Self-accompaniment and improvisation in solo jazz piano: Practice-led investigations of assimilation, ostinatos and ‘hand splitting’

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Self-Accompaniment and Improvisation in Solo Jazz Piano:
Practice-led investigations of Assimilation,
Ostinatos and ‘Hand Splitting’

David Dower

This exegesis is presented in partial fulfilment of degree of
Master of Arts (Performing Arts)

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Edith Cowan University - Faculty of Education and Arts
Perth - Australia

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Abstract

This practice-led project investigates the crafting of approaches to solo jazz piano performance. Through a study and application of assimilation techniques derived from a range of different music styles, a series of self-accompaniments were devised. In addition, the process of developing improvisational facility over these accompaniment patterns was documented.

Although performing solo requires a different approach to ensemble work, jazz pianists are commonly only trained in ensemble practices, rendering the solo setting a potentially overwhelming challenge. In order to move away from ensemble-based methods, the project sought to develop pianistic techniques and exercises that provide an independent approach in solo performance. Techniques such as ‘splitting’ the pianist’s hands to achieve multiple voices, voice-leading, ostinato, and rhythmic focus were explored as methods to develop independent solo performance.

The project follows two trajectories. The first was to develop self-accompaniment patterns for solo jazz piano, an area explored by assimilating techniques outside of the jazz idiom into a solo jazz piano context. These techniques were developed within compositions and arrangements. The second was an examination of the practice processes engaged when performing these techniques, including the development of rhythmic coordination to facilitate improvisation over the composed accompaniment patterns.

The outcome is an exploration of different approaches to developing confidence and aptitude in solo jazz piano performance. As well as the creation of accompaniment patterns for solo jazz piano performance, outcomes of this project include a greater descriptive understanding of the process of assimilating performance techniques onto the piano, and developing an improvisational approach over ostinato accompaniment figures. The scores, as well as recorded performances featuring improvisations over the composed accompaniments, are included with the exegesis.
Declaration

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

- Incorporate without acknowledgement any material previously submitted for a degree of diploma in any institution of higher education;

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David Dower
April 2015
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Part One
1.0 Introduction

1.1 Research Background

For a jazz pianist, performing unaccompanied is an inevitable performance scenario. Jazz pianists are most often not taught techniques specifically for solo performance. In my own experience, there have been times when I have found myself in scenarios where solo piano skills have been called upon. Despite years of practice and lessons supplemented by the study of piano education manuals, I have felt ill-equipped and out of my depth on many of these occasions. I wondered why jazz pianists are not taught this aspect of performance. The difficulty of performing solo is exacerbated when the performance situation is used as an indicator of aptitude, including common scenarios such as lessons, workshops, auditions and solo performances, instances where an ensemble may not be available. Since in ensemble settings, the bass voice and rhythmic voice are often played by other instruments, a jazz pianist trained in ensemble performance skills may find it difficult to both express and simultaneously accompany themselves in a solo setting. In his book Notes on the Piano, Ernst Bacon (1963) describes how any circumstance where a musician is required to perform unaccompanied can be a daunting task:

Each player in an ensemble usually finds that such conjoint music making spurs his energies... This discovery should remind him, however, that a high level of perfection in ensemble is not therefore, as is commonly supposed, the most demanding of the instrumental arts. Instead, it is the person who plays alone, unaided, and who must fire his own enthusiasm, and bear full responsibility for maintaining a high level of interest in his listeners, who has the most difficult assignment. (p. 109)

Jeff Pressing (1987) reinforces this sentiment in his article Improvisation: Methods and Models in Generative Processes in Music, explaining that unaccompanied scenarios are significantly different for the improvising musician due to the removal of external stimuli in performance:

Various dimensions of skill classification have been proposed and improvisation can be placed within these. One division is into ‘open’ skills which require extensive interaction with external stimuli, and ‘closed’ skills, which may be run off without reference to the environment. Solo improvisation is therefore a closed skill, as it relies only on self-produced stimuli, whereas ensemble improvisation is more open. (p. 6)
While the project endeavours to develop alternative accompaniment devices for solo performance, this exegesis does not serve as a compendium of techniques. Instead, it investigates and discusses the process of developing a solo piano approach. A CD submitted with the exegesis supplements this research, providing documented outcomes of both the compositional and improvisational process.

1.2 Self-Accompaniment: Key Concepts

Motivated through personal experience, self-accompaniment was identified as a central component of developing a solo piano approach. On Music dictionary provides the succinct definition of accompaniment as “the additional but subordinate music used to support a melodic line”. In ensemble performance, this accompaniment role is shared between members of the ensemble who are supporting the soloist’s improvisation. In solo performance, self-accompaniment is required; it is the responsibility of the solo performer to provide both the accompaniment and melodic elements. This is not necessarily a simple task, for a number of reasons. Mike Longo (1978) in his book Developing the Left Hand for Jazz Piano describes the commonly employed limited approach to accompaniment, an area he sees as a common obstacle for pianists:

One of the most perplexing problems facing the jazz pianist is the left hand technique. We have all heard the term “one-handed piano player” applied to keyboard players on all professional levels... The term generally connotes a pianist who plays primarily with melodic lines in his right hand and a very sparse, if adequate, accompaniment in the left. Even though some jazz pianists are able to do this remarkably well, at best, only a limited type of piano playing can result from this approach. (p. 1)

While Longo’s book itself does not specifically discuss accompaniment for solo performance, his comment highlights a major factor in the difficulty of creating self-accompaniment. Jazz pianists are often trained to improvise with the right-hand and accompany with the left-hand, and therefore are often ill-equipped to drive the intensity of solo performance while simultaneously taking charge of all accompaniment responsibilities. Most jazz pedagogy focuses on the ensemble setting, with students commonly taught accompaniment approaches suitable to this paradigm. Two examples of the different requirements in accompaniment between solo and ensemble playing are accompaniment rhythms and voicings. Most commonly, education manuals focus on the ensemble approach. Regarding accompaniment rhythm in ensemble performance, Mark Levine (1989) suggests that a pianist’s role is to “stimulate the soloist harmonically and rhythmically, strengthen
the form of the tune and to stay out of the soloist’s way [original emphasis]” (p. 223). Hal Crook (1995) advises a pianist should generally focus on contrasting the bass’ walking bass line by playing syncopated rhythms when accompanying:

An important part of the rhythmic role of the bass in a jazz rhythm section is to provide a steady flow of downbeat attacks (...) Standard practice dictates that the harmonic instrument should frequently contrast the bass rhythmically, providing sufficient upbeat attacks to propel the time and achieve a substantial degree of forward motion. (p. 65)

In an ensemble setting, a syncopated approach to comping is suitable as the piano has the support of the bass, drums, and the lead instrument. The syncopated, “out of the soloist’s way” approach is contextualised by the band. A similar approach is used when the pianist provides accompaniment for their own solo in an ensemble context; the right-hand will improvise while the left-hand plays syncopated chordal hits. By contrast, in solo piano performance there is greater a requirement for independence in the pianist’s approach, including finding methods to propel the music rhythmically without the support of a band. Discussing his solo album, The Heart of the Piano, pianist Geoffrey Keezer found the most significant challenge was to "generate enough rhythmic interest, enough groove to keep it moving, to keep the ideas flowing" (Keezer via Feuerstein, 2013, para 4). Various techniques, such as left-hand ostinatos, can provide an approach to this situation. These are discussed in detail later.

Another common technique found in ensemble-focused jazz piano training is the way in which chord voicings are taught. Many authors emphasise the need for chord voicings that stay out of the bass player’s range. Levine (1989) instructs pianists to not “worry about the lack of root note in the chord. When playing in a rhythm section, the bass player will often play the root on the first beat of a given chord” (p. 41). This approach to education is shared by John Ferrara (2011b) in his book Jazz Piano and Harmony – An Advanced Guide:

A root is not always necessary, and many times is best avoided when playing with a bass player. (p. 74)

The reason behind this is that the bass and piano’s roles are complementary and symbiotic; omitting the root note from a voicing is an approach suitable for ensemble methods. Jerry Coker (1984) explains that “rootless voicings are also less inhibiting to the bass player, as he doesn’t have to worry about playing the root in exactly the same intonation as the pianists’ lowest note” (p. 30). By contrast, in a solo piano setting, an arsenal of voicings or methods that incorporate the root-note is
essential. The pianist must provide all elements of the music that they require for performing independently.

Self-accompaniment is a key point of difference when compared directly to the ensemble role fulfilled by a pianist. Consequently this research places a central focus developing a variety of self-accompaniment approaches in a solo setting, to find departures from the limited right-hand solo/left-hand chordal approach. Assimilation techniques are employed in this process of developing accompaniment patterns. The following section clarifies the term ‘assimilation’, and outlines why and how assimilation techniques were used in this project.

1.3 Assimilation, and its use in Developing Arrangements

Assimilation is a complex term, and requires qualification regarding its context in this research. Assimilation refers to the introduction of musical devices that are exterior to one’s own skillset. The Oxford English Dictionary provides the psychological definition of assimilation as “the process whereby the individual acquires new ideas, by interpreting presented ideas and experiences in relation to the existing contents of his mind.” As a jazz-trained pianist, I sought to make use of outside sources in order to generate ideas that were peripheral to my own approach. These acquired approaches were then blended with my own influences and style into accompaniment devices, compositions, and arrangements for solo jazz piano performance.

Borrowing techniques through transcription and analysis is a method of stimulating personal growth, useful towards developing an individual approach to the instrument. In his thesis, Elliott Carter’s Rhythmic Language: A Framework for Improvisation, Marc Hannaford (2012) describes the process of assimilating rhythmic devices from the works of Elliott Carter into his improvising. Hannaford suggests that “music improvisers often need to develop a context or ‘common ground’ for themselves and their community, and may seek influences from music outside their practice” (p. 12). Hannaford’s comments reinforce the approach used in this project.

The assimilation component of this project occurred in two steps. Initially, techniques from four varying styles were sought and transcribed, including influences from select piano compositions of Chopin, Bach and Beethoven, Bluegrass music, Brazilian music, and drumkit and rudiment techniques. The relevance of these selections becomes clearer further along. Ideas from each of these were then reinterpreted onto the piano, with a specific focus on developing accompaniment
patterns. Following this, each accompaniment pattern was framed in its own composition, experimenting with how the techniques can feature in a solo piano arrangement.

This project takes direct influence from pianists Brad Mehldau (USA), Ben Folds (USA), David Braid (Canada) and Egberto Gismonti (Brazil), all of whom use processes of assimilation in the development of their personal pianistic craft. These pianists were selected as they are all of the current era, and therefore link more closely to my own practice. Their individual influences are discussed later in this exegesis.

1.4 Splitting the Hands

The concept of ‘splitting’ the pianist’s hands to achieve the effect of playing more than two voices is explored throughout the project. Used as accompaniment devices, playing more than two voices can provide the impression of an ensemble, or the occurrence of multiple parts. The hand-splitting techniques investigated in this project are used as a point of departure from the limited right-hand solo/left-hand chord approach. Renowned jazz pianists Brad Mehldau and Keith Jarrett suggest that the typical performance approaches utilised by jazz pianists may result in this limited approach. Jarrett expresses this succinctly, saying that “If a jazz pianist decides to play alone, he’s been playing more likely than not in a rhythm section for so long that his left hand has become an appendage; it just does chords and does vamps. The biggest change in my playing came when I realised that” (Jarrett via NPR-Radio, 2006). Mehldau (2007) explains the situation further:

> The tendency in jazz is often to split the music into a single note melody and a chordal accompaniment, and for a jazz pianist that division takes place, more often than not, between the right and left hand respectively. Individual voice-leading often takes a back seat in this approach when the left hand plays fixed chords that have been worked out ahead of time, and therefore will not necessarily have any melodic integrity in the way they move between each other. (para 15)

In essence, Mehldau and Jarrett are suggesting that when a jazz pianist is required to do more than play left-hand chords and a right-hand melody, their dexterity may be limited. This sentiment is shared by author of *The Piano Player’s Jazz Handbook* Ray Spencer (1985), explaining that “a versatile left hand is a great asset. In contemporary jazz the left hand is badly neglected” (p. 60). In other styles, such as Classical piano, playing multiple parts is a distinctive element of performance.
Due to the ensemble-driven nature of jazz where other instruments share responsibility for the bass and rhythmic voices, there is an inherent limited dexterity inbuilt in the jazz piano tradition.

Methods were sought that allow the pianist to play two independent parts in one hand, resulting in being able to perform with up to four voices. This hand-splitting approach provides opportunity for a range of outcomes; as well as creating voice-leading opportunities, splitting the hand allows for greater textural variety, development of rhythmic drive, as well as enabling the prospect of performing multiple roles of other instruments from an ensemble in a solo setting. The role designation presented in Figure 1.1 is taken from a description by Brad Mehldau (Andre, 2011) as to how he approaches splitting the hands to achieve multiple voices in performance. His method is used in this project:

![Diagram showing hand splitting](image)

In practice, the fingers can be thought of as fulfilling similar roles to choral music or works for string quartet. The fingers are grouped into four sections which are delegated into soprano, alto, tenor and bass roles. In this project, they are referred to as voice one, voice two, voice three and voice four.

Transcriptions reveal that Brad Mehldau employs this technique during periods of inspired improvisation. The excerpt in Figure 1.2 is of an improvised phrase in the performance of his piece *Memory’s Tricks* from his solo album “Elegiac Cycle”. Colours have been used in the diagram to clearly highlight the four voices;

Voice one – **Blue**; Voice two – **Green**; Voice three – **Purple**; Voice four – **Red**
This colour coding is used throughout the exegesis to highlight the distinct voices where relevant.

![Figure 1.2 Colour coding used in this exegesis, shown in an extract from Memory’s Tricks (Mehldau, 1999, track 3) 2:55mins](image)

Splitting the hand to achieve multiple voices is a central theme of this project, used as a departure from typical ensemble approaches of right-hand solo/left-hand chordal accompaniment. Hand-splitting techniques are explored in the development of the compositions, as well as the investigation of improvisational methods.

### 1.5 Ostinatos

Ostinatos are used as a focus point to developing this multiple-voice approach. Each of the accompaniment patterns developed in this project use ostinato techniques as a framework. Ostinato is defined by *The New Grove Dictionary of Music and Musicians* as “the repetition of a musical pattern many times in succession while other musical elements are generally changing” (Sadie, 2001, p. 782). Ostinatos are widely used in many styles of music, including jazz. Figures 1.3 and 1.4 are excerpts of Keith Jarrett and Chick Corea using ostinatos in the solo jazz piano setting. Jarrett’s ostinato is used in an improvised performance at the acclaimed “Koln Concert”. With a few small rhythmic variations, the ostinato barely changes until the 5:50 minute mark of the performance. In this time, it generates an intense amount of energy and forward motion, providing a driving accompaniment figure over which Jarrett improvises freely.
Chick Corea uses an ostinato as a central motif of his arrangement of the Billy Stayhorn standard *Lush Life*. This ostinato is also the central accompaniment figure for the improvisation.

Pianist Rai Thistlethwayte describes the value ostinatos can have as an arrangement device, including their inherent usefulness in supporting an improvisation:

Ostinatos are great for solo piano because you are giving the audience a framework - maybe harmonic and rhythmic, where variation and improvising can happen on top (or below) but it's creating something repeated for everyone to hold on to even though it's completely new music - never been created before, so something like that can be effective. (R. Thistlethwayte, personal communication, 21 March 2013)

Thistlethwayte’s comment is in line with *The Harvard Dictionary of Music*’s suggestion that ostinatos act as a “reference model which imprints itself in the listener’s memory and secures the identity of the pattern throughout the variations” (Randel, 2003, p. 783). Since improvisation is an aspect of
performance that is somewhat unpredictable, an underlying repetitive figure such as an ostinato gives the listener a sense of on-going familiarity. As a result, ostinato concepts are central in the development of accompaniment patterns in this project.

1.6 Improvisation: Exploring the Accompaniment Ostinatos

The area of solo jazz piano improvisation is touched on in this project. Improvisation is both a central element to any jazz performance, and also a defining characteristic of the genre. This sentiment is reinforced by renowned musicologist Gunther Schuller (1986):

...jazz is an inherently creative music...[it] is essentially an improvised music...improvisation is and has been always the heart and soul of jazz ... jazz is, unlike many other musical traditions (...) a music based on the free unfettered expression of the individual. This last is perhaps the most radical and most important aspect of jazz, and that which differentiates it so dramatically from most other forms of music-making on the face of the globe. (p. 27)

The ostinato accompaniments in this project provide platforms to support improvisation. Resultantly, there is a need to investigate how the composition and improvisation aspects of this project interrelate. This was done by exploring how the devised accompaniment techniques are applied in both composition and in improvised settings, including their effect on developing and performing improvisations. Recordings document the outcomes of this practice.

1.7 Research Questions

In summary, the underpinning research questions ask:

- How can assimilation of selected non-jazz techniques be used to develop an approach to solo jazz piano performance?
- How can techniques such as ‘splitting the hands’ and ‘multiple-voice’ approaches be utilised in solo jazz piano performance?
- How can improvisational facility be developed over accompaniment ostinatos in solo jazz piano playing?
2.0 Literature Review

This literature review provides an analysis of the existing literature relating to solo jazz piano and practice led-research. A perceived lack of educational material for solo jazz piano was a motivating factor for the research, and this is looked into. This is followed by discussion of current writings on topics relating to reflective practice and practice-led research in order to frame the methodological approach of the project. An overview relating to recorded literature is also presented.

2.1 Literature on Jazz Pedagogy

Despite solo performance being a challenging task, my research to-date has identified a void in educational material regarding solo performance training. An investigation of jazz piano education manuals has revealed that most texts either omit solo piano information, or else provide shallow discussion on the topic. Appendix A provides a list of over 30 of these manuals. Two quotes surmise the type of guidance provided for the student pianist investigating solo playing; Levine’s (1989) “playing solo is a lot like playing naked, with no bass player or drummer to clothe one’s mistakes” (p. 276), and similarly Ferrara’s (2011b) “If you are playing solo piano, then the root becomes more essential” (p. 74). In both cases, this is basically the extent of specific solo piano guidance provided. This void of relevant solo piano educational material exacerbates the challenge for jazz pianists, since explanations, methods and exercises for performing solo are not readily available.

Three education manuals were identified that went against this trend. While only one of these manuals places a specific emphasis on solo performance, the three provide ideas for applicable techniques.

Neil Olmstead’s (2003) Solo Jazz Piano: The Linear Approach contains a method, albeit with a different aim to mine, for solo jazz performance. Olmstead outlines an approach for students to develop arrangements using a ‘linear’ concept, the term ‘linear’ referring to the use of single lines as opposed to the chordal approaches common in jazz practice. Olmstead explains that “the focus is on contrapuntal techniques for the solo pianist” (p. vii). While some multiple-voice ideas are discussed in the manual, the application of the concept is one-dimensional; Olmstead primarily employs the idea as method of finger delegation for chord voicings, rather than employing the multiple-voices to play varying parts. Furthermore, a significant omission in Olmstead’s book is the lack of discussion
regarding approaches to accompanying and improvising in a solo setting. This project attempts to address these issues, expanding on the multiple-voice concepts as a means of playing multiple parts simultaneously, and exploring accompaniment and improvisation in solo piano performance.

Riccardo Scivales’ (2010) manual Jazz Piano: The Left Hand is a valuable resource as it is one of the few texts that provides description of left-hand approaches for jazz piano. Scivales starts his manual by explaining, “One of the most frequently asked questions by jazz piano students is, ‘What do I do with my left hand?’ This book tries to provide an answer” (p. xi). While not specific to solo piano, a number of the techniques are translatable to solo performance, such as discussions on left-hand options for Latin piano, and an analysis of various left-hand styles from throughout history to the present day. Mike Longo’s (1978) Developing the Left Hand for Jazz Piano presents a similar intention, engaging with concepts regarding approaches for voicings and rhythms for left-hand comping. Longo suggests that “the problem with most pianists is the lack of information on how to train and develop the left hand to function properly” (p. 1). These resources both address the issue of limited-left hand dexterity in jazz piano performance. While both texts place most of their focus on ensemble performance, a number of the ideas presented were applicable to solo playing.

This raises the question, why is solo jazz piano performance not commonly addressed in education manuals? An interesting point regarding this is raised by jazz pianist and author Steve Sedergreen. Sedergreen’s (2011) educational manual Start Playing Jazz Piano Now places a focus on the fundamentals of beginning jazz piano, presenting a new method of approaching voicings, and developing improvising from a deep-listening and story-telling perspective. Sedergreen describes why solo performance is not addressed in his manual, making it clear that the market for his text is beginners:

When starting to play jazz piano, it is best to begin by playing chords in backing style or trio style, only; leaving the other styles aside for the time being. This way, you are not attempting too much too soon across all of the registers, which will allow you to consolidate your development as a pianist in preparation for playing with other musicians. (p. 27)

Sedergreen elaborates this point further:

Solo piano is the hardest setting to perform when you start on your initial journey as an improvising jazz musician. It takes time to develop one’s voice, deep listening skills and the technique to master the whole range of the piano. I strongly believe one needs to master the keyboard as an ensemble instrument before tackling it as a solo jazz pianist. Most participants can learn an arrangement and reproduce this but
really learning how to play one’s ideas in the moment takes time. (S. Sedergreen, personal communication, April 13 2013)

The implication that solo pedagogy should only be commenced after establishing ensemble techniques does potentially provide a justification as to why most jazz piano education manuals do not delve into the topic of solo performance; a firm grounding in the basic skills of jazz piano is important in developing a musician’s technique and approach. Sedergreen’s comments do not discount the importance of solo performance, instead simply indicating that it is a different stage of the learning process. I agree with this sentiment, but would also assert that this does not discount the need for more educational material for solo performance techniques and approaches. This remains an underrepresented aspect of jazz piano pedagogy.

This short review of jazz piano pedagogy, supplemented by the list in Appendix A, highlights the existence of education manuals that discuss methods and techniques for jazz performance. However, as highlighted, many of these do not delve into solo performance in detail. This project does not intend to fill this void of pedagogical material; that is beyond the scope of this research, and is a significant area that requires more investigation. Instead, this project takes a step to provide more insight into developing an example of a possible solo piano approach, exploring assimilation, composition and improvisation through reflective practice, increasing discursive evidence regarding solo piano performance. The next section focuses on literature relating to reflective practice, especially practice-led methodologies that provided a model for this research.

2.2 Practice-Led Research Methodologies

Practice-led methodologies informed the approach that was employed in this project. Especially significant were projects that involved self-reflexive analysis, or assimilation as a method of creating new techniques. This section highlights examples of existing practice-led research projects that provided models for the approach used.

Marc Hannaford’s (2012) Masters project *Elliott Carter’s Rhythmic Language: A Framework for Improvisation* is an example of assimilation techniques being employed through practice-led means. In his research, Hannaford studied the theoretical properties of composer Elliott Carter’s rhythmic language, and subsequently applied the findings into his own practice, framed in composition and
improvisation. Rather than simply analysing the material, Hannaford’s reimagining of these rhythmic
devices into his own craft provided means for more personalised exploration of the techniques. The
performance results were a unique blend of Carter’s language and Hannaford’s own idiosyncratic
approach. While Hannaford’s research does not directly relate to solo piano, the methodology of
applying properties of another composer’s music into one’s own craft provided a model for the
method used in this exegesis.

Other research projects investigated that employ assimilation techniques included Chris Martin’s
Personal Jazz Style*. In his project, Martin examines the effect of assimilating 12-tone composition
techniques into his own personal jazz style. Two recent PhD studies by drummers Daniel Susnjar and
Simon Barker also apply assimilation as a methodological approach, investigating application of
assimilating non-Western percussion influences onto Western drumkit. Barker’s (2010) thesis,
‘Scattering Rhythms’: The Koreanisation of the Western Drumset looks at assimilation of Korean
rhythms and Korean approaches to percussion, and Susnjar’s (2013) thesis, *A Methodology For the
Application of Afro-Peruvian Rhythms to the Drumset for Use in a Contemporary Jazz Setting*,
investigates the rhythms of Peruvian percussion. Both Barker and Susnjar apply the rhythmic
techniques and certain musical elements from their selected style, and revoice the ideas across the
Western drumkit, creating unique results. Both projects also explore broader pedagogical benefits of
their work for other drummers, outlining methods for potential student development.

Auto-ethnographic approaches to practice-led research provided guidance on self-reflective analysis.
Two examples of this in the jazz and improvised genre are Rob Burke’s (2012) *Analysis and
Observations of Pre-Learnt and Idiosyncratic Elements in Improvisation: a Reflective Study in Jazz
Performance* and Peter Knight’s (2011) *The Intersection of Improvisation and Composition: a Music
Practice in Flux*. Their writing observes post-performance results of their improvisations, using self-
reflective analytical techniques in order to develop and trace growth in their art-forms. Both theses
present methodological approaches for how analysis of improvisations can be articulated and
justified academically. Similar self-reflective methods, such as journaling, are applied in this project.

Tom O’Halloran’s (2011) composition-based exegesis *Sustained Aspects and Precursors: Towards a
Stylistic Synthesis* provides a valuable model for assimilation-driven compositional approaches.
O’Halloran discusses several of his own compositions in terms of architecture, harmonic and
rhythmic properties and the underlying trend in his music towards an integration of jazz and art
music concepts and techniques. Discussing the creation of new music from the assimilation of
borrowed material, O’Halloran draws this conclusion:
It seems correct to say then, that essentially when composing via improvising or be it careful planning and organisation, one is essentially doing the equivalent thing – searching for new material to then shape, mould and re-present in a personal, interesting way. Whilst being informed by the European Avant-Garde, the conceptual end point throughout this portfolio has always been to sufficiently embrace these approaches in order to synthesise and re-present art music and jazz genres in my own manner. (p. 100)

While not specific to solo piano, O’Halloran’s research reinforces the validity of assimilating borrowed concepts as compositional devices for the piano, jazz trio, and orchestral settings. Through deriving inspiration from wide-ranging sources and blending them with the composer’s personal approach, idiosyncratic outcomes that are not derivative of only one artist or style can be obtained.

2.3 The Role of Recordings

While the literature regarding solo piano education has been shown to be relatively scant, a range of recordings of solo jazz piano performance demonstrate a variety of techniques, voicings, arrangements and approaches to solo performance, providing valuable insight for this project. A discography is presented in Appendix B, listing a number of solo jazz piano albums found to be relevant and influential for inspiring approaches.

The compositions developed in this project employ assimilation techniques from influences including select techniques from the piano compositions of Chopin, Bach and Beethoven, Brazilian music, Bluegrass, and drumkit techniques. In developing each composition, recorded music specific to each piece’s influence was investigated. The influences for the pieces are also cited and discussed in each composition’s chapter.

2.3.1 Transcription to Supplement this Project

This project is not centered around transcription and analysis. It does not endeavour to transcribe, analyse and codify other pianists’ language. Jazz musicologist Dr Andrew White (1978) succinctly explains that “the purpose of studying transcriptions is to see what someone has played. That’s all” (p. 2). While a transcription shows the notes that a musician played, recordings and transcriptions do not necessarily provide insight into the practice and actual developmental process undertaken by a
musician. Rather than analyse only the outcomes of other pianist’s recordings, this practice-led project explores, tests, and document a hands-on process, supplemented by excerpts of transcriptions.

The provision of the documented process of exploring concepts through practice-led research can be highly beneficial for other musicians, providing deeper insight into the approach undertaken. There is evidence that sometimes even professional performers are not able to articulate their embodied knowledge. Pianist Chick Corea explains in an interview published in *The Contemporary Keyboardist*:

> When you ask a professional how he does something, he can’t always tell you, because the fact that a person can do something well isn’t always the result of having thought [original emphasis] about it. So, in my case, I had the experience of being asked very specifically how I do certain things that I and others know I do, and being stumped for an answer. I realized that I never did sit down and work out how I arrived at them, you see, because you can just go right to certain things. So the professionals in an area are still not necessarily the best ones to ask about it. And I find this to be especially true with artistic and similar high skills, as opposed to mechanical subjects like bridge building or nuclear physics. (Corea via Novello, 1986, p. 421)

Essentially Corea is suggesting that even if a pianist is achieving a technique in performance, they may not be able to explain what they were doing or the process they undertook to get to that point. This is why practice-led research projects can be valuable to musicians, as they document processes undertaken and the experiences of the artist in developing their craft.

For this project, it was preferred to focus on providing discursive evidence of the practice-led steps taken to develop a solo piano approach. So while transcriptions supplement the research, a singular focus on transcription and analysis alone was deemed not the most appropriate method for this project.

### 2.4 Summary of Literature Review

Although this literature review is not exhaustive, it provides an introduction into recent practice-led research in the field of music performance, and also to the state of pedagogy in solo jazz piano, thus providing a background to guide the research. It has been identified that solo piano is an underrepresented aspect of jazz piano pedagogy. A detailed methodology is presented in the following chapter, outlining how the development of techniques will occur in the research.
3.0 Methodology

3.1 Practice-Led Research as a Methodology

Research methods pertaining to self-reflective and practice-led approaches, especially in the areas of jazz and improvisation, are relatively new methodological approaches. Compared to more established forms of research, practice-led methodologies (PLR) are less common in the research field (Janesick, 2001; Leavy, 2008; Nelson, 2013). Leavy (2008) suggests that when compared to other more concrete forms of research, such as qualitative and quantitative, the fluidity of a PLR project can lead to ambiguity regarding what constitutes knowledge and research:

Although arts-based practices are an extension of the qualitative paradigm, these methods practices have posed serious challenges to qualitative methods conventions, thus unsettling many assumptions about what constitutes research and knowledge. (p. 9)

However it is this flexibility that is precisely why PLR is a suitable methodology for this research. Bolton (2010) legitimises PLR methods when she argues that reflective practice in performance is most revealing when one becomes immersed in the action of performance as against reading or writing about it (p. xiv). Gray and Malins (2004) suggest that PLR can be seen as a process of resolving issues, problems, and challenges raised in practice. This is only achieved through undergoing the experience of ‘doing’, as opposed to ‘reading about’. Through analysis and description of their experiences, practice-led researchers take steps “in making the tacit more explicit” (Nelson, 2013, p. 52), benefiting both the artist’s personal craft and similar-minded practitioners.

Tacit knowledge is described by Michael Polanyi (1967) in *The Tacit Dimension* as the idea that “we can know more than we can tell” (p. 4). There is knowledge inside of us that is ingrained, such as tradition, inherited practices and implied values. While these can be discussed theoretically, it is only through the act of ‘living’ and through experience that this knowledge can be truly understood. Discussing tacit knowledge as it relates to music, Alerby and Ferm (2005) suggest that “music does not achieve significance and meaning before human beings experience it by music making, composing, listening, and dancing” (p. 180). In this project, a PLR research model is used as it supports integrating written research with evidence of the practice, which in this exegesis occurs in the form of notated compositions and a recording. The discussion would be incomplete without an
audible reflection of the concepts, techniques, methods and outcomes that occurred as a result of the research and practice process. Furthermore, the experience of actually engaging with solo piano performance provides the researcher with the opportunity to live that experience, and through written reflection take steps towards, recalling Nelson’s words, making the “tacit more explicit” (2013, p. 52).

In his book *Thinking in Jazz*, Berliner (1994) outlines the most common types of jazz research that are undertaken. His list includes autobiographies by major jazz figures (largely anecdotal), historical interpretations of the music’s development chronicling successive style periods, jazz criticism, textbooks describing musical features, analytical studies of great solo styles, sociological accounts of the jazz community, philosophical speculation on the nature of improvisation in relation to composition, and improvisation method books representing various theoretical approaches. Berliner then explains:

> Despite the importance of all these sources, it seems to me that, taken together, they gave but discrete glimpses into the individual and collective processes of learning, transmitting, and improvising jazz. (p. 3)

Janesick describes how “the researcher is the instrument in qualitative research as in artistic practice. Moreover, both practices are holistic and dynamic, involving reflection, description, problem formulation and solving, and the ability to identify and explain intuition and creativity in the research process” (Janesick, 2001). The PLR methodology focuses on my role as a composer, performer, and improviser, and the insights that emerge from my creative process. Dean and Smith (2009) argue that the two main researchable components of PLR are equally weighted in terms of importance, these components being the completed creative product, and the process an artist engages in whilst creating the work (p. 5). Both the final work and the process undertaken are significant in this research. Haseman (2006) describes this approach to PLR as the:

> ...documentation of the process of preparing and developing skills for the performance which sees the material outcomes of practice as all-important representations of research findings in their own right. (p. 80)

Qualitative methods support the practice-led aspects of this methodology. While this research does not involve interviews, approaches to analysis such as self-observation and observation of other musicians are significant in this inquiry. This approach follows Denzin and Lincoln’s (1998) description of what determines qualitative research:
Qualitative research involves the studied use and collection of a variety of empirical materials - case study, personal experience, introspective, life story, interview, observational, historical, interactional and visual texts – that describe routine and problematic moments and meanings in individuals’ lives. (p. 3)

The research process outlined in this methodology focuses on the development of compositions and accompaniment patterns, and the process of developing relevant improvisational approaches over the developed compositions.

3.2 Developing Accompaniment Patterns and Improvisational Facility

This research project uses a PLR research paradigm. Journal entries are maintained throughout all stages of research, containing sketches of ideas, compositions, draft ideas, and reflection on the aesthetic implications and musical result of the practice process. Third-party feedback is sought from my teachers and supervisors, and personal communications with leading Australian pianists from lessons and email contact (used with permission) are also used in the study for broader feedback.

Four pieces were composed in the research, each showcasing specific techniques that were developed. While some techniques were shared between pieces, each composition placed a specific focus on certain technical outcomes. The table on the following page provides a summary of this, with the title of the composition, the major influence that used in the assimilation process, and the main technical outcome that was sought.
In order to develop and practice the techniques, a three-stage process of generating, investigating, and reflecting was followed:

- Assimilation/Composition
- Performance/Improvisation
- Reflection

### 3.2.1 Assimilation/Composition

The assimilation of outside sources into a musician’s craft offers harmonic and rhythmic approaches foreign to one’s own sound, providing potential access to unique outcomes. In discussing this topic, Kernfeld (1995) implores that the development of a unique voice on the instrument is “the most coveted possession in jazz, a virtual requisite for being counted among the giants of the music” (p. 169). The development of a personal approach to one’s craft derives from embodying influences that one desires to display in performance. In an interview, pianist David Braid reinforces the importance a selective approach to musical influences, and how this has influenced his own sound:

> I didn’t listen widely, but I really listened to detail. I listened with a filter on for what I liked, and not be afraid to reject what I didn’t like. This filter enabled me to make a decision about how I’m going to approach solo piano playing in my own way. (Braid via Hum, 2011, para 7)
This project investigated a variety of sources and derived accompaniment patterns for numerous styles of performance. This was to develop a broad palate of approaches for solo piano. Braid explains that for solo piano performances, “I need to invent multiple solutions to do it so I can achieve sufficient contrast throughout an entire evening of solo piano” (Braid via Hum, 2011, para 10). This desire for a broad palate of approaches informed decisions regarding the non-jazz genres investigated, with the chosen styles for the project being techniques from Western classical piano composers, Brazilian music, Bluegrass, and drumbeats and rudiments. These were selected due to the contrasting nature of each style. Techniques taken from these styles are reimagined onto the piano, and then are framed into compositions written specifically to highlight the effect of each technique.

3.2.2 Performance/Improvisation

Approaches towards developing improvisational facility in a solo piano setting are investigated in relation to performing with accompaniment ostinatos. Hargreaves’ (2012) article Generating Ideas in Jazz Improvisation: Where Theory Meets Practice suggests a potential process by which improvisation is learned and practised, and the steps necessary for implementation in performance. Her four-stage approach to developing improvisational facility (p. 358) guides the investigation and discussion. The dot points provided outline how her model is investigated in this project:

1. Idea Generated
   - Discussion regarding the motivation for the development of practised improvisational ideas, commonly devised to engage with and overcome related hurdles

2. Motor Schema Devised
   - Devise practice methods to develop relevant coordination, in order to correctly execute improvisational concept in relation to the left-hand ostinato.
   - Experimentation with a variety of methods to develop motor schema (One example is David Braid’s “In-Time/No Pulse” method (Hum, 2014) discussed in detail later)

3. Motor Programme Executed
   - Practice-led research to document how this motor programme was executed, engaging with what was deemed to be successful and what was not
4. Musical Output Produced
   - Recordings
   - Reflection on outcomes

The four stages provide an overview of the musician’s journey from the ‘knowing’ to the ‘doing’ (Hargreaves, 2012, p. 354). Since Hargreaves’ writing is focused on beginner-improviser pedagogy, the article only provides shallow analysis of the four steps listed above. Regardless, the four-stage process is used to frame the investigation of improvisational development in this project, following each stage and tracking the discoveries and outcomes.

Furthermore, Hargreaves’ also suggests the concept of “strategy-generated ideas” as a practice-approach, an idea that is employed in this project. Hargreaves defines strategy-generated ideas as approaches that are “consciously formulated and implemented with an intended design. Strategies provide a specific plan for behaviour as a means of solving the compositional demands of an improvisation” (p. 359). A survey of Australian jazz musicians by Hargreaves identified that 59% of respondents indicated they used deliberate strategies as sources of ideas for improvisation (p. 360). Jazz saxophonist Lou Donaldson once explained that he used to “work out little patterns to get through difficult spots” to improvise over pieces (Berliner, 1994, p. 234). This approach is used in the development of improvisational facility in this project, guiding the selected practice-methods to result in the desired performance outcome.

The improvisation component of this project looks at the practice and process of developing an improvisational approach in a solo piano context. Investigating the concepts of idea generation, engaging critically with the development of motor skills at the piano, and analysing musical outcomes contribute to discursive knowledge in this area. Practice-led research methods support this personal and developmental approach to research. To clarify, this project does not act as a manual of tools for improvisation, but instead uses practice-led methodology to follow the development of an improvisational approach in relation to the devised accompaniment patterns, contributing to discursive knowledge of this process in relation to solo piano.
3.2.3 Reflection

A process of reflective practice further informed the outcomes of this research. Haseman describes how reflection forms an essential aspect of the practice-led process:

Reflective Practice, with its accompanying “loops” of feedback and critique, offers practice-led research in Theatre and the other creative arts a coherent framework within which they can develop the methods and tools for deepening and documenting their emerging understandings of practice. (Haseman via Barrett & Bolt, 2007, p. 153)

Haseman cites examples of how reflective practice employs tools such as journaling and recorded feedback methods to capture “reflection-in-action”. Resultantly, similar processes were used in this project; the practice process was documented in a journal of activities, detailing observations related the practice, draft compositional ideas, thoughts and reflections, feedback from lessons, and notated practice exercises. The final outcomes of the practice process were documented in a studio recording.

Supplementing my own reflection was the wisdom attained from feedback and discussions with my piano teacher and supervisors. Notes taken would be studied, with the suggestions shaping my approach. Their reflections provided guidance for both the composition and improvisation components of the project, and were formative in shaping my pianistic approach.

Another component of the reflection process was to analyse the improvisations after they occurred in-performance. Sawyer (1992) and Pressing (1987) agree that most analysis for the improvising musician is done after the performance, in the form of listening to the outcomes. Burke (2012) elaborates, suggesting that “analytical theory can occur after the act of performance and findings can be adopted to further develop skills; an important part of a reflective practice model” (p. 20). This post-performance reflection occurred mainly through identification of points where practiced techniques were successfully employed in performance, as well as a discussion regarding their effect on the shape of the improvisation.

Reflection forms a major aspect of this exegesis. It is central to the development and analysis of the compositional process and related decision making, the development of improvisational facility, and the study of the recorded outcomes. These aspects are discussed in detail throughout the exegesis.
Part Two
4.0 Composition and Performance

Using the frameworks described in Part One, a series of compositions were written to demonstrate a range of techniques devised for solo jazz piano performance. Each composition in the project assimilated techniques from a variety of influences, with the intention of developing accompaniment patterns that provided departures from the commonly taught right-hand solo/left-hand chord approach found in jazz education. The development of the techniques sought to liberate the pianist from ensemble methods of comping, and facilitate a more independent approach for the solo jazz piano performer; techniques that provide self-sufficiency with rhythmic and harmonic accompaniment.

The compositions are briefly outlined below, with short examples of the main accompaniment figures, and description of each piece’s intention. This is followed by a detailed discussion of each piece. The final section of Part Two (chapter five) is an investigation of the practice process that was undertaken for learning to improvise over the accompaniment ostinatos.

4.0.1 Bradley’s Art Overview

Inspired by select techniques from works by composers such as Chopin, Bach and Beethoven, Bradley’s Art investigated using two hands to perform four voices as a departure from the commonly taught right-hand solo/left-hand chord approach. The piece also explored the effect that a heightened application of voice-leading can have on solo jazz piano performance. Jazz pianist Brad Mehldau’s use of similar influences is investigated in this chapter, especially tracks from his album Elegiac Cycle (1999).

Figure 4.1 Excerpt of the opening bars of Bradley’s Art, showing the main accompaniment pattern
4.0.2 Cat Donkey Hedgehog Overview

*Cat Donkey Hedgehog* took its major influence from Bluegrass music. Techniques from this style were assimilated to create a driving accompaniment pattern between both hands. The layered elements of Bluegrass arrangements, and how these layers create forward momentum, are explored in this chapter. Two compositions by pop pianist Ben Folds are investigated to develop insight into his method of replicating Bluegrass rhythm section techniques onto the piano, with techniques being prevalent on his compositions *Jesusland* and *Do It Anyway*. *Cat Donkey Hedgehog* explored the effect that using a repetitive ostinato as a framework for accompaniment has on solo jazz piano performance.

![Figure 4.2 Excerpt of the opening bars of *Cat Donkey Hedgehog*, showing the main ostinato](image_url)

4.0.3 Jezza Overview

Brazilian guitar and bass parts form the central ostinato in *Jezza*. The piece explored hand-splitting as a means of layering different parts into one hand to create an accompaniment. In *Jezza* this was applied to the left hand to be able to achieve both the Brazilian guitar and bass parts simultaneously, leaving the right hand free to improvise. Brazilian pianist Egberto Gismonti’s use of hand-splitting was investigated in this chapter, especially on his piece *Sanfona*, inspired by accordion techniques.

![Figure 4.3 Excerpt of the central accompaniment pattern from *Jezza*](image_url)
4.0.4 Bobby Eagle Overview

*Bobby Eagle* derives influence from drumkit and rudiment techniques, exploring what these can offer the solo jazz pianist. The central figure from this piece is derived from a drumbeat from the track *Squarepusher Theme*, by English producer Squarepusher. The drumbeat from this track provided the rhythmic elements for both *Bobby Eagle’s* accompaniment and melodic parts. The drumbeat from Sting’s *Seven Days* and the drum rudiment “paradiddles” were also assimilated to form accompaniment patterns in this piece. Canadian jazz pianist David Braid’s approach in his use of drum transcriptions to develop arrangements for piano is discussed in this chapter.

![Figure 4.4 Excerpt of the main melody and accompaniment of Bobby Eagle](image)
4.1 Bradley’s Art

<table>
<thead>
<tr>
<th>Title</th>
<th>Length</th>
<th>Influence</th>
<th>Techniques</th>
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<tbody>
<tr>
<td>Bradley’s Art</td>
<td>6:31 mins</td>
<td>Select piano compositions of Chopin, Bach and Beethoven</td>
<td>-Multiple-voice arrangement between the hands</td>
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<td></td>
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<td>-Voice-leading techniques</td>
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The composition *Bradley’s Art* assimilated select stylistic techniques from piano compositions of Chopin, Bach and Beethoven towards developing an approach for solo jazz piano. Jazz pianist Fred Hersch (1997) suggests that study into the works of Western classical composers can be of great value to a jazz pianist:

> As an improviser, you can listen for elements to incorporate into your own performance and compositions, such as harmonic devices, pianistic textures, thematic variations, the use of the left hand, and so on. One of the best things you can get out of listening to piano music is that it will make you aware of many pianistic possibilities, and hopefully it will encourage you to experiment with the instrument on your own. (p. 112)

These pianistic possibilities mentioned by Hersch motivated the investigation undertaken in *Bradley’s Art*. The intention was to explore generating alternative methods for solo jazz piano performance beyond the commonly used right-hand solo/left-hand chord approach found in jazz. In this chapter, the two main techniques explored were playing multiple-parts in one hand (as distinct from a chordal approach), and employing a more conscious application of voice-leading techniques to provide harmonic and rhythmic motion. Overall, the intention of these techniques was to aid in creating a solo jazz piano approach that sounded full and independent, not requiring support from other instruments.
4.1.1 Pursuing the Western Classical Music Influence

A number of elite jazz pianists have an audible influence of Western classical piano techniques in their playing and approach. Petrahn’s preface for *The Harmony of Bill Evans* (Reilly, 1992) explains that “Art Tatum and, more so, Bill Evans, also absorbed the music of the Western classical world, from Bach to Schoenberg, and any analysis of their styles must bring this to the fore” (p. iii). Describing his own piano playing, Bill Evans once explained that “Bach changed my approach to the piano” (Pettinger, 2002, p. 39). Brad Mehldau is another who has incorporated techniques of certain Western classical composers into his playing approach, with his appreciation of classical music heard overtly on his solo piano album “Elegiac Cycle” (Mehldau, 1999). In an interview, Chick Corea highlights the key aspects of Western classical repertoire and performance techniques from which he draws influence:

> The quality of sound, the detail one tends to the composition, the detail one tends to the blend and balance of the rendition – and also the fineness of the intention (...) My contact with classical music has just heightened my awareness of all those questions and my desire is to bring what I feel I’m beginning to learn about that into my own music. (Corea via Novello, 1986, p. 434)

Keith Jarrett is another jazz pianist who has studied classical music and applied certain techniques into his jazz approach. Jarrett’s passion for classical music can be seen in his multiple releases in the style, somewhat of an anomaly for a jazz pianist. He has released recordings of Bach’s *The Well-Tempered Clavier* book 1, *Goldberg Variations* (on harpsichord), Handel’s *Keyboard Suits*, Shostakovich’s *Preludes and Fugues*, and a number of Mozart’s piano concertos. In 1991 he was voted Best Classical Keyboardist 1991 in a Keyboard magazine editors poll, as well as winning the Classical CD of the Year 1992 from CD Review (for the Shostakovich *Preludes and Fugues* Album) (Bruer, 2003, p. 89). Much of his ensemble and solo work uses intricate voice-leading methods in inner-voices to create moving textures. Figure 4.5 presents an excerpt Jarrett’s solo piano performance of jazz standard piece *Somewhere Over the Rainbow*. The use of four distinct voices and independent voice-leading between parts is seen in every bar.
A similar four-voice approach is used in the development of the composition *Bradley’s Art*. This technique of voice-leading is explored as a means of developing a greater sense of orchestration for solo performance. There is a common pitfall inherent in a lack of educational material for solo playing, whereby most educational manuals encourage the pianist to learn ensemble-style voicings by rote, providing only a very simplistic approach to voice-leading. Mehldau (2007) explains the issue with the outcomes of this approach:

One such principle is voice-leading – the notion that each voice in a chord moves with logic and integrity, and corresponds with the other notes. The tendency in jazz is often to split the music into a single note melody and a chordal accompaniment, and for a jazz pianist that division takes place, more often than not, between the right and left hand respectively. Individual voice-leading often takes a back seat in this approach when the left hand plays fixed chords that have been worked out ahead of time, and therefore will not necessarily have any melodic integrity in the way they move between each other. (Para 15)

Dr Daniel Arthurs (2011) reinforces this sentiment, explaining:

While jazz music often emphasizes parsimonious voice-leading, the motions just described between harmonies are not a given stylistic requisite in jazz music, not even in the tonal jazz repertory. (p. 9)

One side-effect of the ensemble-focused approach to jazz piano training is that voice-leading between chords in jazz has inadvertently become of lesser significance in jazz pianist’s craft, especially at the student level. Most pianists learn a method where the right-hand plays single-note melodies while the left-hands provides accompaniment with rote-learnt voicings. In the search of a
means to counter this trend in solo jazz piano performance, it was found that certain piano works of composers such as Chopin, Bach and Beethoven placed a much greater focus on voice-leading in composition. Through assimilation of techniques derived from these composers, departures from the common right-hand solo/left-hand chord approach were sought in the composition of Bradley’s Art. The application of these composers’ influence one the composition and arrangement of Bradley’s Art is discussed in the next section.

4.1.2 Developing the Accompaniment Ostinato in Bradley’s Art

The initial stages of the development of an accompaniment ostinato for Bradley’s Art focused on identifying desirable characteristics that were sought for the piece. The creation of an accompaniment ostinato that projected a feeling of flow and continuity was desired, requiring the employment of methods that would make the accompaniment pattern expressive. Arthur Hedley (1947), author of The Master Musicians: Chopin, describes how Chopin managed to draw this characteristic from the piano in his compositions:

He had an instinct amounting to genius for inventing melodies that would be actually ineffective if sung or played on an instrument capable of sustaining tone but which, picked out in percussive points of sound each beginning to die as soon as born, are enchanting and give an illusion that is often lovelier than singing itself. (p. 136)

Chopin’s Etude #6 (opus 10) was investigated in this project as an example of the lyricism Chopin could bring to the piano through his compositions. The accompaniment figure in this Etude was influential in the development of the ostinato in Bradley’s Art. Key facets of Chopin’s accompaniment that were identified were the use of four parts between the hands, with each voice having its own sense of melodic logic. Chopin’s designation of four voices recalls Mehldau’s approach to splitting the hand presented in Figure 1.1. Also identified was Chopin’s application of voice-leading, a technique that, by employing four voices, receives enhanced opportunity for application. The use of voice-leading creates both points of melodic interest, an internal sense of harmonic logic to the arrangement, and rhythmic forward motion through the movement of voices. An excerpt of Chopin’s Etude #6 (Opus 10) is presented in Figure 4.6. Figure 4.7 supplements this, using colour-coding to highlight the employment of four voices in the arrangement.
Fundamental to the Etude’s rhythmic flow are the left-hand arpeggiations. Hedley (1947) describes this piece as having a “plaintive melody, accompanied by a middle part crawling within a narrow space” (p. 143). Subtly weaving between close intervals of mostly minor and major 2nds, the accompaniment part gives an impression of a sustained harmonic pad. This feeling is attained through the creation of a driving yet subtle sense of continuity and flow. Arnold Schoenberg (1967) in his book *Fundamentals of Music Composition* describes how a moving accompaniment pattern can be valuable in combatting what he believes to be the theoretically limited-expression characteristics of the piano:

> The method of repeating full chords is related to the repetition of harmonies in broken-chord style. It derives from the same circumstance: the desire to revive the short-lived tone of the piano. (p. 4)

Schoenberg’s ‘broken-chord’ style provides a heightened sense of forward motion, attained through the constant movement and voice-leading of the arpeggiation, as seen in Figure 4.6 above. Dynamics and articulation play fundamental roles to expressing this sentiment, with a quiet, legato touch required to give this illusion of sustained parts. *Bradley’s Art* explores these concepts, attempting to provide feelings of sustain, expression and forward motion on the piano. Figure 4.8 shows the first two bars of *Bradley’s Art* with the central accompaniment ostinato, employing four voices and voice-leading techniques.
As well as giving the impression of a sustained harmonic pad, the accompaniment figure in Chopin’s *Etude #6* provides a feeling of thematic continuity throughout the piece, making the accompaniment pattern a defining aspect of the composition. Schoenberg (1967) describes the potential available from employing accompaniment parts as thematic motifs:

As a unifying device the accompaniment must be organised in a manner similar to the organisation of a theme: by utilisation of a motive, the *motive of the accompaniment* [original emphasis]. (p. 83)

Consequently, a similar effect was sought in the development of *Bradley’s Art*, whereby the accompaniment pattern could create a sense of thematic continuity.

The multiple-voice approach found in Chopin’s *Etude 6* raises some technical challenges for the pianist, issues that were also encountered when developing *Bradley’s Art*. Specifically this relates to the idea of sustaining a note while simultaneously playing an independent moving line in the same hand. Bach’s three-part inventions (the *Sinphonias*) had their compositional genesis in addressing this issue. The works come with a preface from Bach, explaining that these works provide:

Straightforward instruction, in which amateurs of the keyboard, and especially the eager ones, are shown a clear way not only (1) of learning to play cleanly in two voices, but also, after further progress, (2) of dealing correctly and satisfactorily with three obbligato parts. (Tomita, 1999)

The excerpt of Bach’s *Sinphonia 8* in Figure 4.9 uses this idea of playing a held note in one voice while another voice in the same hand moves plays an independent line. This requires a specific dexterity from the pianist.
Similar to the ‘broken chords’, this technique provides scope for a greater sense of expression and flow, as well as allowing for multiple independent lines and voices to occur in one hand. The same technique is seen in a number of Beethoven Sonatas. The excerpt of *Piano Sonata #1* in Figure 4.10 presents a moment where Beethoven employs three voices; the melody (voice one) is sustained while the other fingers provide a moving counter-melodic accompaniment. The melody in this section is very slow moving, with the interest being created by the arpeggiations in voice 2, and the displaced bass notes.

Occasionally in *Bradley’s Art* this technique is employed to create counter-melodic material. Figure 4.11 presents an example where while voices one and four sustain long notes, voices two and three perform a syncopated two-voice countermelody.
Similarly, a variation on this idea was to harmonise voices two and three. This allowed for moments of richer texture, and a shift in intensity. In Figure 4.12, this intensity is increased further by voice four’s heightened activity, playing crotchets to provide a more driving pulse.

![Figure 4.12 Voices two and three harmonising to form accompaniment in Bradley’s Art (Bar 5) 0:12 mins

This technique of playing sustained notes in one voice while playing moving lines in another has been employed by Beethoven as an accompaniment method. The adagio movement of Beethoven’s Piano Sonata #1 shows two voices occurring in the left-hand part, with the bass note being sustained while the other fingers in that hand playing a separate part. An excerpt is shown in Figure 4.13. This technique is used in the accompaniment of Bradley’s Art, as was shown in Figure 4.8.

![Figure 4.13 Left-hand two-voice accompaniment figure used in Beethoven’s Piano Sonata #1 Adagio Movement (Beethoven, IMSLP.org) (Bars 9-10)

Mehldau’s album “Elegiac Cycle” (1999) is one example of a jazz musician applying a Western classical music influence in their compositional approach. At times on this album, Mehldau uses variations on the techniques discussed above. Figure 4.14 is an excerpt of his piece Resignation. In this piece, the internal voices of the accompaniment propel the music, supporting the slower moving melody and bass line in voices one and four.
As can be seen in Figure 4.14, the arpeggiation are sometimes shared between the right and left hands in voice two (green) and voice three (purple). This allows the accompaniment line to spread over a greater range, as well as providing the opportunity for voice two to sustain some of its notes to provide a counter melodic effect. This is especially visible in bars two to four where voice two takes over the arpeggiation on beats three and five. Schoenberg explains that “in piano writing the necessity of keeping the accompaniment with reach of the fingers sometimes requires co-operation of both hands, or a shift from hand to hand” (p. 87). The same effect was employed in Bradley’s Art throughout the arrangement, an example of which is presented in Figure 4.15. Voice two’s part fills the gap on the 4th semiquaver of beat one, and is then sustained for the entirety of beat two.

As highlighted earlier, a considered approach to voice-leading was important toward generating a harmonic progression. Bradley’s Art took particular inspiration from compositions such as Chopin’s Etude #6 and Chopin’s Prelude 28 #4. An excerpt of Chopin’s Prelude 28 #4 is shown in Figure 4.16. The inner voices and bass part make use of small intervallic steps, moving either in tones or semitones. The voice-leading drives the harmonic motion, using moments of tension and release to pull the ear through the music.
Voice-leading approaches such as this are endorsed as valuable compositional tools by Schoenberg (1967). In regards to the harmonic motion, Schoenberg highlights the value of having a flowing bass part driven by its own melodic logic and voice-leading, suggesting this as being one means by which to develop effective accompaniment:

> For the sake of fluency a bass which is not counter-melodic should make free use of inversions, even where they are not harmonically necessary. (p. 86)

The use of jazz nomenclature in Figure 4.17 brings into focus Chopin’s use of inversions in Prelude 28 #4. Also visible is the effects that small intervallic movement within the inner voices can have on the chord quality.

This method of voice-leading through the use of inversions was explored in the composition of Bradley’s Art. Figure 4.18 highlights the voice-leading between chords used in the accompaniment in
the first six bars of Bradley’s Art, with the arpeggations re-notated as vertical sonorities for ease of analysis.

\[\begin{array}{cccc}
E& F^{17} & G^{4/B} & C^A
\end{array}\]

**Figure 4.18** A harmonic analysis of an excerpt of the chord progression of Bradley’s Art, highlighting a focus on voice-leading in both the bass-line as well as internal voice movement.

In Bradley’s Art, the focus on voice leading, especially in the bass-line, provided the unprecedented physical benefit for playability of the ostinato; since the left-hand was not required to jump frantically around the keyboard, shifting the ostinato through different harmony was able to be executed smoothly.

### 4.1.3 The Solo Section Accompaniment

Figure 4.19 shows the central ostinato devised for the improvisation section of Bradley’s Art. Of key note is the omission of beats 2 and 4. In the arrangement of the melody, these beats were performed by the right hand in voice 2. For the improvisation accompaniment ostinato it was decided that the omission of these beats created a more syncopated outcome. The excerpt shows one bar of the accompaniment ostinato. Maintaining the same rhythmic structure, the ostinato adapts and follows the composed harmony of the piece.

\[\begin{array}{cccc}
\cdot & \cdot & \cdot & \cdot
\end{array}\]

**Figure 4.19** Excerpt of the central accompaniment ostinato of Bradley’s Art.

This ostinato provided an accompaniment framework for the improvisation. Variations on this left-hand theme were also explored, practised, and utilised in the performance. These are discussed in the chapter on improvisation in this exegesis.

The composition Bradley’s Art assimilated select techniques from the piano compositions of Chopin, Bach and Beethoven, towards developing an approach for solo jazz piano. In this chapter, the two main techniques explored were playing multiple-parts in one hand (as distinct from a chordal approach), and employing a more conscious application of voice-leading techniques to provide
harmonic and rhythmic motion. These techniques aided in creating an accompaniment pattern for solo jazz piano performance that sounded full and independent. The final score is presented in Appendix C.
4.2 Cat Donkey Hedgehog

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<th>Title</th>
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<th>Influence</th>
<th>Techniques</th>
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<tbody>
<tr>
<td>Cat Donkey Hedgehog</td>
<td>8:33 mins</td>
<td>Bluegrass</td>
<td>- Repetitive ostinato as a framework for solo jazz piano performance</td>
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<tr>
<td></td>
<td></td>
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<td>- Drive/Forward Motion</td>
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The composition *Cat Donkey Hedgehog* investigated assimilating stylistic techniques from Bluegrass music to create an ostinato for solo piano. A distinctive element of Bluegrass music is the feeling of forward motion that is generated by the instruments. Bluegrass arrangements capitalise on the percussive elements of the instruments, using rhythmic layering to create the driving feel for which the genre is renowned (Rockwell, 2010). This was an element of the style that I wanted to capture and bring to solo piano by exploring the development of a repetitive ostinato that employed similar methods. Reinterpreting these techniques onto piano provided the opportunity for a potential approach to achieve a similar feeling of forward motion, providing a framework for solo piano performance. One pianist who has reinterpreted Bluegrass ensemble techniques to suit the piano is pop-rock pianist Ben Folds, and his approaches are also investigated in this chapter.

4.2.1 Bluegrass Ensemble

This composition takes inspiration from the rhythm sections parts of Bluegrass music since the rhythm section commonly generates the core of the groove. The typical bluegrass rhythm section is comprised of banjo, guitar and double bass. These instruments share some sound characteristics to the piano, especially prevalent in the percussive qualities, including an immediate attack, uncontrolled decay time and a relatively short sustain. Through developing an understanding of how these instruments capitalise on and work within this sound characteristic, I sought to achieve similar results for the solo jazz piano setting.

In order to create a solo piano ostinato that employs Bluegrass techniques, common traits from the style were sought after. Therefore, this chapter does not provide a compendium of Bluegrass techniques. For more in-depth information on Bluegrass music, the journal article *Banjo Transformations and Bluegrass Rhythm* (Rockwell, 2010), the book *Bluegrass Breakdown: The Making of the Old Southern Sound* (Cantwell, 1984) and *Banjo For Dummies* (Evans, 2014) are valuable resources.
4.2.2 Drive and Forward Motion

The accompaniment pattern devised in *Cat Donkey Hedgehog* endeavours to create a feeling of drive in the music. In this instance, drive refers to a sense of momentum in performance, or ‘forward motion’. Forward motion can exist in both a technical and theoretical sense. This chapter investigates forward motion from a technical approach, whereby the technique itself gives the impression of drive in the music. This is distinct to theoretical forward motion where elements such as voice-leading and harmonic function lead the listener’s ear through the music, “the relationship between the melody, harmony and rhythm as a chord sequence progresses” (Brien, 2004, p. 2).

Bluegrass music places greater emphasis on technique and playing-based approaches to creating forward motion. It is this technical-approach to forward motion (rather than the theoretical approach) that is explored in the development of accompaniment patterns for this piece.

Bluegrass music uses a rhythmic duality to create its driving feel. Intense 16\textsuperscript{th} note banjo patterns are supported by an “oom-pah” accompaniment layer from the bass and guitar. These elements combine to create a rhythmic duality according to Dr Joti Rockwell (2010). In his article, *Banjo Transformations and Bluegrass Rhythm*, Rockwell highlights how both parts require the other to have the greatest effect; the oom-pah pattern has potential to become rhythmically stagnant without the banjo, with Rockwell explaining that “without the banjo’s sixteenth notes dominating the texture, the duple meter created by the background instruments becomes quite exposed” (p. 150). The banjo part also requires the bed of sound and regular pulsation from the bass and guitar; a busier accompaniment part would potentially result in cacophony and lack clarity of pulse. It is through the combination of the stated duple meter and the banjo’s syncopated top layer that forward motion is created.
4.2.3 Bluegrass Influences on the Composition of “Cat Donkey Hedgehog”

In order for me to better understand the Bluegrass genre for this project, a study of some popular Bluegrass music was undertaken to identify characteristics of the style. Examples include “Bill Monroe and His Bluegrass Boys”, “The Sultan’s of Slide”, Earl Scruggs, and “The Kruger Brothers”. Figure 4.20 shows a traditional Bluegrass rhythm section fulfilling typical roles on the song Bugle Call Rag. This provides a visual representation of what Robert Cantwell (1984) describes in his book Bluegrass Breakdown: The Making of the Old Southern Sound as a “rhythmic division of labour” (p. 100), in which different instruments articulate separate hierarchically related pulse layers, or the duality of rhythmic layers as described by Rockwell.

![Figure 4.20 An excerpt of the Bluegrass piece “Bugle call rag” (Monroe, 1962, track 2) 0:02 mins](image-url)

The instrument roles in Figure 4.20 are typical of a Bluegrass performance. The bass and guitar combine to create the slow-moving “oom-pah” feeling. The bass plays on-beats (beats 1, 2, 3, 4), alternating between tonics, fifths, and diatonic leading notes when changing chord. The guitars off-beats are described as “a hallmark of Bluegrass music” (Rockwell, 2010, p. 150). The combination of the bass and guitar parts led to the formation of the left-hand pattern in the arrangement of Cat Donkey Hedgehog.
The development of the driving 16th note approach used in Bluegrass banjo is often attributed to Earl Scruggs. His three-finger technique is regarded as being both the beginning as well as the pinnacle of banjo development in the style. Bill Evans (2014), author of *Banjo for Dummies*, elaborates:

> Overestimating the contribution of Earl Scruggs to the world of the banjo is impossible. Although other players used three-finger techniques before him, Scruggs took this way of playing the banjo and perfected it, literally creating an entirely new musical vocabulary for the banjo that enabled him to both play blazing-fast solos and accompany others in a Bluegrass band. (p. 164)

It is interesting to note similarities in arrangement styles between Bluegrass music and some piano music, such as ragtime. Rockwell speculates a potential correlation between these two styles:

> I've long wondered to what extent these banjo picking techniques might have actually arisen out of piano in the first place. There are clear correspondences to ragtime. The prevailing story, though, has these patterns basically as a "discovery" by Earl Scruggs, so we'll likely never know for sure. (J. Rockwell, personal communication, March 22 2014)

Figure 4.21 is an excerpt of the classic ragtime piece *Maple Leaf Rag*. Shared characteristics between ragtime piano and Bluegrass are visible; the “oom-pah” rhythm similar to the pianist’s left-hand stride, while the right hand plays syncopated 16th note patterns.

A point of difference between the Figure below and this project’s investigation is that *Cat Donkey Hedgehog* uses four distinct voices in the music, providing a melody that is independently voiced from the 16th note pattern.

![Figure 4.21 An excerpt of Scott Joplin’s composition Maple leaf rag (Leonard, 1998) Bars 17-21](image)

Drums are also often a part of Bluegrass instrumentation. The traditional part played by the drums is derived directly from the three rhythm section instruments discussed; the bass drum and off-beat accents in the snare cover the double bass and guitar oom-pah pattern, and the snare’s ghost notes provide 16th note subdivisions. Figure 4.22 presents a basic Bluegrass drumbeat:
Figure 4.22 A standard bluegrass drumbeat, played on snare drum and bass drum

Examples of this drumbeat being used in Bluegrass music can be heard on the song *Fireball* by Josh Graves (2000, track 7), *Forever and a day* by the Kruger Brothers (2010, track 1), and a cover by the Blues Brothers of *Riders in the Sky: A Cowboy Legend* (1998, track 11).

### 4.2.4 Ben Folds’ Adaption of Bluegrass Techniques

Pop-rock pianist Ben Folds uses Bluegrass techniques in a number of piano parts in his compositions. His readaptation of the Bluegrass rhythm section roles onto the piano provides a model toward assimilation for a solo piano method. Examples of this can be heard most overtly on two pieces; *Jesusland* from the album “Songs for Silverman” (2005, track 3) and *Do It Anyway* from the album “The Sound of the life of the Mind” (2012, track 7). Folds traditionally omits guitar from his band, a distinguishing feature of his personal sound. Robbie Gennet (1999) from *Keyboard Magazine* explains:

> From an instrumentation-only perspective, one of the things that sets the Ben Folds Five apart from the pop pack is the absence of guitar in the band. [Folds] “I never played with a guitar player that I could really relate to. (Para 7)

As a result, rather than including banjo or guitar in the arrangements of *Jesusland* and *Do It Anyway*, Folds imitates a banjo picking style. This simulation of the part creates a sense of forward motion similar to that heard in Bluegrass music. The two Figures over page present excerpts from these two pieces:
Two key things are central in Folds’ piano adaption of the Bluegrass techniques, and are discussed in detail below. The first is the approach to spreading the 16\textsuperscript{th} note subdivision between the hands. The second is the removal of beats 2 and 4 in the bass part for *Jesusland*.

Unlike a banjo, Folds does not play the constant 16\textsuperscript{th} -note rhythms in one-hand. Rather, the arrangement spreads the load between both hands to provide the veneer of constant 16\textsuperscript{th} notes. At times, the left hand’s oom-pah pattern interjects to fill gaps left by the right-hand. This is especially visible in the first bar of “Do It Anyway” where the right-hand rests on the “and of 2” and “and of 3” and these beats are filled in by the left hand’s off-beats. The effect of this is that the continuity of 16\textsuperscript{th} notes is maintained while also giving the right-hand freedom to function more melodically, rather than as a frantic arpeggiated accompaniment.

This load sharing also heightens harmonic possibilities, with the pianist now being able to more readily sustain certain notes while other parts continue to move. Accompaniment patterns can also exist over a greater range of the piano, allowing for richer voicings and parts.
Ben Folds makes a second modification to the original Bluegrass accompaniment parts. This can be seen in the bass part of *Jesusland*; Folds removes the constant “4-to-the-floor” bass from his piano part, leaving out the bass notes on beats two and four in this arrangement. The effect is a softening of the “oom-pah” sound without affecting the forward motion of the piece. Inspired by Folds’ approach, this method is used in the arrangement of *Cat Donkey Hedgehog*.

Significantly, Folds’ piano parts are accompaniment figures amidst an ensemble arrangement. In both songs the melody is covered by the Folds’ singing, and extra accompaniment is provided from bass, drums and strings. By contrast, since there is no singer to cover melodic aspects in *Cat Donkey Hedgehog*, the Bluegrass translation to piano is extended to include a melodic voice. Further distinct from Folds, *Cat Donkey Hedgehog* also documents the process of using the technique as a tool for improvisation.

From the influence of Ben Folds, decisions regarding the development of a Bluegrass-inspired ostinato pattern for solo piano were developed. These include a method for load-sharing the accompaniment between the fingers, and also the decision to omit beats two and four in the bass, providing a greater feeling of flow in the ostinato.

4.2.5 Development of *Cat Donkey Hedgehog* Arrangement

The arrangement of the ostinato in *Cat Donkey Hedgehog* incorporated the “oom-pah” pattern of the bass and guitar in the left hand, and the interjecting 16\(^{th}\) notes in the right hand inspired by the banjo. Further to this, the project explores adding a melodic voice on top of the ostinato, providing four unique parts.

Key to introducing the melodic voice was to experiment with a variety of subdivisions in relation to the ostinato. This decision affected the composition of *Cat Donkey Hedgehog*; the composition gradually introduces different rhythmic subdivisions in the melody over time, providing opportunity to investigate how using various rhythms affected the playability of the ostinato. Developing the melodic content in this way also shaped methods for developing improvisational approaches, an area that is elaborated on in the discussion on improvisation.

In the opening section of the piece, semibreves in the melody allow the thematic ostinato to set the scene. Whilst the melody itself does not drive the music forward, it does not need to; the ostinato’s syncopated layers maintain the distinctive Bluegrass drive. From a pianistic viewpoint, this section of
the composition is relatively simple; voice one holds a long note while the other three voices simmer underneath.

Bar 16 onwards presents an expansion of the melodic rhythms, with the incorporation of crotchets, quavers, and triplets into the melody. As a result, there are times when the accompaniment has to be forsaken in favour of the melody, such as bars 20 and 24. In these moments, voice two’s part is briefly abandoned to allow space for the melodic idea to be physically possible to perform. This is in line with Schoenberg’s (1967) suggestion that an accompaniment motive’s “special form must be so constituted that it can be modified, liquidated or abandoned, as the nature of the theme demands” (p. 83). The oompah part in voice three and four is not interrupted. This is seen in the two figures below:

Since the heightened rhythmic activity in the melody maintains the momentum of the piece, forward motion is not sacrificed. While perhaps a more virtuosic pianist may have the ability to achieve these
figures whilst maintaining the ostinato, I don’t have the necessary dexterity. Furthermore, the practice that was undertaken while attempting to maintain the ostinato under these melodies led to an obscuring of the melodic material, as the ostinato was sonically competing with the melody.

Even melodic material as simple as playing four crotchets in a bar affected voice two in the ostinato. Figure 4.28 presents this, where the 2\textsuperscript{nd} and 4\textsuperscript{th} bars see a reduction of the right-hand voice two part. The decision to perform shape voice two’s part in this way provided an effective “false” version of the ostinato occurring.

![Figure 4.28 Voice 2 is modified to accompany crotchets in melody (Bars 40-43) 1:33 mins](image)

The decisions made regarding the melodic content of this piece were formative in developing an improvisational approach. Considerations regarding melodic rhythms and their relation to the original ostinato shaped the decision making in the practice process of the improvisational method. For \textit{Cat Donkey Hedgehog}, a thematic approach using the ostinato as the central theme of the improvisation, as opposed to improvising ‘over’ the ostinato, was investigated.

### 4.2.6 Developing the Solo Section of the Composition

The central ostinato used for the \textit{Cat Donkey Hedgehog} inspired a second ostinato; the left hand part in isolation. In order to create a rhythmic shift in the piece, the solo section commences with the left-hand ostinato only, performed in a staccato manner.
Over the course of the improvisation, the accompaniment evolves into a sustained version of the same left-hand riff, resulting in the subtle provision of two voices in the left hand – a sustained bass-note in voice 4, and off-beats in voice 3.

By arranging the left-hand ostinato to evolve in this manner, a greater sense of growth and development through the improvisation was achieved. Over the course of the solo, the entire four parts are introduced, returning to the original ostinato. When the ostinato returns in the improvisation, all elements of the performance became improvised; the harmony was improvised freely, and attempts were made to improvise with all four parts. The form of the solo, shown in Figure 4.31, is essentially a loop of the two chord vamp from the introduction of the piece, with a cued middle section to break up the harmonic material.
The composition *Cat Donkey Hedgehog* investigated assimilating stylistic techniques from Bluegrass music to create an ostinato for solo piano. Reinterpreting these techniques onto piano provided the opportunity for the development of a potential approach to achieve a similar feeling of forward motion, providing a framework for solo piano performance method. The final score is presented in Appendix D.
4.3 Jezza

<table>
<thead>
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<th>Title</th>
<th>Length</th>
<th>Influence</th>
<th>Techniques</th>
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</thead>
<tbody>
<tr>
<td>Jezza</td>
<td>5:14mins</td>
<td>Brazilian music</td>
<td>-Using hand splitting to layer rhythms, incorporating elements of a Brazilian rhythm section into the pianist’s left-hand</td>
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Jezza investigated assimilating accompaniment patterns from Brazilian music to generate a multiple-voice ostinato for solo piano. The techniques devised for this composition are particularly inspired by the guitar and bass parts from the genres of Samba and Bossa Nova.

Assimilating ideas from world music is fairly commonplace in the jazz genre. In his thesis on combining Afro-Peruvian rhythms onto the contemporary drumkit, Dr Daniel Susnjar (2013) explains that “integrating musics from around the world into jazz has been a key element in the evolution and expansion of the art form” (p. 1). In solo jazz piano performance, exploring techniques from Brazilian music allows for exploration of layering different rhythms into one hand, applying hand-splitting as a means of forming accompaniment patterns.

4.3.1 Overview of Brazilian Music

Brazil is a vast nation with centuries of music history which has subsequently led to the development of a wide variety of Brazilian genres and styles. These genres are influenced by regional peculiarities of rhythm, instrumentation, harmony and social function of music. Some examples of these genres include Samba, Bossa Nova, Forro, Choro, and many others, each with its own distinguishing elements (Faria, 1995). Due to the confines of this paper, most Brazilian styles could not be reviewed. This research focused on technical and rhythmic devices specifically from Samba and Bossa Nova to develop a Brazilian accompaniment for the solo piano setting.

Bossa Nova and Samba came into the American mainstream through the rise in fame of certain Brazilian artists. Jamey Aebersold (1984) suggests that “the Bossa Nova movement of the 60’s would seem to be based on the work of two men - singer Joao Gilberto and composer Antonio Carlos Jobim” (p. ii), with many of Jobim’s compositions having become standard repertoire for jazz musicians, such as The Girl From Ipanema or Desafinado or Wave. Other Brazilian musicians such as Egberto Gismonti, Hermeto Pascoal, and Elaine Elias were also significant in bringing their nation’s
popular music to global audiences, (Giddins & Deveaux, 2009, pp. 519-520) with Gary Giddins affirming that Brazilian music both “influenced jazz and was influenced by it in turn” (p. 256).

The following section investigates specific theoretical elements of Samba and Bossa Nova, highlighting how the guitar and bass parts have direct correlation to Brazilian percussion patterns, and how these parts layer to create the characteristic Brazilian sound and groove.

### 4.3.2 Rhythmic Elements and Instrument Roles

Fundamental to Brazilian music is the role of the percussion section. The percussion section creates the groove that characterises the Brazilian sound. Essential to this groove is the understanding that “the meter of a samba is binary, and samba melodies and accompaniments are highly syncopated” (Sabanovich, 1994, p. 94). In other words, there is a rhythmic duality occurring in the groove; a binary meter underpinning the syncopated melodic and rhythmic elements. This sentiment is reinforced by Béhague (2009):

> The peculiar rhythmic characteristic of Brazilian music, however, is syncopation, either by irregular accentuation or anticipation. Syncopations are generally contrasted with a steady rhythmic pulsation. (Para 29)

This duality of rhythm provided an opportunity to explore hand-splitting techniques in solo jazz piano performance, to attempt to play both parts in one hand as a rhythmic ostinato figure. It was therefore significant to identify what instruments created these layers, and how their rhythmic elements combined to create the characteristic Brazilian feel.

It was identified that certain percussion instruments carry the fundamental ‘binary’ (2-feel) elements of the ensemble. For samba especially, the surdo drum (“a large bass-drum commonly used in Samba” (Béhague, 2009)) forms the heart-beat of the ensemble, with its regular beat creating the steady rhythmic pulsation to which Béhague refers. Accompanying the binary two-feel of the surdo drum are syncopated patterns coming from smaller percussion instruments such as the agogo bells or the tamborim, (“a small, cylindrical drum percussed with a stick, with or without jingles” (Béhague, 2009)) whose roles are described in more detail in the next section. The combined result of the surdo and tamborim patterns is an audible duality of rhythm, with the surdo’s steady pulsation underpinning the syncopated higher percussion parts.
The rhythms used in the percussion section often are directly translated onto the melodic and harmonic rhythms of the music. It is for this reason that in this project the guitar and bass parts are investigated for translation to piano. These parts encompass both the fundamental building blocks of the Brazilian rhythm, while also providing harmony. The next section outlines how the surdo and tamborim rhythms influence the bass and guitar accompaniment patterns in Brazilian music. This rhythmic material will form the basis of the solo piano ostinato in this project.

### 4.3.2.1 The Bass

The bass part in Bossa Nova and Samba provides the steady pulsation on which the more syncopated elements are layered. The rhythmic elements for the Brazilian bass-line are essentially derived from the surdo drum. The bass part is commonly a two-feel, with a tonic on beat 1, and a 5th on beat 3, which may be accented. Sometimes the bassist uses ghost notes in between the downbeats, which helps add to the flow of the groove (see bar 2 of Figure 4.32). This bass part can be heard on many Brazilian recordings, including nearly every track from Antonio Carlos Jobim’s album “Rio Revisited” (1989), and on Elis Regina’s recording of *Triste* (1993, track 5).

![Figure 4.32 Common Brazilian bass line, and a variation](image)

The rhythmic figure found in first bar of Figure 4.32 was used as the central bass-line used in the arrangement of *Jezza*. This is due to the lesser rhythmic activity, accommodating greater flexibility in the hand be able to simultaneously execute the chordal element of the accompaniment pattern derived from the Brazilian guitar.

### 4.3.2.2 The Guitar

In Samba, one of the essential rhythmic claves is the “Partido Alto”, and variations on this rhythm. The Partido Alto rhythm, presented in Figure 4.33, is often performed on an agogo bell, and is the nucleus of many percussion rhythms in samba. Other percussion parts usually have some form of rhythmic reference to this central figure.
One example of a percussion part that embellishes the fundamental Partido Alto pattern is the tamborim pattern. Many variations exist for the tamborim pattern; Figure 4.34 presents one common rhythm, and is the fundamental pattern used in Jezza. This, and similar patterns, can be heard on many different Brazilian recordings, with examples including Gretchen Parlato’s Flor De Lis from the album “Gretchen Parlato” (2005, track 2), Eliane Elias’ recording of Jazz and Samba (1998, track 3) and Jobim’s recording of Triste (1967, track 5).

The Tamborim pattern is used in Brazilian music as one of the fundamental rhythms of the guitar part. Figure 4.35 presents a standard Brazilian guitar comping rhythm taken from Faria’s manual The Brazilian Guitar Book (Faria, 1995).

In the same way that the surdo drum and tamborim interlock, the guitar and bass patterns used in samba and Bossa Nova also interlock. The figures over page present the Surdo and Tamborim parts, and then the Guitar and Bass parts combined, highlighting the symbiotic relationship between the two rhythmic layers.
Rhythmically, the combined guitar and bass patterns replicate the percussion parts. The added element is the provision of harmony. This makes the guitar and bass roles very significant to a Brazilian ensemble; the bass and guitar combination can provide both the rhythmic and harmonic characteristics of Brazilian music.

4.3.3 Hand Splitting to Create Brazilian Accompaniment

In the composition *Jezza* the accompaniment patterns of the guitar and bass are assimilated into the left hand of the piano. Hand splitting is used to perform the two parts in one hand. The bass is covered in the ring and pinky fingers, while the top fingers play the guitar voicings. This offers the ability to perform multiple, rhythmically-independent parts in one hand, providing an accompaniment for the right-hand to perform over.

Brazilian pianist Egberto Gismonti uses a similar approach to the left-hand in his composition *Sanfona* (Portuguese for ‘Accordion’). His piece uses hand splitting methods to create a left-hand ostinato that represents the two accompaniment voices of the accordion (chords and bass), creating a platform to support the melody and improvisation in the right hand. His approach provides a model for developing the arrangement of *Jezza*. 
Figure 4.38 An excerpt from Egberto Gismonti’s composition *Sanfona*, highlighting the use of the left-hand to assimilate techniques derived from the accordion, featuring a bass voice and a chordal voice occurring in the same hand (1986, track 10) 0:09 min mark

Notation limits the ability to express Gismonti’s use of touch and tone to imitate the accordion’s sound and phrasing. Regardless, for the purpose of this project, visible bass and accompaniment parts are occurring in the left hand.

In the case of reinterpreting characteristics of Brazilian music onto the piano, a few elements were considered and adjusted to be more pianistically suitable. Figure 4.39 recalls a previous guitar and bass example, using colours to highlight how the division of voices would occur on the piano.

Figure 4.39 The Brazilian bass and guitar parts combined onto one stave (Faria, 1995)

To reinterpret this particular figure to the piano, the voicings would need to be adjusted. The guitar voicings in conjunction with the bass note movement create the large intervallic stretch of a sharp 11th. For my hand, this is near impossible interval to stretch. Consequently adaptations to the voicing were necessary. One possible adaption available is suggested in Figure 4.40:

Figure 4.40 Brazilian bass and guitar parts from Figure 4.39 adapted with more accessible voicings for the piano
The chords now fall more readily within the stretch of a pianist’s left-hand. Unfortunately, some of the character of the Brazilian voicings is lost; instead of having a 4ths-based chordal sound, there is a more ‘closed’ piano voicing. Otherwise, the readaptation now allows a pianist to physically access this ostinato. While developing the left-hand arrangement for Jezza, the interval between the lowest bass note and highest note of the voicing was a major consideration, and was influential in decisions regarding the voicings used. Often richness of harmony had to be sacrificed to accommodate playability of the ostinato.

The following section outlines the process undertaken in the composition and arrangement of Jezza.

4.3.4 Development of Arrangement of the Accompaniment Pattern for Jezza

Following the composition of the skeleton form and melody of Jezza, the left-hand Brazilian pattern developed for piano was superimposed into the arrangement.

For voice four (red), superimposing the Brazilian ostinato through the harmony was made easier due to the compositional decision to use small intervals in the bass-line’s voice-leading. This provision of smooth motion for the left hand minimised jumping around the keyboard, allowing for easier execution of the ostinato through the composition.

In terms of voice three (purple), the chord voicings were quite limited. This is because of the physical reasons outlined earlier, and because only 3 fingers were available (as the other two were being used for the bass line). This resulted in the use of two or three note chords. This can be seen in Figure 4.41 which presents the first melodic section of Jezza.

![Figure 4.41 An excerpt of the opening theme of Jezza (Bars 3-6) 0:17 mins](image)

One adaption to the tamborim pattern was made in bar two on beat four. For the sake of dexterity, the rhythm was placed onto beat four instead of the more traditional “and of four” (the offbeat after beat four). This provided an extra space to allow for a change of chord in voice three.
Interestingly, when it came to the improvisation component of the performance of *Jezza*, the three note limited voicings in voice three were actually quite liberating. As well as allowing for a lighter texture, the voicings also provided harmonic space for improvised melodies to imply different extensions, allowing for harmonic flexibility in while improvising.

The placement of harmonic rhythm in relation to the ostinato was a key consideration during the arrangement of *Jezza*. This was significant because the rhythmic cell used for voice three (derived from the tamborim/guitar pattern) has a chord that ties over the bar line and is held onto beat one. This issue didn’t arise when dealing with the example in Figure 4.41 since the harmonic rhythm flows at one chord ever two bars. However, considerations were necessary when the harmonic rhythm moved at one chord per bar. The decision was made to anticipate the approaching chord at this point. Figure 4.42 shows an example of how this chord anticipation was approached in the arrangement of *Jezza*:

![Figure 4.42](image)

As can be seen in Figure 4.42, the decision was made to anticipate the chord change in the voice three, changing to the new chord on the “and of 4”. Voice four remained unaffected, maintaining the two-feel by clearly playing on beat one. This maintained the character of the Brazilian syncopated feel, provided a sense of harmonic forward motion, and maintained the steady pulsation of the bass.

There is one moment in *Jezza* where the harmonic rhythmic increases again, with the chords in bars 35-37 changing every two beats. In this case, chords in voice three used notes that were common to both chords in the bar, or at least had very small intervallic movements. Voice four provides the root of each chord. Dexterity was aided in this case by the semi-tone voice-leading built into the root note movement of the composition.
Figure 4.43 Increased harmonic rhythm of Jezza, requiring a considered approach to the left-hand accompaniment pattern. This includes voice-leading of both the bass notes as well as the chordal elements in voice three (Bars 35-37) 1:34 mins.

While the arrangement is relatively simple in essence, the challenge lay in developing the coordination and flexibility to improvise over this syncopated and quite complex pattern.

4.3.5 Developing the Solo Section of the Composition

The solo form of Jezza is a simplified version of the harmony used in the head of the piece. Initially, the entire form of the head was to be improvised over, but upon listening to and reflecting on draft recordings, an audible sense of form was not available to the listener. Therefore, a 17-bar form was developed, with a minor “ii-V-i” signalling a return to the top of the solo form. The solo form is presented in Figure 4.44:

Figure 4.44 Jezza solo form
The composition *Jezza* investigated assimilating accompaniment patterns from Brazilian music to generate a multiple-voice ostinato for solo piano. This was particularly inspired by the guitar and bass parts from the genres of Samba and Bossa Nova. In solo jazz piano performance, exploring techniques from Brazilian music allowed for exploration of layering different rhythms in one hand through hand-splitting as a means of forming accompaniment patterns. The final score is presented in Appendix E.
### 4.4 Bobby Eagle

<table>
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<th>Length</th>
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<th>Techniques</th>
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<tbody>
<tr>
<td>Bobby Eagle</td>
<td>9:58mins</td>
<td>Drumkit/Percussion</td>
<td>- Deriving rhythms from drumkit, and what it offers the hands</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Exploring means to create rhythmic forward motion</td>
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*Bobby Eagle* assimilated rhythmic elements from drumkit and rudiment techniques to create accompaniment patterns for solo jazz piano. Drumkit and percussion are fundamental components of most styles of music, as their particular focus on rhythm and time, and not necessarily on pitch, allows for unique outcomes when their techniques are applied to instruments of pitch. Bobby Eagle especially focused on moving away from the dominant right-hand solo/left-hand chord approach found in jazz piano, instead working with a repetitive counter-melody ostinato in the left hand.

#### 4.4.1 Piano as a Percussion Instrument

Due to the percussive nature of the instrument, some musicians and academics, such as Dr Thomas Van Seters (2011), claim that the piano can effectively be viewed part of the percussion family. The percussive traits shared between drums and piano are especially noticeable when comparing the sound characteristics of the piano and percussion instruments; both have an immediate attack and naturally uncontrolled decay and sustain. While this project does not propose to ‘take a side’ on the debate about which instrument family the piano belongs to, I intend to capitalise on the similarities inherent between piano and drums to create accompaniment patterns.

The central distinction between the two instruments is the piano’s ability to perform melody and harmony. By nature, the drumkit does not deal with harmony, making rhythm and the associated time-feel the central focus of the instrument. Through the use of rhythmic-centric elements of drumkit parts, there is opportunity to hone in on, and draw out, the rhythmic characteristics inherent in the piano. This allows for ready translation of the techniques. Pianist Rai Thistlethwayte explains how he uses this similarity in performance:

> I like to play percussive - almost drumming stuff. I did an album where there were a lot of ‘stabby’ sort of things going on from time to time. The piano can be a drum, and solo piano works great for that as it’s so dynamic too. (R. Thistlethwayte, personal communication, March 21 2013)
Pianist Steve Sedergreen refers to drumkit when discussing his approach to self-accompaniment in solo performance.

I like thinking that my left hand is like the bass and drums and the right hand is vacillating from a front-line instrument and chord instrument like a guitar. (S. Sedergreen, personal communication, April 14 2013)

Rhythmic layers provided from the drumkit are a valuable aspect of an ensemble’s forward motion, with grooves attained through provision of subdivisions, beat placement, as well as rhythmic layers between cymbals, snare, bass drum and toms. Assimilating these layers and subdivisions found in drumkit parts has potential for unique outcomes in developing forward motion in a solo jazz piano setting.

4.4.2 Rhythm in Solo Piano

Using and manipulating rhythms to create a feeling of forward motion is a point of interest for the musician performing solo. In his thesis *An Investigation of Forward Motion as an Analytic Template* Stephen Brien (2004) defines forward motion in music as “the notion that musicians use melodic and rhythmic devices to ‘pull’ the ear forward through the chord progression of a song” (p. 8). In an ensemble scenario, instruments perform complementary parts that combine to create layers of rhythm. The solo pianist however cannot rely on the ensemble; all rhythmic forward motion must be generated by the soloist.

Dr Van Seters’ (2011) thesis presents a discussion on how rhythms and groove can be taken from approaches traditionally applied to the drum kit, and reimagined onto the piano. While most of Van Seters’ discussion regards ensemble performance, there is also acknowledgement of applying drumkit rhythms in a solo piano setting:

Jazz pianists specialized in performing solo are perhaps even more indebted to drummers. Numerous solo artists have applied drumming concepts to the piano keyboard. One of the ways they have done this is through the layering of motorized rhythms that rely on the emphasis, overt or implied, of some form of "backbeat." Drummers and pianists may not always articulate the backbeat literally but its presence must be felt to some degree in order to create a desire in listener/participants to clap on beats two and four. (p. 68)
The rhythm and energy of drummers is a source of inspiration for a number of solo performers. In an interview presented in *Handful of Keys: Conversations with Thirty Jazz Pianists* (Shipton, 2004) pianist Joanne Bracken cites jazz drummer Art Blakey as a key influence on her approach to solo piano performance. She recounts her first experience performing unaccompanied at an Art Blakey Jazz Messengers performance:

I took so much energy from Art’s playing at the drums that it saw me through and that energy remains with me. I think it accounts for the way I am now. (Bracken via Shipton, 2004, p. 9)

Canadian pianist David Braid often uses rhythms derived from drummers to form arrangements and compositions. His approach, discussed below, is a central influence in the development of the piece *Bobby Eagle*.

### 4.4.3 David Braid’s Assimilation of Drumkit Parts

Pianist David Braid is a key influence in the development of the approach used in this composition. Braid’s solo album “Verge” (2010) features two tracks that take overt inspiration from the drumkit. The first of these is a unique arrangement of the jazz standard *Just the Way You Look Tonight*. Braid’s arrangement is inspired by rhythmic elements of drummer Max Roach’s solo on bop standard *Cherokee* (D. Braid, personal communication, June 29 2013). The connection between the drum solo and the piano arrangement is not specifically literal, but more taking inspired elements from the solo. Figures 4.45 and 4.46 show the use of a section of Roach’s solo to inspire the B section of Braid’s arrangement. Previous to the B section, Braid’s arrangement was rhythmically driven by quavers, meaning the crotchet triplets in the B section are quite a distinctive rhythmic shift. The rhythmic ideas from the drumkit in this example have resulted in a unique approach to performing this standard repertoire piece.
The second Braid example highlights a more overt inspiration from drumbeats in order to compose original music. Braid’s original piece *Richmond Square* uses rhythms assimilated from the ‘Amen Break’, a renowned drum break found in the Winston’s song *Amen Brother* (Winstons, 1969). Braid devised a left-hand ostinato that uses the rhythmic elements of this beat to act as the accompaniment theme of *Richmond Square*. Figure 4.47 presents the first bar of the Amen Break;

Figure 4.47 An excerpt of the “Amen Break” drumbeat, from The Winston’s *Amen Brother* (Winstons, 1969, track 11)

Figure 4.48 shows how Braid reinterpreted that drum pattern to create the left-hand accompaniment pattern used in *Richmond Square*. The assimilation of the parts is quite clear when compared to the previous Figure.
Braid’s recording also features an extended technique, with Braid overdubbing a ‘piano drumbeat’ to accompany the piece by tapping the body of the piano. This technique of overdubbing in solo piano, made famous by Bill Evan’s album “Conversations with Myself” (1963), is also used by Jason Moran on his track *Planet Rock* (2002, track 3). *Planet Rock* features Moran using prepared piano techniques, overdubbing a drumbeat style groove using the bass register of the piano, and then layering an improvisation over the top. The translation of the drumbeat to the piano is presented in Figure 4.49:

Inspired by Braid’s approach, the composition of *Bobby Eagle* is undertaken in order to document the process of utilising drumbeats as an assimilated influence in composition.
4.4.4 Developing *Bobby Eagle*: Selection of Material

Selecting material for *Bobby Eagle* was a challenging process. When Braid composed *Richmond Square*, the decision to write the piece came after the discovery of the Amen Break drumbeat (D. Braid, personal communication, June 29 2013). In *Bobby Eagle* the idea of using drum parts as rhythmic cells for composition came before choosing a drumbeat. This resulted in a need to find suitable drumbeats that had potential for translation as an accompaniment pattern for solo piano.

Initially, I attempted to compose my own drumbeats, but the outcomes were often sterile, with the drumbeats composed being inherently pianistic in nature i.e. since the drumbeats were composed with the subliminal intention of translating them into piano parts, the outcomes felt inorganic and forced. This doesn’t mean that this approach isn’t suitable for future projects; deeper study into the formation of drumbeats and more practice at composing drumbeats has potential to result in usable outcomes. For the sake of this project however, composing drumbeats was abandoned.

A search was then undertaken to find appropriate drumbeats for the project. Central to the search was to find beats that were essentially repetitive ostinato figures, and contained both syncopation (for interest) and a repetitive flow (for playability). Styles such as jazz, hip-hop, funk, pop, rock and ‘drum and bass’ were looked into, as these styles inherently have repetition and syncopation as key elements of their sound.

It quickly became clear that some of these styles were inappropriate for this project. Many drumbeats that contained rhythmic regularity turned out to be overly simplistic, lacking syncopation and interest. Syncopated beats also contained issues, as it was difficult to find ones that weren’t overly disjointed. While a disjointed part would form interesting results, the downfall would be the inherent difficulty of learning to improvise over the resultant accompaniment pattern.

Most improvised solos on the drumkit, especially jazz drum solos, were discounted from being usable, as they were often found to be too sporadic to be able to form an effective ostinato on the piano. Even David Braid’s example of utilising a jazz solo shows more of an abstract use of inspiration from the solo, and my project was searching for material to provide something close to a literal translation.

Ultimately, music from the ‘drum and bass’ (herein referred to as D’n’B) and pop music genres seemed to possess the qualities I was searching for in this project. *Oxford Music Online* provide the definition that D’n’B is “a form of 20th-century club dance music. It is a fusion of the extremely low bass lines of dub reggae, the frantic, syncopated snare drum breakbeats of hardcore. However, it is
defined by its rhythmic patterns coupled to an extremely fast tempo of around 160 beats per minute” (Fulford-Jones, 2015, [accessed 10.1.15])

The central drum beat used for *Bobby Eagle* is taken from the D’n’B track *Squarepusher Theme* from the album “Feed Me Weird Things” (Squarepusher, 1996, track 1). This beat suited the criteria for the purposes of this project; a repetitive groove with sufficient syncopated elements to create interest. The drumbeat used for the B section came from the pop song *Seven Days* by Sting (1993, track 6). The outro of *Bobby Eagle* investigates using the drum rudiment “paradiddles” as a compositional technique for solo piano. These drumbeats, and their reinterpretation to the piano, are looked at in detail in the next section.

### 4.4.5 Developing the *Bobby Eagle* Arrangement

The central drumbeat that formed the rhythmic backbeat of *Bobby Eagle* comes from the aforementioned piece, *Squarepusher Theme*. The drumbeat is not performed live by a drummer, but is a computer programmed groove.

The fundamental beat of this piece, presented in Figure 4.50 has two distinct hi-hat parts; one hi-hat part alternating between open and closed hat sounds (notated below as “open hats”), creating a washy feel. The second hi-hat part uses a closed hi-hat sound. For clarity of notation, two staves have been used. These two parts are used as separate rhythmic cells for melodic and accompaniment patterns in the arrangement of *Bobby Eagle*, the specifics of which are explained in detail in this chapter.

![Figure 4.50 Drumbeat from the track Squarepusher Theme from Squarepusher’s “Feed Me Weird Things” album (1996, track 1)](image_url)

The rhythm from the bass drum part provides the rhythmic cell used as the bass line ostinato of *Bobby Eagle*. The two distinct hi-hat rhythms provided opportunity to create two contrasting sections; the bottom stave’s hi-hat part inspired the melody, superimposed on the bass line as per
the drumbeat (Figure 4.51). The “open hats” dotted crotchets inspired a higher energy chordal section which appears midway through the composition (Figure 4.52).

![Figure 4.51 Main melody and accompaniment figure of Bobby Eagle (0:11 on recording)](image)

Figure 4.51 Main melody and accompaniment figure of Bobby Eagle (0:11 on recording)

As the piece progresses, the main bass-line is expanded. The rhythm is maintained, and the melodic element undergoes a reharmonisation. At this stage of the piece, the line is doubled in the right-hand in unison.

![Figure 4.53 A composed reharmonisation of original Bobby Eagle bass line (2:02 mins)](image)

Figure 4.53 A composed reharmonisation of original Bobby Eagle bass line (2:02 mins)

The B section of Bobby Eagle has a time signature shift into 5/4. For this section, Sting’s “Seven Days” was used as the rhythmic inspiration for ostinato. A basic version of the drumbeat from this song is presented in Figure 4.54, with the ghosted hi-hats removed from the excerpt. The bass drum and snare drum parts lay down a strong feeling of 5/4 with a typical 3/2 clave. Over the top of this is the accented hi-hat part playing minims, resulting in an over-the-bar cross rhythm, partially disguising the 5/4. These rhythmic elements were intriguing to work with, hence why they were selected for the composition.

![Figure 4.54 Chordal melody in Bobby Eagle inspired by “open hats” part from Figure 4.50 (2:12 mins)](image)

Figure 4.52 Chordal melody in Bobby Eagle inspired by “open hats” part from Figure 4.50 (2:12 mins)
Figure 4.54 The drumbeat from the song Seven Days by Sting, with ghosted hi-hats removed for ease of analysis

This was translated into the piano riff presented in Figure 4.55, used as a breather from the more intense ‘A’ section. The minims were turned into chords, while the bass line’s 5/4 clave is featured. This idea is shifted through a range of harmony.

Figure 4.55 The B section of Bobby Eagle, applying the drumbeat from Seven Days into a solo piano figure

As well as using drumbeats, the piece experiments with using drum rudiments as rhythmic material to assimilate into a solo piano arrangement. Translating drum rudiments to the piano is a concept that is occasionally used by pianist Geoffrey Keezer. In discussing his arrangement of Suddenly I See on his solo album “Heart of the Piano” (Keezer, 2013, track 6), he explains that he “broke up the right hand and left hand in patterns that can resemble drum patterns, paradiddles and things like that” (Keezer, 2014, [accessed 7.6.2014]).

Paradiddles are a fundamental rudiment for drummers. The term refers to the sticking pattern presented in Figure 4.56. The “R” and “L” refer to “right” and “left” hands:

Figure 4.56 A standard paradiddle sticking exercise

In Bobby Eagle, this was used as an outro to the piece, using the paradiddle sticking pattern between the two hands. The multiple voice technique was made use of in the arrangement, using hand-splitting. Voice four plays a sustained bass note, while in voice one a held melodic note occurs. The inner voices (voices two and three) create momentum through using the paradiddle sticking approach. An excerpt of this is presented in Figure 4.57.
4.4.6 Developing the Solo Section of the Composition

In the development of the solo section, the main accompaniment is the A section bass line.

Upon the decision of the soloist, the harmonic progression can be taken to C# minor for a short period, to provide harmonic variation.

Distinct from the bass line used in the melodic sections of the piece, the first note of each bar is not sustained. It was decided that to allow room for the improvisation to breathe and build, a clearer accompaniment texture was desired. This resulted instead in simply using the moving line as the accompaniment.

The final cued part of the solo section is a brief return to the 5/4 concept taken from Sting’s *Seven Days*. This section gently decelerandos into a very brief free improvisation, accommodating a smooth segue into the composed paradiddle outro. Figure 4.59 shows the solo section in full:
Bobby Eagle assimilated rhythmic elements from the drumkit to create an accompaniment pattern for solo jazz piano. The focus was on moving away from the dominant chord/solo approach found in jazz piano, instead working with a repetitive counter-melody ostinato in the left hand. Elements of drumkit parts and rudiments were used as methods for inspiring rhythmic approaches to the piano in order to develop a sense of forward motion in performance. The final score is presented in Appendix F.
This project has thus far investigated developing accompaniment patterns for solo piano. This has been explored through the assimilation of a variety of influences into compositions, including select techniques from composers of Western classical piano repertoire, Brazilian music, Bluegrass, and drumkit and rudiment techniques. Left-hand ostinatos were derived from each composition to form the main accompaniment for the improvisations. The ostinatos provide departures from the commonly taught ensemble method of the left-hand playing syncopated chordal hits. As a result of exploring a different accompaniment method, the process of improvising was also affected. This chapter discusses the processes undertaken toward developing an improvisational approach over these accompaniment ostinatos. This is investigated through documentation and investigation of the practice process, as well as analysis of the recorded outcomes.

5.1 Improvisation & Practiced Materials

This section outlines how improvisation and practiced-materials were blended, and the influence this had on the approach used in this project. In this project, improvisation as it is defined in a Western jazz context is applied. Commonly, definitions of improvisation infer the need for spontaneity. John Novello (1986) in *The Contemporary Keyboardist* suggests that “improvisation is the art of creating music spontaneously” (p. 91). *Oxford Music Online* provides a similar definition:

The creation of a musical work, or the final form of a music work, as it is being performed. It may involve the works’ immediate composition by its performer, or the elaboration or adjustment of an existing framework, or anything in between. (2014)

However, it should be recognised that improvising does not necessarily mean reinventing new material. Dr Rob Burke (2012) highlights that using practiced materials or preconceived ideas is not necessarily anti-spontaneous, but is a major factor in developing a personal approach in one’s improvisations:

To assert rather simplistically that an improviser is not going to play what has been practiced needs qualification...inevitably there is a degree of influence coming from practiced materials. This is related in part to motor memory, in part to what has
been heard and assimilated over time – consciously and subconsciously – and in part to one’s musical background generally. (p. 18)

Practiced materials often form the backbone of a musician’s approach, and support the ability to improvise ‘spontaneously’. Bob Hinz (1995) in his journal article *Helping Students Master Improvisation*, explains:

Improvisation takes place when a musician’s aural and technical facilities combine to create a spontaneous form of musical expression. (p. 32)

This is in line with Burke’s “duality of balancing creativity with known and learnt knowledge in improvisation is an inherent aim of jazz improvisers” (2012, p. 20). Hinz and Burke acknowledge that the material practiced by a musician forms the core of their sound and ideas used in spontaneous invention. Controlling the duality of spontaneous invention and pre-learnt material is a challenging concept. For this balance to occur there must be a period of learning practiced materials to provide a springboard for ideas to exist. Developing and practicing pre-learnt material is a significant aspect to approaching a fluent improvisational facility. Dr Peter Knight (2011) suggests that to reach this level of control on an instrument requires a practice “approach that combines intuition with highly technical skills and refined methods of preparation and conceptualisation” (p. 2). Ben Wendel, saxophonist for the band “Kneebody”, explains how his spontaneous improvisations are underpinned by a considered practice method:

I really like the idea of not thinking, or trying to think as little as possible, and mostly just following ear and instincts. So the approach is in a sense is non analytical though there is a great deal of intellectual thought that’s happening when I’m not playing live, there’s a great deal of intellectual practicing that’s happening. (Wendel via Minness, 2013, p. 68)

This is further reinforced by Paul Williamson (2009) in his Masters *Constructing the Collective Consciousness: Individual Player Identity Within the Collective Jazz Ensemble*:

The individual preparation sometimes requires the development of ideas in advance in order to be able to negotiate the challenging forms, harmonic and rhythmic elements, tempos and odd meters. (p. 30)

This project takes influence from these suggestions; a method of preparation was required to develop the relevant technical skills to guide improvisations. As a result, most of the improvisations
in this project’s recordings were not spontaneous in the literal sense. Instead, commonly the improvisations were based around the use and manipulation of preconceived practiced ideas. This was an intentional decision; the practice and use of preconceived ideas provided benefit when dealing with the coordination requirements of improvising over ostinatos. While the ultimate aim was to improvise spontaneously over the ostinatos, I could not attain this end goal without initial development of physical facility through the assimilation of practiced materials. There was a need to develop both language and dexterity over the ostinatos before spontaneously inventing material. Most of the challenges encountered during the practice process were related to dexterity and rhythmic variation in the improvisation over left hand ostinato. Therefore, a practice approach was explored in order to counter this.

5.1.1 Development of Improvisational Motor Schema

A significant aspect of improvising over the ostinatos was the development of coordination between the hands. Hargreaves’ improvisational development stages, presented in the methodology, suggested that the development of motor schema is a central component of learning to improvise. Dom Famularo (2000), author of It’s Your Move: Motions and Emotions, suggests that “true practice is re-programming practice” (p. 2). Ben Falle (2011) in his Honours thesis Proposed Methods For Efficiently Attaining the Skills Required For Accurate Time Keeping in Music implores the significance of developing correct muscle memory as a valuable practice approach:

Muscle memory consolidates through savings in performance over multiple repetitions. This means that whatever is input through practice is what will be output in performance. This information highlights the importance of inputting muscle memory correctly from the first instance, rather than editing incorrect muscle memory habits (p. 27)

The development of an appropriate motor schema was a central part of the improvisation component of this project. Strategy-generated ideas were created in order to develop suitable exercises for attaining the desired motor schema. Hargreaves suggests that these ideas are consciously formulated plans that are implemented with an intended design, providing a specific plan for behaviour as a means of solving the compositional demands of improvisation (2012, p. 359). Strategy-generated practice ideas allowed me to preconceive desired musical outcomes, and then design appropriate practice schemes to achieve those goals. The following sections of this chapter outline the main processes that were engaged with in developing facility over the ostinatos.
5.2 Rhythmic Coordination

Developing rhythmic coordination over the ostinatos was essential in learning to improvise on the pieces. The ultimate aim of this practice was to develop dexterity and rhythmic freedom, facilitating ready execution of ideas in performance without hindering an ostinato’s time-feel and groove. Developing a rhythmic language over the ostinatos was fundamental in this project.

Hannaford’s Masters Elliott Carter’s Rhythmic Language: A Framework for Improvisation provided a valuable model in developing an approach to investigating rhythmic material. In his thesis, Hannaford assimilated rhythmic language from Elliott Carter’s music into his jazz improvisations. A methodological practice approach employed by Hannaford was the use of limitations in practice. These limitations allowed him to focus on each new concept exclusively:

In the process of assimilating these rhythmic materials however, I have found that limitations often do help. They have provided me with a practice methodology. (p. 80)

Musicologist Jeff Pressing (1987) describes employing approaches such as limitations as “attentional emphasis” practice approaches; by limiting the ideas required to be practiced, a heightened outcome is achieved (p. 162). A similar process was used in this project for developing rhythmic material over the ostinatos, with limitations devised to allow for focused development of each rhythmic idea in isolation.

A foundational stage in practicing rhythmic material over the ostinatos was developing the coordination required for standard subdivisions, specifically minims, crotchets, quavers and semiquavers. Initially my rhythmic practice focused on superimposing this rhythmic material over the left-hand ostinatos; developing independence. Over time however it became clear that a deeper approach was necessary - one facilitating a greater understanding of how individual parts between the hands interrelated; in effect, developing co-dependence. This was a major revelation in this project. The rhythms between the right-hand improvisation and the left-hand ostinato were more effectively practiced if viewed as forming a symbiotic relationship, and consequently the rhythmic material was approached in this way. This shift in my approach resulted in a more unified performance; the accompaniment and improvisation worked together rather than as separate entities, resulting in an overall better time-feel. The rhythm practice not only added material for improvising, but also was helpful in cementing my understanding of the ostinato’s rhythmic placement. This was because learning a variety of rhythmic material contextualised the ostinato
against different subdivisions; hearing an ostinato against semiquavers, or minims, or triplets for example, contextualises the ostinato’s rhythmic material in different ways, resulting in deeper understanding of the rhythmic placement of the accompaniment pattern.

Figure 5.1 shows four examples (labelled A, B, C and D), superimposing the four standard subdivisions (minims, crotchets, quavers and semiquavers) over the ostinato from Bradley’s Art. Example “A” is an exercise focusing on practicing minims over the ostinato. Example “B” shows crotchets being played over the ostinato, example “C” is quavers, and example “D” is semiquavers. Each exercise was looped until executing the coordination was felt to be accessible in my facility.

Figure 5.1 Practicing standard subdivisions in a focused manner over the ostinatos. This example uses the Bradley’s Art ostinato

As can be seen in Figure 5.1, no melodic or harmonic elements were considered, allowing a singular focus on rhythm and study of the rhythmic layers between the two hands. Pianist Barry Harris explains how this focus on rhythm is valuable in developing an improvisational approach:

The hands are like monsters, and they have a separate entity, and they like certain grooves, and if you aren’t careful with the hands they’ll just play those grooves that they like. Sometimes I think the closest I can come to it is if I think of rhythmic things, and just think of the rhythm, don’t think of notes to go with the rhythm, just think of the rhythm, then I think I come closest to being original. (BarryHarrisVideos, 2013)

This suggestion by Harris guided the methodological approach employed for the development of rhythmic coordination in this project. Drawing from this approach, I devised three stages of practicing coordination, whereby initially rhythm was the sole item addressed, with new musical elements of melody and improvisation incorporated gradually. This is that three stage approach:
1. Fixed rhythm, single note melody
2. Same Fixed rhythm, fixed melodic concept (e.g. scales, arpeggios, intervals, patterns)
3. Same Fixed rhythm, improvised melodic content

Figure 5.2 shows stage one in practice using the rhythmic cell of two semiquavers and a quaver.

Figure 5.2 Rhythm Coordination Practice Stage 1: Fixed Rhythm, single note melody

The second stage employed the same rhythm, and incorporated a fixed melodic concept, such as a scale, arpeggio, or melodic pattern. Dr Bob Hinz (1995) suggests that “knowing how to create sequences is another important aspect of the improvisational process. The ability to move a tonal pattern through a key diatonically (…) or through different keys (…) is a useful practice technique” (p. 34). Employing the rhythm from Figure 5.2, an example of this is presented in Figure 5.3.

Figure 5.3 Rhythm Coordination Practice Stage 2: Same Fixed rhythm, fixed melodic concept (scales)

The third stage was to improvise freely with the melodic content while maintaining a fixed rhythmic cell. Removing prearranged melodic parameters added a new of level of difficulty to the exercise. Figure 5.4 is a hypothetical example of how this stage might have occurred in practice, using the same rhythmic cell as above.

Figure 5.4 Rhythm Coordination Practice Stage 3: Same Fixed rhythm, improvised melodic content
These three stages were applied to most of the rhythms explored over the ostinatos in this project. The ultimate aim of this practice was to develop coordination between the hands, as well cultivate an arsenal of rhythms that could be accessed while improvising. The practice method outlined was felt to be effective in developing this facility.

5.2.1 Ted Reed’s “Progressive Steps to Syncopation for the Modern Drummer”

In order to access many rhythmic variations, ideas were drawn from the manual Progressive Steps to Syncopation for the Modern Drummer (Reed, 1958) (herein referred to as Syncopation). This book functioned as a rhythm catalogue, providing variations of standard subdivisions presented in an incremental manner. Figure 5.5 presents an example of exercises from Syncopation. This example contains a variety of semiquaver and quaver combinations.

![Figure 5.5 An excerpt of a page from Ted Reed's Syncopation book (1958, p. 25)](image)

Rhythms from Syncopation would be superimposed over each ostinato and practiced using the same three-stage method outlined earlier. A rhythm catalogue like this provided an opportunity to encounter rhythmic ideas that may not have occurred naturally in my own phrasing over the ostinatos. As a result, practicing these rhythms enhanced phrasing potential and rhythmic material for the improvisations.
Some of the more complex rhythms required a greater amount of time and a different approach in developing the required coordination. In order to achieve this, a practice process of “In Time/No Pulse” was investigated.

5.2.2 The “In Time/No Pulse” Approach

Certain rhythms over the ostinatos provided coordination challenges, resulting in the need for a strategy-generated approach to overcome these difficulties. These coordination challenges arose in cases where either melodic rhythms were difficult, or when melodic phrases did not line up rhythmically with the ostinato. Learning these ideas at tempo (including slow tempos) did not always result in the desired execution in performance. Often when attempting these difficult rhythms, the coordination was felt to be underdeveloped and inaccurate. A method was required to address this issue. This section discusses an approach that I encountered through a private lesson with pianist David Braid in 2013. Braid approaches developing coordination between the hands as an ordering of physical gestures. In an interview published in the Ottawa Citizen, Braid explains:

> Practicing with time but not steady pulse was particularly helpful... in other words, not forcing myself to play without the demand of steady pulse gave me the mental preparation time I needed to conceptualise each gesture in advance – this naturally made the gesture flow without obstacle or effort. With repeated practice, the preparation time lessened until I could do it in real time. (Braid via Hum, 2014, para 10)

This approach was found to be effective in this project. For this exegesis, I gave this approach the label “In Time/No Pulse”; “In time” referred to placing the rhythmic gestures in the correct order (rather than with a groove or time-feel). “No pulse” described how the learning process was undertaken without a beat or groove. A metronomic pulse would be added later once the order of gestures had been embodied in my motor schema. This approach allowed for improved execution and reinforcement of motor skills and muscle memory, in line with Falle’s “importance of inputting muscle memory correctly from the first instance, rather than editing incorrect muscle memory habits” (2011, p. 27). This idea is reinforced by Braid:

> The cleaner aural and muscle movements took very deep roots in my memory as well as greatly improved precision. (Braid via Hum, 2014, para 10)
In this project, the “in time/no pulse” method was developed as an incremental process. Initially the rhythms were clearly notated to provide a visual representation of the desired outcome. Figure 5.6 presents a hypothetical syncopated rhythm over the ostinato of Bradley’s Art.

![Figure 5.6 A hypothetical syncopated rhythm over Bradley’s Art ostinato](image)

To enhance the focus on rhythm, the phrase would be re-notated without harmonic considerations, as simply two rhythms. This idea is presented in Figure 5.7:

![Figure 5.7 Rhythm and ostinato (from Figure 5.6) notated away from musical stave](image)

Following this, the rhythms would be simplified into “drum sticking” notation. This is shown in Figure 5.8. The “L” represents “left” and is the rhythmic material from the left-hand ostinato. The “R” is the right-hand’s rhythm. Lines were then drawn on the diagram to notate where either the rhythms lined-up (solid red lines), or where they didn’t (dotted orange lines). The result of this is a visual representation of the order of rhythmic gestures.

![Figure 5.8 Rhythm (from Figure 5.6) simplified to a sticking pattern](image)
This sticking pattern would be practiced away from the instrument; by removing myself from the piano, I further removed any distraction of harmony or melody. The rhythms would be practiced by tapping the two parts on my legs. Using the “In-Time/No-Pulse” method meant that the practice occurred with a rubato time-feel (initially almost in slow-motion), making certain to place the rhythmic gestures in the correct order. The red-lines in Figure 5.8 are significant because it provides a visual representation of the ordering of gestures through the phrase, allowing for muscle memory to be developed correctly from the outset. Over time, a pulse would be introduced with the inclusion of a metronome at a slow tempo.

After embodying the rhythms physically, the next step was to apply the concepts to the piano. The intent of the practice away from the piano was that the coordination may come faster when the rhythms were applied at the instrument. Similarly, the “in-time/no-pulse” approach would be employed in the initial stages as a means of developing muscular familiarity with the rhythms. Over time, once the rhythms were felt to be occurring more naturally, a metronomic pulse would be introduced to the practice.

Overall, the “in time/no pulse” method itself was found to be a valuable approach in this project. By learning rhythms between the hands as an order of physical gestures, the muscle memory became more firmly fixed in my facility. The next section highlights occurrences in the performances where various standard subdivision ideas were used as an improvisational tool.
5.2.3 Occurrence of Standard Subdivisions in Performance

The practice of standard subdivisions over the ostinatos resulted in some of the rhythms occurring in the recorded performances. When exploring coordinating standard subdivisions over the ostinatos, a key focus was on developing rhythmic flexibility by learning a variety of syncopated manipulations of the rhythms. This included syncopated rhythms, cross-rhythms, and conceptual application of rhythmic material (such as playing in the gaps of an ostinato). The intentional practice and resultant application of this material in performance was found to be helpful in developing greater coordination over the ostinatos, as well as opening up phrasing variety in the improvisation. This section acknowledges some moments where a practiced rhythmic technique appeared in the recording as part of the improvisation.

Exploring off-beats over the ostinatos was a quaver-based idea that was practiced in this project. This was done with the intention of opening up my phrasing over the ostinatos, through practice of a rhythmic idea that may not have necessarily occurred naturally in my playing. Figure 5.9 shows this rhythm as it occurred in performance on Jezza.

![Figure 5.9 Jezza: Off-beats (2:28mins)](image)

One strategy-generated idea that was developed was to learn to play in the gaps of the accompaniment. This was an idea presented to me by American jazz pianist Aaron Goldberg in a private lesson as a means of gaining a more thorough understanding of the ostinato rhythms (A. Goldberg, personal communication, June 15 2010). The practice also helped in learning rhythmic ideas that didn’t sync up with the left-hand, creating varied rhythmic options for performance. This method was practised over all of the ostinatos, with the most interesting rhythmic results occurring on Bobby Eagle. Consequently, the technique was used in the improvisation over this piece. The technique starts at the 4:21 minute mark; the excerpt in Figure 5.10 is taken from the 4:31 minute mark.
Another quaver-based practice method explored was to improvise in a manner derivative of the melody (specifically in this project, utilising rhythmic elements). The idea was taken from Burke’s (2012) suggestion about the significance of thematic continuity between composed and improvised elements in a performance:

The idea of connecting improvisations with the pre-composed melody, as distinct from stating the melody and then improvising on the chord progression rather than the thematic material is an instinctive choice. (...)It is a concern for maintaining the melodic essence and identity of a piece. (p. 65)

This idea was employed in Bobby Eagle as a rhythmic technique. Due to Bobby Eagle’s syncopated melody, application of the technique in improvisation was quite effective, resulting in heightened syncopation in the improvisation. Figure 5.11 presents an excerpt of this approach as it occurred in the recording:

The investigation of semiquavers over the ostinatos raised some interesting challenges. Although playing semiquavers over the ostinatos did not present many coordination issues, the challenge was precise execution at tempo. Dr Bob Hinz (1995) suggests that “tempo has a strong influence on the
character (and often the quality) of an improvisation” (p. 33). He explains that fast tempos can inhibit an improviser’s melodic integrity, relying more on patterns and shapes to achieve the rhythmic material. Figure 5.12 shows an excerpt of semiquavers occurring over Jezza (approx. 175-180bpm).

![Figure 5.12 Jezza: Semiquavers (3:07mins)](image)

An expansion of using semiquavers was exploring syncopated variations. Again, the tempos often made precise execution of this difficult. One example where syncopated semiquavers did occur in performance was in the opening of the Cat Donkey Hedgehog solo, an excerpt of which is shown in Figure 5.13.

![Figure 5.13 Cat Donkey Hedgehog: Start of solo (2:23mins)](image)
Another method of practicing manipulation of standard subdivisions was the investigation of cross-rhythmic material. These ideas were practised to develop more fluid phrasing options, and to learn to hear ideas that flow over the bar-line. As Tom O'Halloran (2011) explains in his Masters, "Cross-rhythms and hemiolas are often employed for contrast, to add variation, colour and to propel the music further" (p. 82).

In this project, many of the cross-rhythms practised did not occur in performance. The specific occurrence of the cross-rhythms themselves was not important; the motivation of the practice was to learn new phrasing options (especially from a coordination viewpoint), and explore other methods to approaching improvising over ostinatos. In this case, the practice of cross-rhythms was valuable in expanding phrasing variety in my improvised lines. The discussion identifies points in the recordings where cross-rhythms did occur.

A cross-rhythm explored in this project was dotted-crotchets, implying 3/8 time, over the ostinatos. This cross-rhythm flows over the bar-line, taking three bars of 4/4 time to resolve back to the beat where it started. Figure 5.14 is an excerpt where dotted-crotchets occurred over the ostinato from *Bradley's Art*.

![Figure 5.14 Bradley's Art: Dotted crotchets—(4:48mins)](image)

Figure 5.15 shows another manipulation of dotted crotchets. While the rhythmic material employs constant quavers, it is the melodic line that implies the 3/8 rhythm. The top note of each group of three is highlighted in purple for ease of analysis.
5/8 and 7/8 cross-rhythms were two other rhythmic ideas that were explored that occurred in performance. These cross-rhythms were found to be effective in displacing melodic material, creating variety and interest. Figure 5.16 highlights where 7/8 cross-rhythms were played over the ostinato from *Jezza*.

Figure 5.16 *Jezza*: 7/8 cross rhythm (2:34mins)

Figure 5.17 shows a 5/8 cross-rhythm occurring over *Bobby Eagle*.

Figure 5.17 *Bobby Eagle*: 5/8 Hemiola (3:49mins)
5.2.4 Summary of Rhythmic Coordination over the Ostinatos

The practice of standard subdivisions, including syncopated and cross-rhythmic variations, was found to be helpful in developing greater coordination over the ostinatos, as well as opening up phrasing variety in the improvisation. Processes employed in this project, such as the three-stage rhythm practice (with the gradual introduction of other musical elements such as melody), the *Syncopation* book, and the “In-Time/No-Pulse” approaches were all valuable in developing a great deal of the coordination necessary to achieve the rhythmic material that occurred in the improvisations. This heightened coordination in my playing provided flexibility in my hands, allowing freedom to express my musical ideas in performance over the ostinatos. More practice in this area would lead to greater facility, and subsequently more freedom in improvisation.

5.3 Right-Hand/Two-Voice Improvising

In the composition stage of this project, Brad Mehldau’s approach to hand-splitting and playing multiple voices was a central technique. As well as using the technique in composition, it was also explored in an improvisation context, especially in relation to playing two-voices in the right-hand. In order to develop the necessary facility to execute this technique, a variety of practice ideas were investigated. These are discussed in this section.

5.3.1 Learning of Composed Works and Exercises for Two-Voice Development

An initial step in developing facility in this area was to learn some composed works that employed the multiple-voice technique. Learning pre-composed material provided an opportunity to develop physical familiarity with hand-splitting techniques in a fixed context without the added difficulty of improvising. Pieces from Bach’s *Inventions and Sinfonias* (especially the 3-part inventions) and Bach’s Chorales were practiced. These works were chosen due to their specific focus on playing multiple parts, as well as the inherent melodicism in the compositions, an aspect of the technique I wanted to incorporate into my own playing. Figure 5.18 presents an excerpt from Bach’s Chorale 300. Colours highlight the use of four voices:
Figure 5.18 Excerpt of Bach’s Chorale 300, highlighting use of four voices

Practice of these works revealed the need for greater finger independence, a technical aspect that would be necessary to achieve this technique in an improvisation. Consequently, exercises were sought to develop finger strength and coordination. Exercises from Max Cooke’s (1985) *Touch, Tone and Technique for the Advanced Pianist* provided exercises that were found to be especially useful. Figure 5.19 presents one of Cooke’s exercises with a specific focus on developing the ability to sustain notes while other fingers in the same hand played faster subdivisions.

Figure 5.19 A multiple voice finger strength exercise from *Touch, Tone and Technique for the Advanced Pianist* (Cooke, 1985, p. 100)
5.3.2 Developing Strategy-Generated Practice Approaches for Two-Voice in Right-Hand Improvising

Extending from the Bach works and the Cooke exercises, a number of strategy-generated practice ideas were developed during the project. These personalised exercises allowed for outcomes I desired to achieve in improvisations to be developed in an intentional manner. A central aim of the strategy-generated practice ideas was to develop the relevant coordination to improvise melody and counter-melody simultaneously in the one-hand, while also performing the left-hand ostinatos. Initially, simple exercises were developed to slowly gain facility in the hands. At first these were practiced without the left-hand ostinato, with that element being added later. Figure 5.20 shows an example of a reasonably straight-forward scalic pattern that was practiced, with the melodic voice supported by harmonising notes in voice two.

![Figure 5.20 Scalic Exercise with two voices in one hand](image)

While the exercise in Figure 5.20 appeared to be reasonably straightforward, unexpected challenges arose when playing it. The most significant of these was the challenge of fingering. Take, for example, the first 3 beats of bar 1; while voice two (green) played the “B” with a thumb, the fingering in voice 1 required five fingers to get from the “C#” to the “G”. However, with the thumb occupied, only four fingers were available. In a standard ascending scale exercise, the thumb (finger 1) would cross under to propel the hand up the scale. In this case however, the addition of voice two’s part provided a physical limitation that restricted easy execution of the exercise. A perfect solution was not found, so in order to achieve the exercise, a compromise was made using pedalling techniques and playing the same finger twice in a row (finger 4 – ring finger). Figure 5.21, using numbers to show which finger is used, shows this compromise (1 = thumb, 2 = index finger etc.).

![Figure 5.21 Compromised fingering for two-voice exercise from Figure 5.20](image)
Potentially with more time, a better fingering outcome would have been discovered. Regardless, the aim of the exercise was to develop coordination for the hand to play two parts. In essence this was achieved. However the downside of the compromised fingering affected potential speed, control, and the note clarity. Hurdles such as this highlighted the need for the careful consideration required when developing exercises for playing two-voices in one-hand.

5.3.3 Expansion of Two-Voice Rhythmic Material

Various rhythmic approaches were also explored with the two-voice technique, as a means of expanding melodic options available in performance. An example that was practiced is presented in Figure 5.22. The exercise involved playing semiquavers in one voice while the other plays crotchets. The roles would then be reversed between the voices, as shown in the figure.

![Figure 5.22 Two-voice practice exercise: Playing semiquavers and crotchets simultaneously in one hand](image)

Some multiple-voice material that employed cross-rhythms was also practiced. Efforts at playing cross-rhythmic ideas in two-voice parts in the right-hand were found to be challenging, especially when played in conjunction with the left-hand ostinato. While these exercises were felt to be helpful for expanding my coordination when playing two-voices in one hand, the cross-rhythms generally didn’t occur in performance. One practiced rhythm is shown in Figure 5.23, playing dotted crotchets in one voice while playing crotchets in the other. The crotchets in voice two in this example also imply a 3/4 melodic cross-rhythm.

![Figure 5.23 Two-voice practice exercise: Playing dotted crotchets in voice one against crotchets in voice two](image)
Another method explored was the use of call-and response techniques. In order to achieve this, strategy-generated practice exercises were developed that focused on learning to shift the melodic and counter-melodic elements between voices one and two. Figure 5.24 presents an exercise where this was practiced. Dynamic control was important in this exercise, in order to bring out the melodic voice.

![Figure 5.24 Two-voice practice exercise: Regularly shifting the melodic/counter-melodic material between voices in one hand](image)

5.3.4 Occurrence of Two-Voice Improvising in Performance

Figures 5.25, 5.26 and 5.27 show how this technique occurred on *Bradley’s Art, Cat Donkey Hedgehog* and *Jezza*. Again, colours are used to represent the four voices occurring in performance; blue for voice one, green for voice two, purple for voice three, and red for voice four.
Figure 5.25 Bradley’s Art: Two voices in right-hand (3:45mins)

Figure 5.26 Cat Donkey Hedgehog: Two voices in right-hand (4:29mins)
Figure 5.27 Jezza: Two voices in right-hand (2:04mins)

Figure 5.28 presents an excerpt from the performance of Jezza that combines the multiple-voice approach with a cross-rhythm. In the excerpt, a 3/4 time signature is implied over 4/4 time. Voice one is the melodic phrase, using a repetitive rhythmic idea, while voice two plays harmonising notes that are sustained for 3 beats, clearly outlining the 3/4 cross-rhythm. Applying these two techniques (cross-rhythms and two-voices) simultaneously while also maintaining the left-hand ostinato was quite difficult. Blending the ideas of cross-rhythms and multiple-voice parts did not receive much attention in the practice process, but is an area that would benefit from more research and further developmental practice.

Figure 5.28 Jezza: Two-voice hemiola employing 3/4 cross-rhythm (2:52mins)
There is scope for much more research into multiple-voice improvisation. The exploration in this project provided interesting performance outcomes, and started to explore potential possibilities from further practice in this area. Future research could investigate the creation of more effective practice exercises that result in greater dexterity and more rhythmically liberated outcomes, such as finding methods to play faster subdivisions, increasing independence between the voices, investigating multiple-voice cross-rhythmic material, as well as exploring ways to increase melodicism when applying the technique. Upon reflection from my experiences in this project, these are all areas that would benefit from future research.

5.4 Triplets

Triplet subdivisions over the ostinatos were explored in this project. The intention was to develop a sense of cross-rhythm against the quaver and semiquaver accompaniment ostinatos, as well as to add phrasing options in the improvisations. While some triplets did occur in the recorded performances, overall this rhythm was difficult to coordinate over the ostinatos and was not employed much in performance.

The common subdivisions used in the project (for the ostinatos and the improvisational devices) were standard rhythms such as minims, crotchets, quavers, and semiquavers. Significantly, these rhythms all fit into the same rhythmic grid; Figure 5.29 highlights this. The rhythms interlock, all linking into the same subdivision count of “1 e + a” (N.B. the “+” is vocalised as “and”). Orange lines are used to highlight how the semiquavers and quavers line up.

![Rhythmic grid: Quavers and semiquavers lock into the same rhythmic grid](image)

**Figure 5.29 Rhythmic grid: Quavers and semiquavers lock into the same rhythmic grid**

Triplets however do not fit into the same subdivision grid of this “1 e + a” count. This is highlighted in Figure 5.30 where the orange lines only line up on the first beat of the triplet.
While coordinating triplets over the ostinatos was certainly achievable, it was difficult, especially in the limited time-frame of this project. Methods such as the “In-Time/No-Pulse” approach were employed to some success, helping develop coordination and understanding of how the triplets and the ostinatos lock in. When it came to playing the rhythms at tempo however, developing precise execution required more practice.

Figure 5.31 shows triplets over one bar of the *Bobby Eagle* ostinato. Orange lines are used to highlight where the placement of the quavers line up against the triplets.

In the initial stages of practicing these rhythms, a subdivision approach was necessary to develop a precise outcome. A common subdivision of sextuplets (6) was used as a rhythmic grid. This is because 6 is the lowest common denominator of triplets (3) and quavers (2). Figure 5.32 shows how this lines up. The “x” notes in the treble clef are the unplayed subdivisions.
Since the quavers line up with a sextuplet subdivision, the correct placement of the triplets is easier to execute as the quavers and triplets share a rhythmic grid. Even with this in mind, counting sextuplet subdivisions at tempo (*Bobby Eagle* is played at approximately 90bpm) was quite difficult.

One of the concerns of this triplet practice was avoiding approximation of the ostinato rhythms. While practicing these rhythms, I came to realise that it was easy to mistakenly sync up the ostinato rhythm with the triplets, especially at tempo. Figure 5.33 presents what this undesirable outcomes might look like. The orange lines highlight where the quaver subdivision is.

Performing rhythms approximately (as per Figure 5.33) defeats the purpose of practicing coordination with the ostinatos. The only thing that would be achieved is the development of incorrect muscle memory. Moreover, the slight warping of the time feel makes the groove uneasy. It was very easy to fall into the trap of blurring triplets and the ostinato together. Developing the independence between the hands to execute this rhythm with precision was found to be difficult.

This process became more complex again when dealing with faster subdivisions. For *Bradley’s Art* the main subdivision of the ostinato is semiquavers (4’s). As a result, triplets were more difficult to execute precisely. Figure 5.34 graphically displays this;
Again, the “In-Time/No Pulse” method was used to develop the coordination of where each hand places certain notes. When it came to playing this type of rhythm at tempo however, precision was very difficult. If the subdivision grid approach were to be used, the lowest common denominator of triplets (3) and semiquavers (4) is 12 – therefore, the subdivision would look like this:

Since Bradley’s Art is performed at approximately 120bpm, subdividing into 12’s would’ve required trying to count/hear 48 subdivisions per bar, or 1440 subdivisions in one minute. For the author, this was a difficult thing to do.

One method found helpful to achieve the coordination at tempo was to vocalise the rhythms. The cross rhythms of triplets against semiquavers could be vocalised as “cook the big fat chicken”. These syllables, while childish, helped provide a basic feeling of four against three. Figure 5.36 shows how the syllables lines up with the rhythm.
While this method was approximate, employing it meant that this difficult polyrhythm was at least attainable in a basic sense. However, due to the difficulty of developing this particular cross-rhythm, and the approximate outcomes from verbalising the rhythms, playing triplets over semiquavers ultimately was not used in any of the performances on the recordings.

Overall, due to the project time constraints and the difficulty inherent in coordinating triplets against quaver and semiquaver ostinatos, triplets weren’t employed in performance very often. However, the practice provided insight into the potential value of a deeper study of triplet cross-rhythms. The practice undertaken on triplets had a number of benefits, including increased dexterity over the ostinatos, and new methods for approaching phrasing.

5.5 Other Techniques Employed

On some of the compositions, a few improvisatory techniques were explored separate from improvising over ostinatos. Select examples are acknowledged here as points of interest for solo piano performance, as they also contribute to approaches that depart from the common right-hand solo/left-hand chord approach to jazz piano education.

5.5.1 Bradley’s Art: Left Hand Solo

The opening section of the Bradley’s Art improvisation employs a left-hand solo (starting at 1:40 mins). This approach was inspired from quotes presented earlier from Brad Mehldau and Keith Jarrett, who both highlighted the issue of a jazz pianist’s left-hand commonly being less dexterous in comparison to the right-hand. Therefore, in order to explore this perceived pianistic limitation it was decided to commence the solo by reversing the roles of the hands.
Not surprisingly, and in-line with Mehldau and Jarrett’s suggestions, improvising with my left-hand raised a number of technical issues that required addressing. Initial attempts at improvising in this way immediately revealed a deficiency in my technique. In order to develop facility in my left-hand, practice strategies were employed, including playing exercises such as scales, arpeggios and melodic patterns with my left-hand. This was done to develop muscle memory and strength in the fingers.

Within a few weeks, my left-hand began to show an improved facility for improvising. This is an area that still requires more work. Figure 5.37 presents an excerpt of the left-hand solo in the recording of Bradley’s Art:

![Figure 5.37 Bradley’s Art: Left-hand improvising, right-hand accompanying (2:12mins)](image)

5.5.2 Bradleys Art: Two-Handed Soloing

At 2:35 mins in Bradley’s Art, the solo evolved from a left-handed solo to two-handed improvising. Both hands improvised, interacted and accompanied all in the same moment. Figure 5.38 shows an excerpt of this technique as it occurred in the recording.
In order to practice this, works from Bach’s *Two-Part Inventions* were investigated, the use of call-and-response was practiced, and I would regularly improvise freely with the concept over a period of some months. Freely improvising with this two-handed approach was a method inspired by the text *Free Play* by Stephen Nachmanovitch (1990); “Mastery comes from practice: practice comes from playful experimentation” (p. 73). This was an informal practice method that was also applied to many other techniques discussed in this project.

### 5.5.3 Cat Donkey Hedgehog: Improvising with the Ostinato

In the improvisation section of *Cat Donkey Hedgehog*, the central ostinato was used as an improvisational tool. This occurred at 5:36. It was preconceived that at this point of the improvisation the solo form and composed harmonic progression would be abandoned, and the device would be explored as a framework for free improvisation.
In order to improvise freely using the technique, flexibility was required to be able to execute the ostinato in every key, with many chord types and inversions. Figure 5.39 presents an excerpt from the improvisation where a number of different chord types occur.

![Figure 5.39 Cat Donkey Hedgehog: Improvising with the Ostinato (6:20mins)](image)

As discussed in the chapter on the compositional development of *Cat Donkey Hedgehog*, voice two’s part was regularly adjusted or omitted to support the melodic element in voice one. An example of this is seen in the figure above (Figure 5.39), in bars 3 and 4 in the right-hand part.

### 5.6 Summary of “Improvising on the Compositions”

This chapter has provided insight into the practice process undertaken in this project toward developing an improvisational facility over the ostinatos. The discursive evidence of my findings, including the approaches that were practiced and techniques that occurred in performance, provided insight into my experiences of developing a solo piano approach over the composed ostinatos.
6.0 Conclusion

As outlined in the introduction of this exegesis, a motivating factor of this research was the under acknowledged demands of solo performance, aggravated by a lack of educational material. This project sought to investigate approaches for facilitating solo jazz piano performance different from commonly taught techniques such as stride and walking bass-lines. Consequently, the following three research questions were established:

- How can assimilation of selected non-jazz techniques be used to develop an approach to solo jazz piano performance?
- How can techniques such as ‘splitting the hands’ and ‘multiple-voice’ approaches be utilised in solo jazz piano performance?
- How can improvisational facility be developed over accompaniment ostinatos in solo jazz piano playing?

The pieces developed in this project provided me with an opportunity to explore different ways to approach solo jazz piano performance. While I have achieved certain results in both the composition and improvisation stages of the project, it is probable that a talented concert soloist would achieve different results, as would a high school student. This is an area that might be worth investigating in future research.

Assimilating various techniques from different genres and styles as a method was explored, with the intention of demonstrating this approach in practice. This was addressed with a practice-led and reflective methodology through development, observation and analysis of compositions and improvisations. Assimilation was applied by borrowing various technical aspects from differing influences and applying them to the piano, including select techniques from piano compositions of Chopin, Bach and Beethoven, Bluegrass music, Brazilian music, and drumkit and rudiment techniques. Assimilation was found to be a valuable method in this project for inspiring a variety of approaches for the development of solo jazz piano accompaniment techniques.

Supplementing the assimilation approach was the exploration of ‘Splitting the Hands’. This technique allowed for up to four parts to be accessible in performance, more readily providing the veneer of an ensemble in a solo setting, such as in Jezza where the ostinato accommodated playing both the Brazilian bass and guitar parts simultaneously in one hand. This method was also found to be valuable as a departure from standard right-hand solo/left-hand chord approaches. Exploring
multiple-voice playing in both composition and improvisation did pose unprecedented challenges that required addressing. These especially related to coordination demands, approaches to melodicism with the technique, and rhythmic flexibility. Future research could examine this area in more depth, possibly focusing on pedagogical aspects of the technique and the development of material to facilitate a learning process.

The final research question related to learning to improvise over the devised accompaniment ostinatos. Significantly, there is a potential multitude of approaches for developing improvisational facility over ostinatos. This project focused mainly on one, the learning of rhythmic facility through coordination and muscle memory. The development of improvisational facility over the ostinatos was challenging on both a conceptual and a technical level. Ultimately the learning of rhythmic subdivisions over the ostinatos, using techniques such as the “In-Time/No-Pulse” approach, was valuable in facilitating rhythmic freedom. Furthermore, the practice of this coordination aided in the development of a deeper knowledge of rhythmic subdivision and time-feel, a benefit applicable to all performance scenarios.

The practice process identified the significance of a balanced, two-handed approach required for solo piano performance. This revelation is in response to the hierarchical right-hand solo/left-hand chord approach which dominates jazz piano education. Whether accompanying or providing melodic elements, both hands play an integral role to the performance outcomes. In a solo setting, it would be disadvantageous if either hand was technically limited, or approached as having less significance in performance. Therefore, when developing improvisational facility over the ostinatos, it was not independence that was sought by superimposing rhythms over an accompaniment, but exploring co-dependence between the hands, developing a thorough understanding of how the hands interacted as a unified whole.

Two main achievements result from this research. Significantly, at the time of writing there is a void of solo jazz piano educational material. This project has attempted to demonstrate that methods for solo jazz piano performance can be developed and explained. These include ‘splitting the hands’ for composition and improvising, ostinatos, developing improvisational facility and coordination over ostinatos, and assimilation as a composition/arrangement method. A logical next step would be the creation of an education manual for students.

The second achievement is the acknowledgement of the need for a heightened focus on a balanced approach to the hands in jazz piano pedagogy. This would make a welcome paradigm shift from the right-hand solo/left-hand chord approach to a more holistic method. I am not suggesting that the
right-hand solo/left-hand chord approach is not an applicable performance method. Instead, my point is that students could benefit from a training regime that was more balanced between the hands, to not leave the left-hand technically limited or underprepared.

In closing, I hope that the information contained in this document can be useful to readers by contributing fresh ideas and inspirations for their own musical expressions. Beyond learning the ostinatos developed in this project, it is hoped that the individual may be inspired to experiment and develop their own perspective and approach to developing a solo piano skillset. Solo performance is an area that relates to every jazz pianist in some way, and is an area that requires much thought and investigation.
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Appendix A – Education Manuals

A.1 Education Manuals that Contain Minimal-to-No Discussion on Solo Performance

- Jazz Piano and Harmony: A Fundamental Guide (Ferrara, 2011a)
- Jazz Piano and Harmony: An Advanced Guide (Ferrara, 2011b)
- Start Playing Jazz Piano Now! (Sedergreen, 2011)
- Ultra Smooth Jazz Groove for Piano/Keyboards (Gordon & Villafranca, 2009)
- Exploring Jazz Piano: Pt 1: Harmony, Technique, Improvisation (Richards, 2005)
- Best of Bebop Piano: Keyboard Signature Licks (Rizzo, 2004)
- Piano By Ear, Book One: Play Jazz, Blues, Rock (Ostwald, 2004)
- Big Book of Jazz Piano Improvisation (Baerman, 2003)
- Jazz Piano Chords (Stefanuk, 2001)
- Jazz Piano From Scratch: A How-to Guide for Students and Teachers (Beale, 1998)
- Jazz Piano Voicings (Levine, 1995a)
- The Jazz Theory Book (Levine, 1995b)
- Jazz Piano Voicing Skills (Haerle, 1994)
- Jazz Piano Comping for the beginning Jazz improviser (Anderson, 1993)
- Alfred’s Basic Jazz/Rock Course Lesson Book (Konowitz, 1993)
- Jazz Piano Method (Robur, 1990)
• *The Jazz Piano Book* (Levine, 1989)

• *Voicings for Jazz Keyboard* (Mantooth, 1986)

• *Jazz Keyboard for Pianists and Non-Pianists* (Coker, 1984)

• *Solo Improvisation Techniques for the Jazz Piano* (Doherty & Nunes, 1981)

• *Jazz Hanon* (Alfassy, 1980)

• *Melodic Studies for the Jazz Pianist* (Agovino, 1980)

• *Contemporary Jazz Piano From Voicings to Improvisation* (Sumares, 1978)

**A.2 Books Containing Shallow Discussion On Solo Piano**

When discussing solo piano, these texts typically focus on stride, harmonising melodies, and walking bass-lines:

• *Jazz Piano Handbook* (Weir, 2008)

• *The Soul of Blues, Stride and Swing Piano* (Scivales, 2001)

• *Jazz Piano Concepts and Techniques* (Valerio, 1998)

• *Berklee Jazz Piano* (Santisi, 1993)

• *Modern Jazz Piano: a Study in Harmony and Improvisation* (Waite, 1987)

• Harvey’s *Teach Yourself Jazz Piano* (Harvey, 1974)

• *Contemporary Piano Styles* (Mehegan, 1965)

• *Swing and Early Progressive Piano Styles* (Mehegan, 1964)
Appendix B – Solo Jazz Piano Discography


Goldings, L. (2011). In My Room [CD]: BFM.


McAll, B. (2013). Barney Mcall ~ Solo Live Performance [CD]


Appendix C – Bradley’s Art

BRADLEY’S ART

1ST TIME ONLY – BOTH HANDS

CROOK LOCAT MAN 7?

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21 \text{F6} \\\[(B^\flat C^\flat F^\flat E^\flat D^\flat C^\flat)\]

A tempo

23 C-vEb \\
[D \text{LOC0}]

25

\text{SOLOS - OPEN A SECTION}
\text{CUE TO B SECTION (PLAY MELODY FROM 17 TO END)}
Appendix E – Jezza
1 - Cue to CM and loop back
2 - Cue to 5/4 section to go on

RIT

SMALL FREE IMPROV TO EMERGE
Appendix G – Attached Audio CD

Track 1 – Audio Appendix G1 – Bradley’s Art

Track 2 – Audio Appendix G2 – Cat Donkey Hedgehog

Track 3 – Audio Appendix G3 – Jezza

Track 4 – Audio Appendix G4 – Bobby Eagle