, overdubbing 8 piano tracks on top of a repeating 5/8 ostinato. Below (4i) is a visual representation of the wave forms of the piece, with the repeated ostinato at the top in grey, the central melody in Eb in pink, the melody transposed into C in green, the harmony part in brown, and the improvised linear overdubs in the following 5 boxes.

(4i. Representation of wave forms in 'In Kochi' Bruno Heinen)



The very nature of recording this particular layered melodic conversation was Herschain in nature. Each new overdub created contrapuntal surprise, and changed my perception of the previous track(s). As the recording session unfolded, I was essentially in a surprising dialogue with myself, once again furthering the discussion of counterpoint as path to the unforeseen.

British contrapuntal pianist Liam Noble's appreciation of rhythmic counterpoint was instrumental in forming my own rhythmic outputs. I was keen to explore in which ways counterpoint could be used as a route to rhythmic exploration.

Rhythmic counterpoint

As outlined in the previous chapters, rhythmic counterpoint can be viewed as the layering of two or more time signatures, or time feels on top of each other.

I exploit this kind of contrapuntal writing in the movement 'Spring', from the album *Changing of the Seasons*. The theme navigates changing time signatures, which return through the movement, but the rhythmic contrapuntal element in the writing explores the relationship of the dotted crotchet against the crotchet. This draws on Hersch's improvisation over 'In Walked Bud', as discussed in chapter 3.

(4j. Example of rhythmic counterpoint in 'Spring' Bruno Heinen)

The image displays a musical score for the movement 'Spring' by Bruno Heinen, focusing on bars 113 to 119. The score is arranged in a system with six staves: Piano (a) and Piano (b), Violin I, Violin II, Viola, and Double Bass. The time signature changes from 4/4 to 3/8, then 4/4, 5/8, 6/8, and finally 4/4. The Piano part (a) features a melodic line with dotted crotchets and crotchets, while the Piano part (b) provides a harmonic accompaniment with chords and dotted crotchets. The string parts (Violin I, Violin II, Viola, and Double Bass) are marked with 'Pizz' (pizzicato) and 'mf' (mezzo-forte) dynamics. The Violin II, Viola, and Double Bass parts also include 'Cresc' (crescendo) markings. The score concludes with a first ending bracket labeled 'I'.

As we can see in bars 113-119 in the score above (image 4j. audio example 3.7), the dotted crotchet outlined in the string writing is in contrapuntal

dialogue with the crotchet/quaver of the piano melody. This is reiterated in bars 196-201 (audio example 3.8), as shown in the score below (4k.):

(4k. Rhythmic counterpoint example in 'Spring' Bruno Heinen)

The image displays a musical score for the piece 'Spring' by Bruno Heinen. The score is divided into two systems. The first system, labeled 'Piano (a)' and 'Piano (b)', shows a piano solo from bar 196 to 201. The piano part features a melody in the right hand (RH) and a bass line in the left hand (LH). The second system shows the string ensemble, including Violin I, Violin II, Viola, Violoncello, and Double Bass, playing a rhythmic pattern of crotchets (quarter notes) in the key of B-flat major. The piano part in the first system consists of six bars (196-201). Bar 196 is marked with a sharp sign and '(LH)'. The piano part in the second system consists of six bars (224-233). The string ensemble part in the second system consists of six bars (224-233). The piano part in the second system consists of six bars (224-233).

And again after the piano solo between bars 224 and 233 (image 4l. audio example 3.9), this time with the piano playing the dotted crotchet, and the strings playing largely crotchets:

(4l. Rhythmic counterpoint example in 'Spring' Bruno Heinen)

The image shows a musical score for the piece 'Spring' by Bruno Heinen, specifically measures 224 through 233. The score is arranged in a system with five staves. The top staff is for Piano, with a 'P' dynamic marking and a 'Q' (quasi) marking above it. The second staff is for Piano (bass clef), also with a 'P' dynamic marking. The third staff is for Violin I, marked 'Pizz.' (pizzicato) and 'mf'. The fourth staff is for Violin II, also marked 'Pizz.' and 'mf'. The fifth staff is for Viola, marked 'Pizz.' and 'mf'. The bottom staff is for Double Bass, marked 'Pizz.' and 'mf'. The score features a complex rhythmic counterpoint between the strings, with various note values and rests. The key signature has one flat (B-flat), and the time signature is 4/4. The measures are numbered 224 through 233 at the top of the score.

I continue to explore this relationship in an improvised context in the movement during the piano solo (audio example 3.10). I shift between outlining the dotted crotchet and playing a crotchet octave pedal pattern, once again drawing on Hersch's 'In Walked Bud'.

'Daydreamer' (image 4m) from my album *Mr. Vertigo*, further draws on rhythmic contrapuntal relationships, this time in a solo improvised context:

(4m. Score of 'Daydreamer' Bruno Heinen)

PIANO
MED TRIPLETY SWING FEEL

DAYDREAMER

BRUNO HEINEN

INTRO B/E Gmi7 B/E Gmi7 B/E Gmi7

4 B/E Gmi7 A B/E Gmi7

6 B/E Gmi7 B/E Gmi7

8 B/E Gmi7 BΔ#11 EALT Ami7 E7#11

11 DΔ BALT B/E Gmi7

14 B/E Gmi7 B/E Gmi7 B/E Gmi7

V.S.

2 8 PIANO

17 $D^{\flat}Mi^9$ A_{ALT} Dmi^7 $E^{\flat}\Delta$ A_{SUS} $A7^{\flat9}\#11$

20 $B^{\flat}\Delta\#11$ $B^{\flat}Mi^9$ $E^{\flat}7\#11$ C/E F^6

23 E/G# Ami^7 G^{\flat}/B^{\flat} B_{ALT} B/E Gmi^7

26 B/E Gmi^7 B/E Gmi^7 B/E Gmi^7

The central bass line relationship with the melody is that of 4 against 3. Although both can be described in either 3 or 4, the phrasing of each line is such that the rhythmic content is felt in duality, as outlined below (image 4n):

(4n. Example of rhythmic counterpoint in 'Daydreamer' Bruno Heinen)

The image shows a musical score for 'Daydreamer' by Bruno Heinen. It consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature is one sharp (F#), and the time signature is 8/E. The score is divided into four measures, numbered 1 through 4. Measure 1 starts with a boxed 'A' and a '1' below the staff. Measure 2 has a '2' below the staff and a 'GMI7' chord symbol above it. Measure 3 has a '3' below the staff. Measure 4 has a '4' below the staff. The notation includes various note values, rests, and accidentals, illustrating a complex rhythmic dialogue between the two staves.

This is not the only rhythmic dialogue in the piece however. During the improvisation, I switch back and forth between playing off 3 and 4 (see image 4o), and the dotted quaver and dotted crotchet with the result that different metres can be felt at the same time, creating a rhythmically contrapuntal dialogue. This, in essence, draws on Liam Noble's description of rhythmic counterpoint above, but instead of layering tracks or separate instruments with different time feels on top of each other, they are outlined in reciprocation within a solo improvisation in such a way that they can be felt to be in rhythmic discourse (audio examples 3.11 and 3.12):

(4o. Example of improvised rhythmic counterpoint in 'Daydreamer' Bruno Heinen)

DAYDREAMER IMPROVISATION - RHYTHMIC COUNTERPOINT EXAMPLES

BRUNO HEINEN

EXAMPLE OF 3 GOING TO 4 (AUDIO 1:30 - 1:35)

PIANO

1 2 3 1 2 3 1 2 3 4 1 2 3 4

Detailed description: This musical example is for piano in 3/8 time. The first staff (treble clef) shows a melodic line with a sequence of eighth notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The second staff (bass clef) shows a bass line with a sequence of eighth notes: C3, D3, E3, F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5. The piece concludes with a final chord in the right hand.

EXAMPLE OF DOTTED QUAVER TO DOTTED CROTCHET (AUDIO 1:54 - 1:57)

PNO.

1 2 3 4 1 2 3 4 1 2 3 4

Detailed description: This musical example is for piano in 3/8 time. The first staff (treble clef) shows a melodic line with a sequence of eighth notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The second staff (bass clef) shows a bass line with a sequence of eighth notes: C3, D3, E3, F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5. The piece concludes with a final chord in the right hand.

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In his publication *Counterpoint*, Walter Piston describes this kind of rhythmic counterpoint in the following terms: 'The contrast of rhythmic patterns gives a counterpoint of rhythms lacking only in the harmony and melodic curves of counterpoint as we are accustomed to speak of it'.⁷

Piston goes on to state that 'polytonality is contrapuntal in its effect, because of the opposition of tonal centres'.⁸ I have explored this notion in both compositional and improvised contexts through my two published albums.

⁷ Walter Piston., p.229.

⁸ Walter Piston., p.230.

Harmonic counterpoint

The movement 'Summer', from *Changing of the Seasons* explores tonal centres in contrapuntal dialogue:

(4p. Example of harmonic counterpoint in 'Summer' Bruno Heinen)

The image displays two pages of a musical score for the movement 'Summer' by Bruno Heinen. The score is written for Piano (a and b), Violin I and II, Viola, Violoncello, and Double Bass. The key signature is one sharp (F#), and the time signature is 4/4.

The first page (measures 59-71) features a piano improvisation section where the piano part is marked 'freely around harmony'. The harmony is divided into two sections: 'TENSION' (measures 60-69) and 'RESOLUTION' (measures 70-71). The tension section is characterized by polychords: Ab major 7 9 (measures 60-61), C major/D major (measures 62-65), and A major/D major (measures 66-69). The resolution section resolves to G major (measures 70-71). The string parts (Violin I, Violin II, Viola, Violoncello, and Double Bass) are marked 'dolce' and 'mp' (mezzo-piano) in the tension section, and 'f' (forte) in the resolution section. The string writing consists of long, flowing lines with many ties, creating a sense of harmonic counterpoint.

The second page (measures 112-127) continues the piano improvisation and string counterpoint. The piano part is again 'freely around harmony'. The tension section (measures 113-123) features polychords: C7/Bb (measures 113-114), C major/B major (measures 115-123), and B major (measures 124-127). The resolution section resolves to B major (measures 128-129). The string parts are marked 'ff' (fortissimo) in the tension section and 'ppp' (pianissimo) in the resolution section. The string writing continues with long, flowing lines, maintaining the harmonic counterpoint.

As shown on the two examples above (4p), the tense polychords outlined in the strings from bars 60-69, and 113-123 are resolved to either G major or B major respectively as marked on the score above. The relationship of these two tonal centres is explored through the string writing, as well as my piano improvisation throughout the movement. As well as exploring the harmonic

contrapuntal dialogue between these two tonal centres, the movement also examines harmonic tension and release. Liebman states that tension and release can be ‘conceived as the act of a question being posed and subsequently answered’. It is in this context that I approach the harmonic content of the movement. Tense augmented harmony is posed in the string ensemble, over which I freely improvise. These harmonic questions are then answered with a major resolution in either G or B major, as marked above the piano part in the score above.

I continue to explore this kind of harmonic dialogue in the movement ‘Winter’, This time exploiting the use of harmonic pedals:

(4q. Example of harmonic counterpoint in ‘Winter’ Bruno Heinen)

The image shows a musical score for the piece 'Winter' by Bruno Heinen. It features a piano part and string parts (Violin I, Violin II, Viola, Violoncello, and Double Bass). The piano part is marked with chords: E Major 7 (#11) (bars 26-27), F 7 sus (bars 28-30), E Major 7 (#11) (bars 31-33), F 7 sus (bar 34), and Bb min (bars 35-36). The string parts are marked with 'Cantabile' and 'pp'. The Violin I part has a 'Pedal suspension' (pp) and 'Resolution' marked above it. The Viola part has a repeated quaver Bb tonic pedal. The Violoncello and Double Bass parts are marked with 'Cantabile'.

As shown in the score above (image 4q) between bars 26-35 (audio example 3.13), the viola sustains a repeated quaver Bb tonic pedal. Violin II, cello and bass sections outline alternating opposing harmonies around this pedal, as marked above the piano part. These then resolve to Bb minor in bar 34. The E major/F dominant harmonic contrapuntal discourse is strengthened with the unifying nature of the constant Bb pedal, and grounded further still with the entry of a sustained Eb descant pedal in the violin I part (in bar 29). This second pedal is resolved to the third degree of the home key Bb minor in bar 35 as marked on the score above.

My piano improvisation further builds on this harmonic dialogue/harmonic pedal framework: The strings hold a dominant pedal F throughout the solo (audio example 3.14). My improvised harmonic language in this section draws on the kind of tonal discourse set out by Mehdau in his rendition of 'In Walked Bud', as discussed in chapter two. I navigate through Phrygian, minor, major, diminished, dominant and suspended harmonic centers respectively over the pedal sustained by the strings. This rooted pedal links the contrapuntal harmonic dialogue, but also served the purpose of challenging me to improvise unpredictable progressions. This further draws on the Herschian model of counterpoint as a route to the surprising.

In my work 'In Kochi' from the album *Mr. Vertigo*, I explore the contrapuntal polytonality of layered lines as set out by Piston: 'two melodies in different keys are certainly independent' (to a contrapuntal extent).⁹ The composition uses the vagadhibhusani south Indian Karnatic scale in two different keys, and therefore also explores the harmonic contrapuntal relationship between them:

⁹ Walter Piston., p.230.

(4r. Score of layered parts in 'In Kochi' Bruno Heinen)

IN KOCHI

IMPROV IS OVER PRE RECORDED LAYERED PARTS BELOW...
(PARTS 2 AND 3 USE THE VAGADHISUSANI SOUTH INDIAN SCALE)

BRUNO HEINEN

LAYERED PART 1
INTRO

PIANO

5 LAYERED PART 2

PNO.

9

PNO.

11

PNO.

13 LAYERED PART 3

PNO.

17

PNO.

19

PNO.

21 Eb 8 G Eb
LAYERED HARMONY PART

PNO.

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CONTINUES EXPLORING
FALLING MAJOR THIRD HARMONY

The track is underpinned by an ostinato Eb 5/8 pedal (marked above as layered part 1 on image 4r). The central melodic content of the piece is in Eb

(layered part 2), which is then introduced as an overdub on top of this part, transposed to C (layered part 3). This minor third relationship is explored throughout the piece, as well as in the multiple improvised overdubs included in the track. The polytonal outcome of these tonal improvisations are in constant dialogue with each other, creating counterpoint not only between the overdubbed melodies in a linear sense, but also in harmonic discourse.

Some scholars have noted that dialogue between elements is essential in jazz: Ingrid Monson states 'Good jazz improvisation is sociable and interactive just like a conversation; a good player communicates with the other players in the band. If this doesn't happen, it's not good jazz'.¹⁰ This view is reiterated in the publication *The Other Side of Nowhere: Jazz, Improvisation, and Communities in Dialogue*: 'I believe...that any empirical analysis of African-based musical practices, whether Rhumba or Jazz, Samba or Mbalax, will reveal a pervasive tendency toward the incorporation of heterogeneous sonic elements'.¹¹ I am extending this notion to the contrapuntal relationship between any two or more musical elements. I will be discussing the concept that any musical discourse is essentially contrapuntal.

Counterpoint as concept

Below is an excerpt from the final section of 'Autumn' (image 4s) from the album *Changing of the Seasons*.

¹⁰ Ingrid Monson. (1996)., p.84.

¹¹ Daniel Fischlin. and Ajay Heble. (2004)., p.114.

(4s. Final section of 'Autumn' Bruno Heinen)

The image displays two systems of a musical score. The first system covers measures 295 to 309. The piano part (Piano (a) and (b)) is marked with a series of diagonal lines, indicating a specific texture. Above the piano part, harmonic markings are provided for measures 296 through 309: E minor, E Minor (sus4), Eb Phrygian, Eb 6, and Eb. The string parts (Violin I-1 (a), Violin I-1 (b), Violin I-2 (a), Violin I-2 (b), Violin II-1 (a), Violin II-1 (b), Violin II-2, and Viola 1 (a)) feature a melodic line of quarter notes, with some notes beamed together. The second system covers measures 309 to 325. The piano part continues with diagonal lines. Harmonic markings above the piano part for measures 310 through 325 are: Bb/D, Eb/D, D diminished, D dim 7, Ab/D, BbD, Gm(maj7)/D, and D altered. The string parts continue with the same melodic line.

I improvise freely over the string section around the changing harmonies marked above. The individual string lines move in succession while the rest are held, as outlined in the score between bars 297 and 325 (audio example 3.15). The linear progression of the melodic lines, interact with one another

contrapuntally in a Herschian manner reminiscent of a Bach chorale. As each single line moves melodically the overriding harmony changes. The length of each changing harmony however, is not fixed. The members of the string ensemble were instructed to change individual notes in the order they are written on the score, but as and when they chose to, drawing on the Herschian model of contrapuntal surprise within our collective improvisatory realization (this model was also employed for the movement 'Summer'). The result is a dialogue not only between the string lines, but also between the overall harmonic changes of piano improvisation and string orchestra: In some cases my harmonic outline is led by the strings, as in bars 303-304 (audio example 3.16), in other cases the string players were led by my changing harmony, as in bars 317-318 (audio example 3.17), and there are yet further examples of the whole ensemble moving together, as in bars 323-324 (audio example 3.18). In other words, we were all moving through the score in contrapuntal conversation, each member of the ensemble had the power to bring about change. The string writing then, is contrapuntal in a Bachian sense, but I am also putting forward the notion that the harmonic dialogue between piano and strings in this section is itself contrapuntal.

If contrapuntal voice leading is defined as 'the linear progression of melodic lines and their interaction with one another',¹² can this interaction not be extended to the musical discourse of any two or more elements? The works 'Virgo' and 'Mirage' from my album *Mr. Vertigo* pose this question.

'Virgo' is a musical debate between improvised piano and an original Stockhausen music box.

Below (image 4t) is the score of Karlheinz Stockhausen's score for the movement 'Virgo', taken from his work *Tierkreis* (1974-1975).

¹² Jane Clendinning. and Elizabeth Marvin. (2011)., p.A73.

(4t. Score of 'Virgo' Karlheinz Stockhausen)

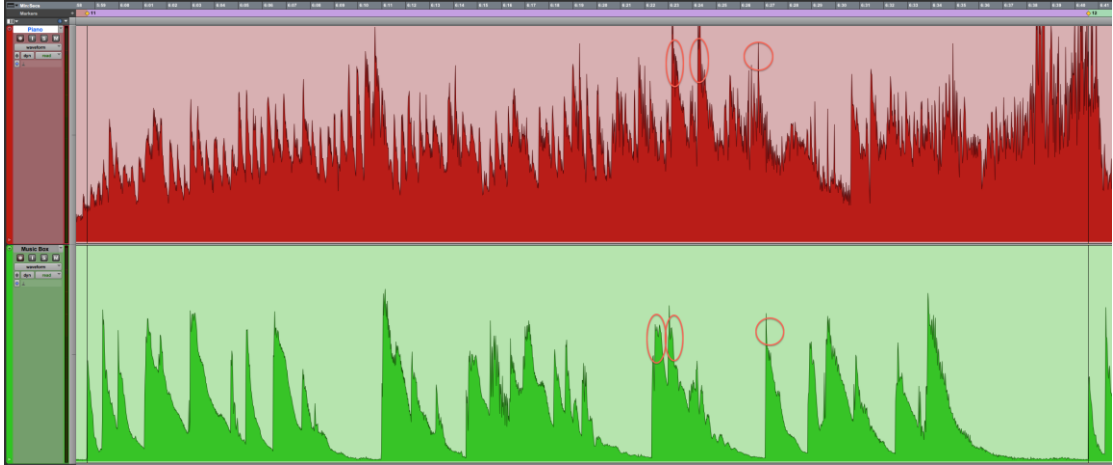
The image shows a page from a musical score for Karlheinz Stockhausen's 'TIERKREIS' (Zodiac), specifically the 'Virgo' section. The title 'Jungfrau - Virgo' is written in a stylized font, accompanied by the Virgo zodiac symbol and the planet 'Merkur' (Mercury). The score is for piano and music box. It includes a tempo marking of quarter note = 80 and a duration of 26.8 minutes. The music is written in a key with two flats (B-flat and E-flat) and a 4/4 time signature. The score consists of two systems of staves, each with a piano part and a music box part. The piano part is marked 'sempre *rit.*' and the music box part is marked '8'. The score is numbered '23.8.-23.9.' and '8'.

My piano improvisation was overdubbed on top of a take of the music box, with the box decelerating as the take unfolded.

As the musical content of the box is short and repeating, I was able to engage in dialogue with the box in a contrapuntal fashion. The nature of the organic deceleration of the analog box proposed a surprising discourse, with my improvisation acting and reacting to it in a sparring fashion. There are audible instances where the box leads my arrival points in the improvisation. What is perhaps more surprising, are the instances where my pianistic landing points are perceived to lead the box, despite the fact that the pre-recording of the box was fixed.

I have noted an example of both of these scenarios on the image below (4u), a representation of the wave-forms of the two elements. The timeline of the track can be found at the top of the image.

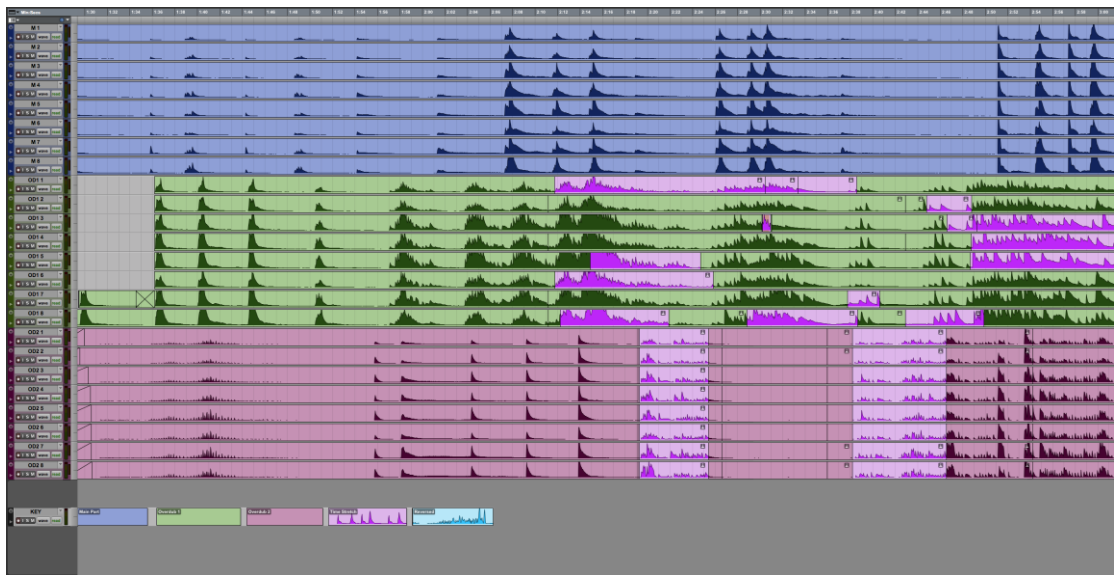
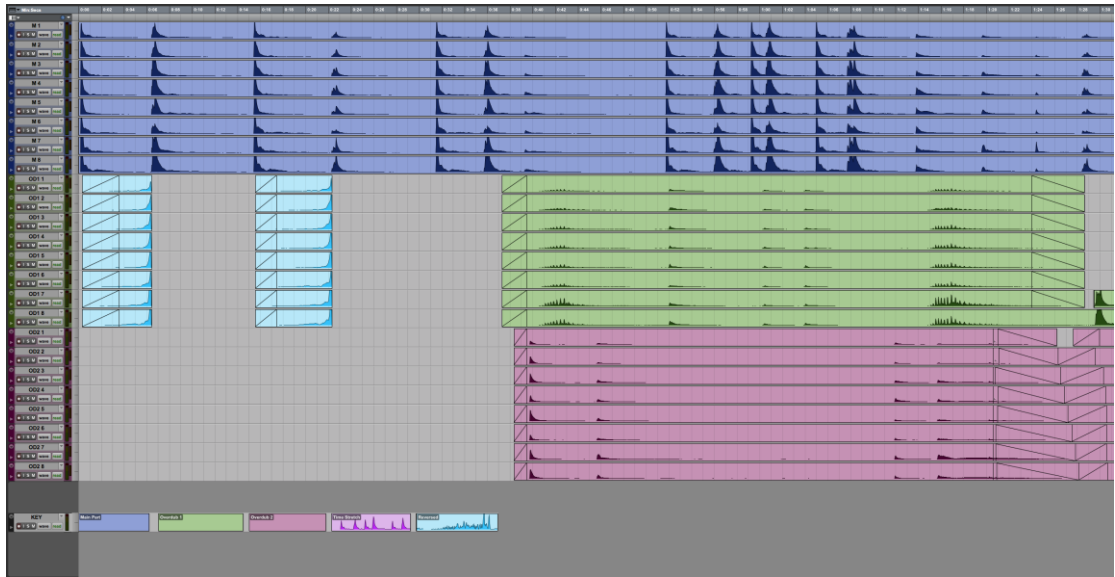
(4u. Representation of wave-forms in the improvisation of 'Virgo' Bruno Heinen)

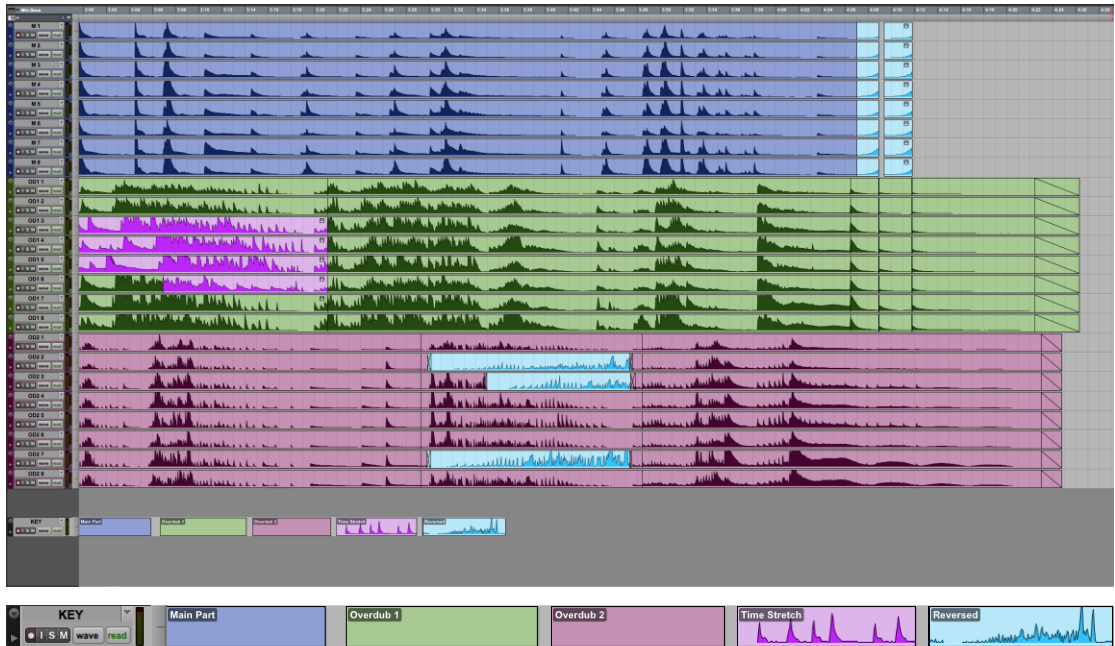


As we can see, the music box entry at 6:22-6:23 immediately precedes the piano entry from 6:23-6:24 (as marked in ovals on the image). The following descending piano scale then lands at its arrival point at 6:26, leading the music box entry at 6:27 (as marked in circles on the image (audio example 3.19)). I am putting forward the argument that this musical discussion can be described as contrapuntal.

My work 'Mirage' from the album Mr. Vertigo furthers this notion using different methods. The work employs the use of overdubs and prepared piano using paper on the strings for one overdub. These different voices are in melodic contrapuntal dialogue, but I also exploited a conceptual view of contrapuntal dialogue in post-production, working with the mixing engineer to edit the wave-forms to a contrapuntal end:

(4v. Representation of post-production work on 'Mirage' Bruno Heinen)





Above is a visual representation of the wave-forms of each overdub (image 4v), along with a colour-coded outline of the effects added in post-production. As we can see at the beginning of the track, the wave-form of the initial chords played have been reversed to create an answering ‘phrase’ in contrapuntal discourse. This initial example of reversing the wave-form was applied to all microphones recording the opening chords, but later in the track, between 3:30 and 3:46, we can see examples where individual mic wave-forms have been reversed (audio example 3.20).

We can hear a phrase played by prepared piano, followed by the same phrase in reverse (audio example 3.21). This method could be viewed as a contemporary reflection of the Bachian tool of answering phrases in retrograde, but also gives a contrapuntal dialogue between wave-forms. We can also see several examples of where sections of individual mic wave-forms were time-stretched, furthering the surprising discourse between elements.

Recording overdubs in the studio opened doors to multiple aspects of counterpoint, as discussed above. But what of performing these live? I was interested in exploring ways in which contrapuntal devices could be transferred to live performance, using pre-recorded material. I was also

interested in how a series of performances with fixed pre-recorded material would evolve.

Mr. Vertigo live tour

The subsequent live tour of my solo material drew inspiration from the performances of pianist Jason Moran (born 1975), in which he plays alongside pre-recorded spoken word. His 2006 release *Artist in Residence*¹³ included a number of selections from different works commissioned by museums. On the album Moran improvises alongside the recorded voice of performance/visual artist Adrian Piper. Moran often performs live to pre-recorded spoken dialogue, using the syntax of the words in a rhythmic contrapuntal context. I took this model one stage further, performing the overdubbed works of my album alongside the pre-recorded takes of my album, less one of the overdubs. This live contrapuntal conversation with myself changed through the course of the tour, as I got more and more familiar with the pre - recorded material. But again, it became more surprising rather than less, as one might suspect. My perception of the nature of the pre-recorded material was ever changing, due to the variety of possible live responses to it. This then, was one prospective live answer to the Herschian question of contrapuntal surprise.

¹³ Jason Moran. *Artist in Residence*.

Chapter 5 - Conclusion

Having interviewed Fred Hersch, and conducted detailed analysis of his work; several conclusions about his approach and innovations have had a profound impact on my own solo language. His contrapuntal style is rooted in the voice-leading evident in the Bach chorales. He sees counterpoint as a vehicle for surprising improvisation, and employs the use of arrival points at marked intervals, breaking up contrapuntal tension in a real-time structured context. My own approach then, has been structured to build a contrapuntal solo language in answer to the central Herschian model of counterpoint as a route to the unexpected. Practice through composition gave me the tools needed to broaden my contrapuntal horizons. Working within frameworks was also beneficial, and unexpectedly led to a greater sense of freedom in my approach: the structure of writing for strings aided my polyphonic language, but the inspiration of the Herschian route of surprising contrapuntal improvisation took my work to question counterpoint in a rhythmic, harmonic and conceptual context. Parameters set for exercises in contrapuntal improvisation also led to this sense of freedom, as well as improving other aspects of my playing. The practice of improvising freely in one hand, alongside a written line in the other not only aided the independence of the hands needed in order to convincingly improvise contrapuntally, but also improved my sense of time in general. This has been

obvious to me when now playing in a trio setting. The constraint of improvising with only two fingers was conversely liberating in terms of the possibilities for the solo. Taking away the use of the other fingers meant that I could not rely on what I know I can play, forcing me into uncharted territory, and away from the draw to pre-learned material. I approached the writing and improvising of the two albums from the perspective of a voyage of discovery into what counterpoint could be.

The project was aimed at creating my own contrapuntal language in order to build a own solo project in which I improvise contrapuntally, using the work of the underrated pianist Fred Hersch as a starting point. I began by establishing Hersch's use of contrapuntal improvisation as a route to surprising himself, and by extension, the listener. This started a personal journey into what counterpoint could mean to me, and how this model could be applied to my own approaches, as informed by Hersch and his contemporaries. I do not feel a sense of closure to the research, quite the contrary. Here are some possible routes as to where the project might go next:

In 1961, American composer, historian and jazz musician Gunther Schuller defined Third Stream as 'a new genre of music located about halfway between jazz and classical music'.¹

The project could lead to a fully integrated concerto for piano and orchestra that combines written and improvised elements. I would perform the piece myself, improvising over sections of a written orchestral work, which also employs featured soloists who are versed in both classical performance and improvisation. I could frame work from the viewpoint of the changing role of composer as performer, and explore the differences on this issue between the classical and jazz worlds.

¹ Gunther Schuller., p.114.

Notable exponents of Third Stream music include Lewis's Modern Jazz Quartet, Gil Evans, George Russell, Dave Brubeck, Jacques Loussier, Ornette Coleman, Eric Dolphy, and Sun Ra. Examples of composed pieces from the same period that employ improvised sections include *Jazz Abstractions* by Schuller and Jim Hall, *Miles Ahead*, *Porgy and Bess* and *Sketches of Spain* by Miles Davis, and *European Windows* by Gil Evans.

As the closest existing work to a Third Stream concerto, Claus Ogerman's *Symbiosis*, written for jazz pianist Bill Evans in 1975 could form a starting point for my research.

Although these compositions (including *Symbiosis*) combine written and improvised elements, they either make use of jazz big band instrumentation (alongside strings), or employ the prominent use of a traditional jazz rhythm section: bass and drum kit. This inevitably leans the sound world of these works towards jazz, even if classical instruments and performers are used within the work.

On the other hand, there are many classical compositions that have been influenced by jazz music. These range from Ravel's Piano Concerto in G and Gershwin's *Rhapsody in Blue*, to Milhaud's *La création du monde* and the music of Leonard Bernstein. These works however, do not involve improvisation on the part of the performers, linking them more closely to music of an inherently classical nature.

The conscious mixing of classical and jazz techniques and resources have developed considerably since Schuller's time, aided in part by the intermingling of classical and jazz cultures at the conservatoire level. Notable examples of this are Mark-Anthony Turnage's work *Bass Invention*, written for jazz bassist Dave Holland with classical ensemble, Hans Koller's recent Birmingham Contemporary Music Group commission for jazz quartet and 6 BCMG members, as well as the composed pieces for classical resources by contemporary jazz/improvising pianists Matthew Bourne and Alexander Hawkins.

Although it constitutes a different category (improvisation over an existing classical work), Herbie Hancock's improvisation over the second movement of Ravel's concerto in G from his recording *Gershwin's World*² could also inform my research and discussions.

As outlined above, there are many works that either lean towards the jazz or classical worlds. What I am proposing, rather, is a fully integrated Third Stream piano concerto. It would be written for classical orchestral instrumentation (without rhythm section), and feature piano, and versatile soloists, improvising sections over a notated score played by classical musicians.

In Schuller's time relatively few jazz musicians were conservatoire-trained. The situation has changed dramatically since the 1950's. I would take advantage of this by employing musicians who are versed in both musical genres.

It would be necessary to score the piece in multiple ways for different orchestral members. Chord symbols and graphic signs as well as standard notation would need to be used.

Through my practice, I could interrogate traditional notions of the composer-performer hierarchy in both classical and jazz cultures. In his publication *The changing role for the composer in society*, Jolyon Laycock states: 'The relationship between composer, performer and listener can be described in terms of a triangular partnership where the composer is creative, the performer re-creative, and the listener a passive receiver'.³ I would be challenging this model from the viewpoint of my unique role as the composer, performer and improviser of my own work.

² Herbie Hancock. *Gershwin's World*.

³ Jolyon Laycock., p.138.

The aforementioned Hancock recording highlights how a jazz musician can improvise with classical material as a basis. This underlines an issue other than the composition itself, and brings to the fore the importance of the role of the performer in the possible work.

There are other directions the project could take. Building on my initial explorations of playing live to pre-recorded material, I would like to begin experimenting with the use of loop-pedals in live performance. This could be used distinct from, or in conjunction with performances including pre-recorded material. The nature of the live production of questioning material to perform over, could further the discussion of counterpoint in all of its guises.

My doctoral path has been one of self-discovery, learning and reflection. The process of building a solo language, and disseminating my research through published albums and live performances has furthered all areas of my playing, composition and improvising. The parameter of counterpoint could be viewed as a restrictive one. Through my studies, compositions, exercises and improvisations, informed by the work of Fred Hersch and his contemporaries, I have come to quite the opposite conclusion. My project argues that counterpoint can open doors, question established notions and lead to the surprising.

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Appendix

Certificate of ethical approval:



This is to confirm that the application made by Bruno Heinen to the Royal Northern College of Music Research Ethics Committee was APPROVED.

Project title: Counterpoint in jazz piano with specific relation to the solo work of Fred Hersch

Date approved: 3 February 2016

Signed: *Jane Ginsborg* Date: 3 February 2016
Prof. Jane Ginsborg (*Chair of RNCM Research Ethics Committee*)