Developing Technical Control, Ensemble Interaction, and Flow within Jazz Performance

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Abstract

This exegesis explicates the approaches, processes and experiences within my performance practice. It explores relationships among studio practice, performance, the flow state, improvisation and composition. The exegesis also looks into balancing individual conception and technical control with interactive ensemble performance. The outcomes of this research project include compositions, commercially released recordings, and a major recital.

The practice-led research model has been a pertinent methodology in this research for experimenting, documenting, and reflecting within my studio practice, rehearsals, performances, recordings, and compositions. Research-led practice has also been a key methodology in this project, establishing concepts and theoretical constructs, such as the idea of flow. Additionally, the investigation of trends within Australian jazz and the examination of seminal practitioners and ensembles has contextualised and influenced my approach as a composer and contemporary jazz trumpeter.

The advantages of performing in flow, the development of technique that enables the practitioner to execute ideas with accuracy and immediacy, and developing a flexible vocabulary for improvised and interactive ensemble performance are specific to my own performance practice and have provided a grounding for developing my recital. These approaches might be adopted in the future by other practitioners, specifically jazz musicians seeking to gain greater awareness and understanding of the preparation and experience of improvised jazz performance.

Although the literature within the field of practice-led research is growing, to date only a small portion of it has focused on the specific issues relevant to performance within jazz music. In addition to the primary recital outcome, a secondary aim of this research was to develop a better understanding of the particular issues that jazz musicians face within performance.

Statement of Originality

I declare this exegesis contains no material that has previously been submitted for a degree or diploma in any university and, to the best of my knowledge, I believe this thesis contains no material that has previously been published or written by another person, except when due reference is made in the text of the exegesis.

Signed:

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Table of Contents

Table of Figures

Chapter 1: INTRODUCTION

1.1 Content Of Recital

The primary outcome of my practice-based research is a recital. The recital features seven original compositions, six of which are performed within a quartet configuration of trumpet, piano, double bass and drum kit. One of the compositions is performed in a duo configuration of trumpet and piano. The choice of compositions and musicians reflects my principal research goals of developing flow[1] as a state of heightened consciousness, ensemble interaction, technical control during performance, and manipulating improvisations within the real-time performance. The compositions contain both notated and improvised sections. Notated sections establish a theme or mood and provide a guide for the nature of the improvisation that follows. The improvised sections and some of the notated sections allow for flexibility in interpretation and input by all ensemble members. The overarching intention of the recital is to create ensemble music of artistic value[2] for the performers and the discerning listeners, featuring a musical dialogue within the given compositional parameters between distinctive practitioners. The recital works and approximate durations are:

1. *Drift* 9:00
2. *Flow* 8:00
3. *Piece for Peace* 8:00
4. *Finding the Balance* 9:00
5. *Marshmallow Man* 7:00
6. *When the Stars Align* 10:00
7. *Rollercoaster* 9:00

Along with my recital, the exegesis outlines the following objectives within my practice-based research of jazz trumpet playing:

1. To develop technical control to facilitate musical vocabulary for jazz trumpet performance.
2. To achieve a state of flow in jazz performance and narrow the gap between conception and execution.
3. To manipulate improvisations within the real-time performance context.
4. To develop improvised music performances with deep interaction between ensemble members.

[1] Because 'Flow' is a key concept within my research it will be discussed in detail later in the introduction section, but in this early stage of the exegesis it is important to note that 'Flow' is commonly understood to describe a particular state of heightened consciousness in line with the definition established by psychologist Mihaly Csíkszentmihályi within his book *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990), 43.

[2] 'Artistic Value' is a potentially problematic term due to its subjective nature; therefore it will be discussed in detail later in this exegesis. At this early stage it is important to state that artistic value within this research refers to the level of complexity within my music.

This exegesis provides a context for my recital performance and compositions, and it explicates the experiences and processes involved in my performance practice. As a practicing artist I have certain experiences during my practice that cannot be verified or observed by others. This confirms a widely understood aspect of practice-based research, namely the subjective nature of some of it, but nevertheless I felt that it is vital to take those personal experiences into consideration simply because they have led to specific outcomes in my performance practice.

Chapter 1 outlines the general context of my performance practice, the research focus within my recital, and provides a context for my work within discourse around practice-based research. It also describes the research methodologies and relevant theories within this exegesis and discusses various components of my practice-led research and research-led practice.

Chapter 2 presents the context of my performance within Australian jazz and the various ensemble and individual practitioners who influence my performance practice.

Chapter 3 discusses issues of performance practice in relation to the recital. These include creating music of artistic value, the influence of composition on improvisation, approaches and processes towards technical development, flow, improvisation, and ensemble interaction within my performance practice. Also included are considerations within the differing contexts of studio practice, rehearsal, performance, and post-performance reflection.

Chapter 4 focuses on the role of composition within my performance practice. The context of my compositional approach within the field of jazz, the ontology of my compositions, the materials, musical form, and technical aspects for trumpet performance within my compositions are considered. The chapter also discusses the influence of improvisation on composition.

Chapter 5 contains a summary and synthesis of main observations.

1.2 The General Context Of My Performance Practice

The four focus areas outlined in the content of the recital section govern my performance practice approach. Developing the technical control required to execute performance materials with reflexivity is important to any jazz improviser. In particular, this aspiration is key for trumpet performance, which requires physiological coordination, efficiency and control. Excess muscular tension, air and blood flow obstruction, inefficient posture, inadequate breathing, embouchure malfunction, or poor general health can have adverse effects on a practitioner's ability to execute material accurately on the trumpet. Technical elements hindered by these physiological impediments include tone production, pitch accuracy, control of register extremities, clarity of articulation, endurance, dynamic control, and finger technique. The aim is to develop control of

these elements through body conditioning designed to improve coordination and promote efficient trumpet playing. This efficiency facilitates the development of the broader performance physiological requirements such as power, endurance, breathing, and physical recovery.

Technical challenges in performance can also interrupt creative flow, acting as a distraction from the music and creating a gap between a practitioner's conception and execution. Clearly, if a practitioner is distracted or mentally preoccupied during performance their ability to respond to the music and ensemble dialogue will be compromised. This may impede the engagement with interpretations, deviations, and improvisations of ensemble members, which are vital for fostering meaningful interaction. Interaction is key to spontaneity and momentum within jazz performance and usually features as an ongoing presence in high-level jazz ensembles.

My goal of manipulating improvisations in real-time performance is influenced by performance experiences, jazz method books, reflection, and specific approaches in studio practice that create a semblance to the ensemble performance context. I have experienced an increased ability to manipulate improvisations to the immediate performance context when in a flow state, free of thoughts of predetermined responses. Achieving and remaining in a flow state is challenging, as repetition of materials and approaches within studio practice increases the likelihood of their habitual duplication in performance. This tendency to play by habit, rather than in response to the immediate context, highlights the importance of considering ways to prepare for ensemble interaction within studio practice, followed up with analysis and reflection of recordings of these exercises. Reacting to the immediate context involves a restrained use of one's existing materials. One of the most basic restraint methods that I explore in practice is to leave space when I feel that what I am playing is not relevant to the immediate context. By not playing, I can listen more closely to the ensemble and re-establish my connection with the real-time context.

Manipulating improvisation within the real-time musical context is not the sole approach employed by jazz musicians, even though the term 'improvisation' suggests a spontaneous real-time action. It is common for jazz musicians to develop a personalised catalogue of materials, as I have done for the recital works, which are recycled with degrees of variation on harmonic sequences or formal structures.[3] For me, the ability to deploy that vocabulary with minimal conscious thought or intention is essential to improvisation. Ideally, preparation of vocabulary provides a store of material that is deeply ingrained and therefore easily accessible to the practitioner during performance. However, the real-time performance decisions lie in how to assemble materials according to the musical context. My ability to incorporate these materials within performance is

[3] Paul F. Berliner, *Thinking in Jazz* (Chicago: The University of Chicago Press, 1994), 102.

enhanced when I am responding reflexively in a flow state and therefore not over-thinking my decisions.

Accompanying instrumentalists often approach improvisation using instrumental-specific role-playing as a basis for their performance: a drummer may assume a predominantly time-keeping function within an ensemble improvisation, a bassist may habitually hold to the role of accompanist, and so on. While these roles are useful in many musical contexts, within improvised music this strict adherence to roles can potentially limit the adventurousness of interaction and flexibility[4]. In more interactive settings, all performers have the capacity to be simultaneously soloists and accompanists and the potential of a jazz ensemble to manipulate the improvisation to real-time performance requires flexibility individually and collectively. Factors that can assist increased performance flexibility are ensemble intersubjectivity[5], trust, and a willingness to depart from an idea if a stronger or more suitable one emerges within the ensemble.

My current approach to achieving ensemble interaction comprises elements of traditional role-playing, based on the post-bop[6] tradition, and a more interactive approach that loosens the distinction between soloists and accompanists. I am exploring these approaches within the context of three ensembles: the *Four in One*[7] quartet that explores jazz standards,[8] a duo configuration[9] comprised of piano and trumpet performing my compositions, and the *Paul Williamson Quartet.*[10] Whilst the repertoire for these ensembles is contrasting, the main goals are the same. In each, I strive to reach a high level of interaction with the other ensemble members, to manipulate the improvisations within the real-time musical context, and to achieve immediacy between conception and execution of ideas.

Compositions can affect ensemble interaction, potentially stifling or facilitating it depending on the abilities of the ensemble individuals. The style of notation, the approaches to verbal instructions by

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[4] 'Flexibility' in this context refers to an ensemble understanding that certain parameters, such as form, harmony, melody and arrangement are open to change during performance.
[5] The term 'intersubjectivity' is used here to describe language and understanding between ensemble members.
[6] 'Post-Bop' is an assimilation of influence from hard bop, modal jazz, the avant-garde, and free jazz (in this context the term 'free jazz' refers to experimental improvised music that is not bound by predetermined parameters such as tempo, chord sequences, or musical form, although these elements may be present in the music), without necessarily being immediately identifiable as any one style in particular. It has been an influential and popular jazz style over the last five decades.
[7] 'Four in One' is an ensemble comprised of Paul Williamson (trumpet), Marc Hannaford (piano), Alan Browne (drums) and Sam Pankhurst (double bass).
[8] 'Jazz Standards' is a term used to describe musical compositions that are widely known, performed and recorded by jazz musicians.
[9] The duo configuration 'Connect Four' features Paul Williamson (trumpet/composer), and the pianists Paul Grabowsky, Tony Gould, Andrea Keller and Marc Hannaford.
[10] The 'Paul Williamson Quartet' is an ensemble comprised of Paul Williamson (trumpet/composer), Paul Grabowsky (piano), Niko Schäuble (drums) and Frank Disario (double bass), and is the ensemble featured in my recital.

the ensemble leader, and the flexibility that the composition allows practitioners can have dramatic impacts on the interaction level within the ensemble. For example, if a composition has a specific, intricate and rigid melodic or harmonic sequence, then the options for individual interpretation and group discovery and interaction are reduced. This is not to suggest that such a composition is better or worse, but rather that it demands less input to the content and direction of the music from ensemble members. Compositions with specific notation and intricate detail often reflect the conception of the composer more than the contributions of the ensemble members.

Reducing the information on the notated parts requires the individuals to increasingly rely on the musical activity occurring within the ensemble for guidance, decisions, and materials. This is largely a process-driven approach, as identified by Smith and Dean,[11] which can result in the emergence of new ideas. Notated music with limited information can lack focus and consensus due to the conflicting interpretations within the ensemble. Nonetheless, through repeated performances, discussion, and reflection, individual detachment can transform to a feeling of connectedness with the other practitioners as ensemble intersubjectivity and common materials and approaches are developed.

Seminal recordings that epitomise interactive jazz and present alternatives to traditional jazz ensemble role-playing are useful for analysis. My music is influenced by post-bop style and ensembles such as the 1960s Miles Davis Quintet[12] have been role models for identifying, analysing, and incorporating interactive techniques within my own ensembles. These are introduced verbally during rehearsals, informally during discussions with the ensemble, and intuitively during performance. In my compositions, I have experimented with techniques intended to encourage ensemble interaction. These include reducing the information contained in the score by omitting elements such as harmonic chord symbols, open ended vamp sections that rely on cueing to change section, variations to traditional jazz ensemble role-playing, incorporating space, using sonic and gestural cues, including collective improvisation, and creating variations on the traditional theme-solos-theme jazz structure. These techniques are not new, however they trigger a different dynamic within the ensemble that relies on building intersubjectivity through listening, interacting and playing 'in the moment'. These actions help develop trust and a stock of co-created materials that can be drawn upon in future performances.

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[11] Roger T. Dean and Hazel Smith, *Practice-led Research, Research-led Practice in the Creative Arts*. (Edinburgh: Edinburgh University Press, 2010), 23.

[12] Jazz historians refer to the Miles Davis Quintet that existed between the years 1965-1968 as Davis's second great quintet. In addition to Davis, the ensemble consisted of Wayne Shorter, Herbie Hancock, Ron Carter, and Tony Williams. The group recorded a series of landmark albums, including *E.S.P.* (1965), *Miles Smiles* (1966), *Sorcerer* (1967), and *Nefertiti* (1967), which demonstrate what was a new approach to jazz: the combination of post-bop and free-jazz styles.

More broadly, these approaches to my composition practice help to facilitate the ongoing development and refinement of a personal, idiosyncratic approach to ensemble performance and a jazz trumpet style that accurately represents my conception. Of particular importance are the development of technical control and reflexivity within jazz performance, and the manipulation of my improvisations to the real-time interactive musical context and compositional structures.

1.3 Existing Literature And Rationale For The Current Study

Ongoing artistic development[13] is an underlying goal for many jazz musicians, but that does not tell us much about the concerns of a jazz musician. Concerns identified through the course of my research include: processes involved in ensemble interaction, flow within performance, refining technique for performance requirements, and manipulating improvisations within the performance context.

One of the satisfying aspects of my research is that focusing on the concerns identified above has fostered the development of a more individual sound. Anecdotally, other musicians report similar progress resulting from the examination of practice within a practice-led research. In addition, ongoing studio practice, performance experience, post-performance reflection, and an understanding of relevant literature are beneficial for development. As a practitioner who practises daily and performs several times weekly, there are plenty of opportunities for me to engage in this ongoing action and reflection, however transferring those thoughts into writing can present additional challenges. These include the task of describing intangible processes and actions primarily performed kinaesthetically with little conscious thought. The usefulness of considering jazz performance on a deeper level is not limited to the finished product or the outcome but, importantly, it can provide insight into the processes and context within which the creation of art and new knowledge occurs. As Burke suggests, this insight into one's own music making can connect performers "to their unique experience in life generally and strategies to reconceptualise their creative ambitions."[14]

[13] In this context, I am referring to the term 'artist' as a creative musician who, in addition to considerable instrumental craft, develops a distinctive sound and/or approach.

[14] Robert Burke, "Analysis and observations of pre-learnt and idiosyncratic elements in improvisation: a reflective study in jazz performance" (Sir Zelman Cowan School of Music, Faculty of Arts, Monash University, 2013), 3.

1.3.1 Literature On Jazz Trumpet Method

Trumpet technique is commonly learnt through method books[15] written by classical or brass band soloists and orchestral trumpeters. These methods, which include exercises designed mainly on diatonic scales and arpeggios, rarely include harmonic and melodic material used within jazz performance. Recent publications, such as Laurie Frink's and John McNeil's *Flexus* and Allen Vizzutti's *Vizzutti Method Book Volumes 1, 2, and 3,* partially address this lack of variety of materials used for exercises, but they seldom contain material that is jazz specific. Whilst there is an increasing number of method books published specifically on the topic of jazz trumpet,[16] most are limited in scope, presenting either a series of fixed melodic patterns or physical conditioning exercises based on common chords and harmonic sequences. Whilst these materials are useful, books such as John McNeil's *The Art of Jazz Trumpet*[17] and Eric Bolvin's *The Modern Jazz Trumpet Method*[18] are lacking in approaches to apply the materials to interactive improvisation and ensemble playing. Perhaps this omission is partly due to the variation and personalisation required to incorporate improvisation into technical exercises. However, as trumpeter Eugene Ball noted in his Master's thesis, "The Fundamentals of a New Practice Method for Improvising Trumpet Players", the practice and acquisition of trumpet technique need not be a separate pursuit from the development of creativity and musicality.[19]

Jazz improvisation is more complex than merely learning a prescribed set of melodic materials that are then applied to appropriate harmonic sequences. Jazz performance, which usually includes improvisation as a central feature, involves interaction, spontaneity, and variations according to the events of real-time performance. Jazz trumpet literature provides scarce insight into how to approach studio practice or performance of improvisation so that it is conducive to ensemble performance. One such example is the need to practise material in short bursts to replicate the performance environment. This replication should include focus on elements such as phrasing, space, form, contour, and climactic points that resemble those of an actual improvised jazz solo. In contrast, and perhaps partly as a result of the omissions of jazz trumpet literature, many trumpeters regurgitate patterns and sections of transcribed materials from seminal artists with limited consideration of their application to the macroscopic context of performance. Perhaps the

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[15] Some common method books include: Jean-Baptiste Arban: *Cornet Method*, Max Schlossberg: *Daily Drills and Technical Studies for Trumpet*, Vincent Cichowicz: *Long Tone Studies*, Herbert L. Clarke: *Technical Studies for the Cornet,* James Stamp: *Warm-ups and Studies for the Trumpet,* Earl Irons: *Twenty-Seven Groups of Exercises for Cornet and Trumpet,* and Charles Colin: *Advanced Lip Flexibilities for Trumpet.*

[16] Notable books written specifically on Jazz Trumpet include: Laurie Frink and John McNeil: *Flexus,* John McNeil: *The Art of Jazz Trumpet,* Eric Bolvin: *The Modern Jazz Trumpet Method,* Scotty Barnhart: *The World of Jazz Trumpet – A Comprehensive History & Practical Philosophy,* Mike Steinel: *Building a Basic Jazz Vocabulary*, Krin Gabbard: *Hotter Than That,* and Randall G. Reyman: *Technical Drills for the Jazz/Commercial Trumpet Player.*

[17] John McNeil, *The Art of Jazz Trumpet.* (Brooklyn: Gerard and Sarzin Co, 1999).

[18] Eric Bolvin, *The Modern Jazz Trumpet Method.* (San Francisco: Faded Duck Publishing, 2009).

[19] Eugene Ball, "The Fundamentals of a New Practice Method for Improvising Trumpet Players" (MMus.Perf. diss. Victorian College of the Arts, University of Melbourne, 2004), 1.

existing jazz trumpet literature, which focuses predominantly on technique and melodic patterns, would be most useful as a supplement to literature that specifically addresses jazz improvisation. This tendency for technique and creativity to be separated within existing methods and literature, as noted by Ball, is something that can prove beneficial when integrated within practice.[20]

1.3.2 Literature On Jazz Performance

Within the extensive literature published on the topic of jazz improvisation, very few writers address how to practise jazz improvisation. It could be interpreted from the majority of the literature that a student of jazz should approach improvisation by taking two main steps: first, acquire a vocabulary of commonly used materials based on chord/scale theory, and second, reproduce these materials in ensemble performance. While this method has its uses, it can result in formulaic playing that is limited in its flexibility and interactive scope. It is my experience that the art of jazz performance and improvisation involves more nuances and requires creative techniques, including practising improvisation through exploration, focused incorporation of materials, incorporating expressiveness, and reflection and refinement prior to application within ensemble performance. Jazz method books cannot necessarily define what a practitioner should play in an improvised solo. What they can provide is guidance and tips for creating variation and flexibility of materials through the processes of improvisation, exploration, and experimentation. These processes are intrinsic to jazz performance, therefore it is logical to incorporate them into individual preparation.

Within the limited literature on practising improvisation[21], three books that clearly and comprehensively addresses this often-neglected area are: *How To Improvise,*[22] *Ready, Aim, Improvise,*[23] and *Beyond Time and Changes,*[24] by the author Hal Crook. These books influence my approach to practising improvisation, providing a model by which I can identify, develop, and reflect on areas of improvisation.[25] An example of a concept derived from these books is the use of a method that Crook terms 'restrictive practice'.[26] This involves the creation of exercises tailored to

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[20] Ibid., 55.
[21] Notable books that address approaches to practicing jazz improvisation include: David Liebman: *A Chromatic Approach To Jazz Harmony And Melody,* Kenny Werner: *Effortless Mastery,* and Jerry Bergonzi: *Inside Improvisation Series - Volume 1 Melodic Structures, Volume 2 Pentatonics, Volume 3 Jazz Line, Volume 4 Melodic Rhythms, Volume 5* Thesaurus of Intervallic Melodies*,* and *Volume 6 Developing a Jazz Language.*
[22] Hal Crook, *How to Improvise* (Germany: Advance Music, 1991).
[23] Hal Crook, *Ready, Aim, Improvise* (Germany: Advance Music, 1993).
[24] Hal Crook, *Beyond Time and Changes* (Germany: Advance Music, 2006).
[25] Restrictive practice approaches that I incorporate regularly when learning new repertoire include: playing only chord tones (whilst improvising pitch order and rhythm), playing the note pitches of the melody but changing the rhythm, using the melody rhythm but changing the melodic pitch, and using a continuous quaver subdivision to create rhythmically flowing melodies. Other restrictive practice ideas I regularly use include: playing a single rhythmic subdivision such as quintuplets through an entire form, applying one specific melodic or harmonic idea to a form, and using a repetitious harmonic motion using rhythmic anticipation or delay.
[26] The term 'restrictive' in this context is a useful tool for creating focus and has no negative connotations, as may be the case in other contexts.

the individual's needs, which are restricted to a limited number of variables in order to isolate specific areas. Whilst restrictive concerning the variables of parameters, this approach, which at the outset can appear rigid, fosters variation of the chosen elements. The restrictive nature of this approach eliminates meandering, lack of focus, or randomness in the practice of improvisation, which often occurs due to the enormity of choice possible when no restrictions are in place.[27] The majority of jazz styles are comprised of musical form, meter, harmonic and rhythmic elements that require practitioners to be able to shape their musical ideas within these constraints. Therefore, practising improvisation within restrictive exercises is not a foreign concept, and one that needs addressing, to varying degrees, in most jazz performance contexts.

Importantly, Crook's approach to restrictions and set parameters can be adapted to the requirements of the individual practitioner. The practitioner's ability to analyse their playing through transcription and reflection of performances and recordings is useful in providing insight into the variables they will select in a restrictive practice exercise. Crook's books reinforce ideas previously shared with me by teachers, and inspire me to investigate approaches to practising improvisation, especially those that encourage flexibility of materials rather than solely developing a catalogue of fixed patterns.[28] The main purpose of developing flexibility of materials in an improvised context is to increase the practitioner's ability to react in real-time to the musical dialogue of the ensemble.

Although Crook's methods have inspired me, I have noticed that he (along with other authors) does not address methods within individual practice to facilitate desirable ensemble performance skills, including interaction and flexibility of improvisational approach. This seems to be a significant gap in the literature available to improvising trumpeters and neglects an important skill set central to the improvising trumpeter's ability to react to, and interact with, the musical events that occur during real-time performance. Important questions are neglected, such as: Is it possible to prepare for ensemble interaction in individual practice and, if so, what and how much can one prepare? Individuals may provide a variety of responses to this question, but more important than the response is the process of questioning itself, as it can have a dramatic impact on the individual's approach. This has been my experience and it is reflected in my observations of students and colleagues.

A common suggestion concerning preparation for ensemble performance is to practise with play-along recordings that attempt to replicate the generic sound of a jazz ensemble, providing common harmonic and rhythmic elements and clearly delineated musical forms.[29] Play-along recordings can

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[27] Restrictions, or structural restraints, are already an integral part of many jazz styles, excluding types of free jazz.
[28] 'Patterns' is a term used by jazz musicians to describe melodic ideas that they have learnt and can be drawn upon during improvisations. Books that are common sources of jazz patterns and licks include: Nicolas Slominsky, *Thesaurus of Scales and Melodic Patterns*; Oliver Nelson, *Patterns for Improvisation*; and Jerry Greene, *Patterns for Jazz*.
[29] Paul F. Berliner, *Thinking in Jazz* (Chicago: The University of Chicago Press, 1994), 170.

be helpful for scrutinising rhythmic feel by omitting the drums, or testing the ability to outline harmony by omitting the bass or piano. Many play-along recordings have functions that allow for the adjustment of key, tempo and meter. Exploring these variations is frequently advised in jazz method books, as the ability to play in a variety of keys, tempos and meters is a common performance requirement. However, as play-along tracks become increasingly familiar, their use becomes limited to an aural tool to react to, as opposed to having an interactive function. This can actually result in reinforcing habitual approaches, rather than developing flexibility.

1.3.3 Literature On Practice-led Research

Practice-led research[30] is a methodology gaining prominence in literature and academia and is applied increasingly within the field of arts. There are varying views around what practice-led research actually is, when practice counts as research, and how it should be documented. In addition to numerous journal articles,[31] books such as *Practice as Research* by Barrett and Bolt (2010), *Practice-led Research, Research-led Practice in the Creative Arts* by Smith and Dean (2009), *Reflective Practice* by Bolton (2010), and *The Reflective Practitioner: How Professionals Think In Action* by Donald Schön (1984) have made a strong case for the value and legitimacy of practice-led research as a research methodology. Practice-led research is an important methodology for musicians as it reveals understanding of the outcomes, such as the musical material, composition, score, and performance. Additionally, as author Henk Borgdorff observes in his article *The Debate on Research in the Arts,* Practice-led research provides understanding of the process, which includes creating, rehearsing, concepts, exploration, and context, including the cultural and historical environment and the audience.[32] Borgdorff's assertion that artistic practice itself is an essential component of both the research process and the research results[33] is based on the understanding that "no fundamental separation exists between theory and practice in the arts, where concepts and theories, experiences and understandings are interwoven with art practice."[34] He suggests that this is partly why art is always reflexive. Research in the arts seeks to articulate some of this embodied knowledge, manifested in writing about the creative process and in the art object such as the performance and scores. Bruce Brubaker also notes the importance of gaining insight into process and product through practice-led research when he suggests, "ideas

[30] The term 'practice-led research' is also referred to as practice-based research and practice as research.
[31] An important source of information is the papers and reports produced by organisations involved in research funding and/or assessment, such as the UK Council of Graduate Education, the Arts and Humanities Research Council and the Research Assessment Exercise, all in the UK.
[32] Henk Borgdorff, "The debate on research in the arts." *Dutch Journal of Music Theory*, (2007), Vol 12: 7.
[33] Ibid., Vol 12: 5.
[34] Ibid., Vol 12: 5.

and ways of hearing/thinking emerge in live music making."[35] Similarly, the importance of generating research from the process and context of performance is echoed by Sligter, stating:

> Research by a performer can thus be much more than the analysis of a score or historical research into the place of composer and piece: the performance itself, one's own musical actions and the context of the performance become object of research.[36]

In his article, *The Trojan Horse: Epistemological Explorations Concerning Practice-based Research,* Marcel Cobussen[37] suggests the idea of works of art being integral parts of a PhD Project and includes the possibility that these works will also be the results of the research. Although accompanied by a written exegesis, the main outcomes of research projects, such as this one, are chiefly communicated through art. Cobussen argues that art can articulate itself outside of spoken and written language, and in many cases, this kind of knowledge cannot be generated otherwise than in or through the production of art.[38] The artwork, such as the compositions, performances and all its embodiments, is itself the fundamental statement and conclusion. This assertion raises questions as to what kind of knowledge can be passed on only through art works, and what kind of knowledge cannot be articulated in written language. This research project seeks to address these questions through knowledge gained by enquiry into the art of jazz performance. Practice-led research in jazz has been minimal to date, but with the increase of postgraduate research degrees offered in music performance in tertiary institutions, this methodology is growing. Recent practice-led projects that have informed my approach include PhDs by Robert Burke,[39] Peter Knight,[40] and Christopher Martin,[41] whose research examined original compositions, materials, and performance, contributing to knowledge embodied within their creative processes and the resulting art objects.

1.3.4 Literature On Flow

'Flow' is a term coined by psychologist Mihaly Csikszentmihalyi to describe a particular state of heightened consciousness that enables the individual to feel deeply engaged, focused, and in control during particular activities. He discovered that extremely creative people are at their peak when they experience "a unified flowing from one moment to the next, in which we feel in control of

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[35] Bruce Brubaker, "Questions Not Answers: the Performer as Researcher." *Dutch Journal of Music Theory*, (2007), Vol 12:1, 67.
[36] Jurrien Sligter, "Performer and Research." *Dutch Journal of Music Theory*, (2007) Vol 12:1, 46.
[37] Research. In, *Dutch Journal of Music Theory*. Volume 12:1.
[38] Ibid., Vol 12:1, 19.
[39] Robert Burke, *Analysis and Observations of Pre-Learnt and Idiosyncratic Elements in Improvisation: A Reflective Study in Jazz Performance*. (Sir Zelman Cowan School of Music, Faculty of Arts, Monash University, 2013).
[40] Peter Knight, *The Intersection of Improvisation and Composition: A Music Practice in Flux*. (Queensland Conservatorium Arts, Education and Law Group Griffith University, 2011).
[41] Christopher Martin, *A Radical Reconsideration of Serialism and Chord Stranding, Applied to a Personal Jazz Style*. (PhD University of Adelaide, 2008).

our actions, and in which there is little distinction between self and environment; between stimulus and response; or between past present, and future."[42] 'Flow' functions as an umbrella term that encompasses a number of aspects that are crucial to my performance including hyper-focus, a state of timelessness, deep engagement, a sense of effortlessness and control, reflexivity and manipulation of materials. It is also quite clear that in recent years the term 'flow' has emerged in other areas such as psychology, but it has also been used specifically in music research as a term that is now quite frequently applied to describe certain aspects of this state of consciousness. [43] Whilst it is also possible to refer to the state of flow with other terms, I found the literature on flow was particularly resonant with my own thinking and my performance. An audience is not able to discern whether a performer is in a state of flow. The state of flow is therefore something that is not directed at an audience but it is important to my performance practice as there are a number of positive outcomes associated with this heightened state of consciousness including being deeply engaged, focused, experiencing a sense of effortlessness and control.

Whilst Csikszentmihalyi's description of the state of flow corresponds with my experience, an important addition to the study of flow specifically experienced by jazz musicians is Elina Hytonen-Ng's book *Experiencing 'Flow' in Jazz Performance.*[44] Drawing on a series of interviews with jazz practitioners, Hytonen-Ng's book presents various ways that flow is experienced, constructed, spoken about, reflected on, what meanings are attached, and how it can enhance the pleasure, expression and emotion experienced by musicians.[45] Of particular relevance to practice-led research, Hytonen-Ng spends considerable time focusing on the experience of flow. This includes consideration of its meaningfulness and integration into the musician's performance practice, how other musicians can affect the flow state, the importance of collectivity in the creation of flow, the importance of trust and support within a band, shared goals, and communication.[46] Hytonen-Ng's book has provided a useful basis to compare my experience of flow with that of other jazz practitioners and thus enabling me to establish a sense of intersubjectivity that surrounds the term 'flow'. Additionally, post- performance discussions with band members from the three ensembles[47] related to this research have made it clear that whilst the collaborative interaction of the ensemble at times positively impacted on our ability to access or maintain a flow state, it was also possible to individually achieve a heightened sense of consciousness even when the other ensemble members were not in a flow state.

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[42] Mihaly Csíkszentmihályi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990), 43.
[43] An example of the term 'Flow' being used within recent music literature is Elina Hytönen-Ng's book *Experiencing 'Flow' in Jazz Performance* (Surrey: Ashgate, 2013).

[44] Elina Hytönen-Ng, *Experiencing 'Flow' in Jazz Performance* (Surrey: Ashgate, 2013).
[45] Ibid., Preface.
[46] Ibid., 5-6.
[47] The three ensembles are *Four In One, the Paul Williamson Quartet, and the duo project Connect Four.*

A growing number of music practitioners are researching the role of flow within their performance practice. German musician, psychologist, and teacher, Andreas Burzik, explores the application of the flow state to music performance in an education setting. Burzik runs a workshop program titled 'Practising in Flow' designed to facilitate optimal music performance through developing a greater awareness in the approach to instrumental practice. He relates eight elements, originally identified by Csikszentmihalyi as essential components of the flow experience, to music practice. These elements are clarity of goals and immediate feedback, a high level of concentration on a limited field, balance between skills and challenge, the feeling of control, effortlessness, an altered perception of time, the melting together of action and consciousness, and the autotelic quality of flow experiences. Burzik suggests this method of practising in flow leads musicians in their daily practice to a state of heightened creativity and enhanced learning ability.[48] He suggests four principles[49] of 'Practising in Flow': contact with the instrument, development of the sense of sound, effortlessness, and playing around with the study material. Australian trumpeter, composer, and educator, Peter Knight explored methods for practising flow in music performance within his Master's thesis.[50] Knight's research examined the concepts of Csikszentmihalyi and the teaching of Burzik and applied them to his own performance practice. Knight experienced an increased awareness of "good feeling, contact with my instrument and sound".[51]

An awareness of literature relating to jazz trumpet method, jazz performance, practice-led research, and flow provides a greater understanding of the context in which my research is situated. Jazz trumpet methods present important fundamental technical exercises and fixed jazz materials but rarely situate these in an improvised context. Jazz performance literature presents materials for jazz performance and a small number of books suggest approaches to vary vocabulary for flexible incorporation into improvised performance. Practice-led research literature helps clarify the importance and relevance of a methodology that examines both performance outcomes and processes. By examining the practice-led research of others, it informs my research approach and provides examples of knowledge articulated in written language.

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[48] "Flowskills" on Andreas Burzik's website, accessed February 11, 2008, http://www.flowskills.com/for-musicians.html.
[49] Ibid., http://www.flowskills.com/method.html.
[50] Peter Knight, *Towards The Limit-Experience in Music Performance: A critical survey of popular literature and methods designed to facilitate optimal music performance*. (MMus.Perf. diss. Victorian College of the Arts, University of Melbourne, 2004).
[51] Ibid., 32.

1.4 Relevant Methodologies

1.4.1 Introductory Observations About My Methodology and Research Design

The overall research design of this project is best characterised by a complementary relationship between practice-led research and research-led practice. Within practice-led research, I explore the possibilities of my playing within studio practice,[52] rehearsal, performance, and composition. Particular areas of consideration include the importance of improvisation in developing materials and processes, developing technical control, tailoring studio practice to performance requirements, self-transcription, recording, critique and reflection. Practice-led research has proved an ideal methodology for my research, using my ongoing performances to inform my studio practice and vice versa. At the same time, research-led practice has provided a number of concepts and theoretical constructs that have informed my approach. This includes the adaptation of the idea of flow, kinaesthetic learning, and a consideration of heuristics, as well as the study of jazz and trumpet method books and seminal recordings.

My approach within practice-led research is largely empirical, based on observations and a trial and error process. Additionally, teachers, colleagues and local and international study have influenced my knowledge.[53] The trial and error component of my practice-led research is a fundamental technique within heuristic research,[54] which is a research methodology that refers to experience-based techniques for problem solving, learning, and discovery. In his book *Heuristic Research,*[55] psychologist Clark Moustakas discusses the importance of personal experience in research, describing heuristic research as

> a process of internal search through which one discovers the nature and meaning of experience and develops methods and procedures for further investigation and analysis. The self of the researcher is present throughout the process and, while understanding the phenomenon with increasing depth, the researcher experiences growing self-awareness and self-knowledge. Heuristic processes incorporate creative self-processes and self-discoveries. [56]

Moustakas suggests that at the heart of heuristic research is discovery that begins with the passionate search for the illumination of puzzlement, where intrigue and engagement carry one along. These attributes align with my experience and approach within this performance-based research project.

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[52] 'Studio practice' is a term used to define the space in which a musician undertakes technical and musical research.
[53] This study includes participation at the Banff Institute, School for Improvised Music, New York University Summer Jazz Course, Bachelor of Music and Masters at Victorian College of the Arts, and ongoing private study.
[54] Clark Moustakas, *Heuristic Research*. (California: SAGE Publications, 1990), 9. The root meaning of 'heuristic' comes from the Greek word heuriskein, meaning to discover or to find.
[55] Ibid.
[56] Ibid., 9.

The research design of this project involves several non-linear steps, as the refining of compositions, studio practice objectives, and ongoing reflection are symbiotic processes. I compose musical works that are conducive to performance featuring improvisation and ensemble interaction. At the time of composing, I also decide on the ensemble instrumentation and confirm the involvement of specific musicians suitable to my envisioned ensemble aesthetic and compositions. The distinctive musical qualities of the ensemble members influence my composition choices and style, especially when considering their interpretative, improvisatory and interactive approaches.

Following notation of the compositions, I organise and record a preliminary rehearsal, with the intention of assessing how the notated scores can be adapted in performance. Through reflection and analysis of the recorded rehearsal, I make changes to the compositions, being mindful of creating music that will facilitate ensemble interaction and flow. I also formulate verbal instructions to describe desired characteristics in improvised sections and to establish which details are fixed, and those that are open to interpretation and variation. These instructions and subsequent ensemble discussions increase the potential of creating expressive, varied and interactive interpretations of the compositions within each performance.

Prior to further rehearsals, I practise the compositions, with the initial objective being the memorisation of the basic melodic, harmonic and rhythmic components. Once memorised, I program backing tracks to create a semblance of the ensemble within my individual practice. I structure my practice so that it addresses specific technical and musical challenges in the compositions, and consider the interactive potential of pacing, rhythmic density, and motivic development within my playing. Recording studio practice helps me gauge my development. At the next rehearsal(s), the primary objective is to explore the possibilities of each composition through improvisation and experimenting with variations of the notated melody, rhythm and harmony. I record and reflect on these rehearsals and make amendments to the compositions. I also adjust my studio practice to address technical challenges and interesting materials observed in the recordings. Finally, public performance is an opportunity for the ensemble to explore and refine the music.

1.4.2 Practice-led Research

Practice-led research is especially suitable for music performance, and is a form of exploration that most musicians, whether they are aware or not, use in their ongoing performance practice. Dean and Smith[57] suggest there are several different ways that practitioners may choose to go about

[57] Roger T. Dean and Hazel Smith, *Practice-led Research, Research-led Practice in the Creative Arts* (Edinburgh: Edinburgh University Press, 2010), 23.

their creative practice and research. They suggest two common approaches: firstly, a process-driven approach that is not defined by a particular start or ending point and can generate new ideas, and secondly, a goal-orientated approach that has a clear start and end point, a plan, and an idea of the end objective.[58] Both of these approaches play an important role in my performance practice on a daily basis and are often interrelated. Allocating time within my practice that is not goal driven, especially towards improvisation, allows for increased exploration and often results in the emergence of new ideas. I regularly combine this approach with the second goal-orientated approach identified by Dean and Smith.[59]

Developing technique within my performance practice is achieved with a goal-orientated approach. I identify technical areas for refinement in studio practice and performance and then design exercises to address the areas, in small achievable increments, until the goals are realised in studio practice. The final step for determining the development and success of the incorporated technique is through the ease and accuracy of execution experienced within performance.

Another step in the processes of studio practice and performance is the identification of improvisation materials and technical components that are important for exploration within a compositional structure. Such materials may be important simply due to the aesthetic interest or usefulness to the practitioner. Incorporating the material into a composition results in new creative work consisting of fresh approaches to improvisation, and compositions formed through non-specific and goal-driven practice-led approaches, such as the exploration of interesting rhythmic materials. The process of documenting the music through recording is also a goal-orientated approach. The impetus of an upcoming recording provides clarity for the practitioner in relation to what they want to communicate through documenting the music, how to achieve it, how to prepare in studio practice, and how to balance rigorous preparation and repetition of materials with the ability to be flexible and interactive within real-time improvised performance.

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[58] Roger T. Dean and Hazel Smith, *Practice-led Research, Research-led Practice in the Creative Arts.* (Edinburgh: Edinburgh University Press, 2010), 23.

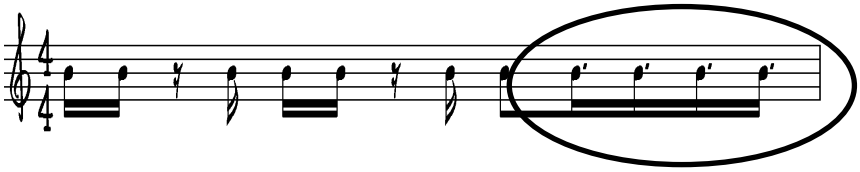
[59] For example, in my studio practice I create improvisation exercises with a specific starting point, such as exploring the melodic possibilities of a certain chord, with the intended outcome of developing greater familiarity within that harmony. Besides the start and end objectives, there are no other predetermined goals. The by-product of this exercise is the emergence of new ideas that subsequently generate new exercises to consolidate the material for use in performance contexts. Exercises such as this involve reflexivity, a loop approach where the practitioner uses the material to generate new material, which in turn stimulates the practitioner to respond. These exercises also frequently result in a flow state of heightened awareness by placing a focus on the present moment.

[59] Roger T. Dean and Hazel Smith, *Practice-led Research, Research-led Practice in the Creative Arts.* (Edinburgh: Edinburgh University Press, 2010), 23.

Research, in general, is about systematic work undertaken to add to knowledge. In their book *Practice-led Research, Research-led Practice in the Creative Arts,*[60] Roger T. Dean and Hazel Smith discuss important components for defining research in relation to creative practice. These include: creative work undertaken to increase knowledge, the use of this knowledge to devise new applications, the assertion that sonic artwork can transfer knowledge, and the suggestion that knowledge is often ambiguous and cannot always be conveyed with the precision of mathematical proof.[61]

Apart from being an art form in itself, improvisation can be considered a type of practice-led research in the sense that it can result in the development of unique processes and materials for creative work such as composition and jazz performance. The ability to improvise in jazz music requires considerable preparation and study of vocabulary in order to execute and respond to theoretical and musical challenges. In addition to transcribing and the development of patterns and licks, jazz improvisers develop vocabulary through the process of improvisation. Upon making a discovery through improvisation, a practitioner may continue to explore the material in real-time improvisation or catalogue the idea for exploration at another time. For example, an idea discovered through my improvisation is a rhythmic subdivision within *Buzzby,* shown in Figure 1. The rhythmic subdivision on beats three and four (circled) within this bar is something that I continue to explore within my performance practice.

Figure 1. *Buzzby* rhythmic subdivision. Bar 6.



Improvisation can help build a shared understanding, language, and trust among ensemble members.[62] During rehearsals of *Buzzby*, the improvisations revealed varying degrees of interactive possibilities. Some of the knowledge generated from the improvisations included material that the practitioners could draw upon during subsequent performances. These included considerations of density and space, polyphonic melodic improvisation, use of the notated rhythmic elements as a basis for improvisation, playing simultaneous rhythmic ideas with contrasting density, and obscuring the harmonic resolution and the repetitive three-bar form. This experiential

[60] Roger T. Dean and Hazel Smith, *Practice-led Research, Research-led Practice in the Creative Arts*. (Edinburgh: Edinburgh University Press, 2010), 2.
[61] Ibid., 3.
[62] Elina Hytönen-Ng, *Experiencing 'Flow' in Jazz Performance* (Surrey: Ashgate, 2013), 65.

learning can be considered a form of problem-based learning,[63] whereby practitioners are actively engaged in solving problems.

Another key area in relation to my practice-led research is the development of technical control, which enables me to instantly execute and express musical ideas that I hear during performance and improvisation.[64] My initial approach to learning and performing jazz improvisation was limited to the process of acquiring fixed materials such as transcribed jazz licks, patterns, melodies and chord sequences of jazz standards. I also developed instrumental craft, with an emphasis on technical exercises from trumpet method books.[65] I frequently played along with recordings without any specific learning objective or focus other than to play for sheer pleasure. These components of my practice were partially effective, as control of instrumental technique, acquisition of common jazz vocabulary, and development of aural skills are generally necessary in order to converse with other musicians within the jazz idiom. However, what was lacking were practice approaches that developed tools tailored specifically to the context of improvisation and interactive jazz performance. This context requires approaching technical fundamentals with an emphasis on jazz language and with specific focus on the exploration of these materials within an improvisation context.

Another consideration within my practice-led research is to structure studio practice to replicate the duration, pacing, phrasing and intensity of performance. This may include performing a melody then improvising multiple choruses of between three and eight minutes' duration, followed by a similar length break that accounts for other soloists in the live performance, then finishing with the melody and perhaps an extended improvised coda vamp. Replicating these lengths, by predetermining the length and overall contour of an improvised solo, is helpful in developing awareness of the overall solo structure, shape, tension and release, and climactic points within improvisation.

Restrictive practice is an approach that helps me focus on specific materials required in performance to develop aural, theoretical and contextual understanding. Most jazz improvisation, aside from free jazz, requires restrictions in varying degrees whilst adhering to underlying musical structures, such as harmony, form, and meter, in ensemble performance. Restrictive practice

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[63] Barbara Bolt and Estelle Barrett, *Practice as Research* (London: I. B. Tauris, 2010), 3.

[64] For jazz trumpet practitioners, this may also include technical exercises that coordinate the physical and mental continuity required for improvisation. This may include synchronizing the fingers and tongue articulation with the conceived ideas to generate improvisatory continuity, connecting the creative and physiological.

[65] These technical exercises include maintaining and developing efficient breathing, posture, sound production and clear tone, tonguing, finger technique, embouchure flexibility and endurance.

approaches that I incorporate when learning repertoire for performance include playing chord tones whilst improvising pitch order and rhythm, playing melody pitch but changing the rhythm, playing the melody rhythm but improvising the pitch, playing swing quavers for continuity, playing with the same rhythmic subdivision through an entire form, for example quintuplets, and incorporating a specific melodic or harmonic idea, for example an intervallic motif, through an entire form.

Transcription,[66] recording, and reflection are central processes within practice-led research. Transcription is a direct way of acquiring jazz style and nuance from master musicians and provides the practitioner with insight into methods that differ from their own. This increases the improviser's creative possibilities and can trigger fresh conceptual possibilities, inspiring the practitioner to initiate their own ideas. The transformation of transcription from an imitative process to a creative one is significant in personalising language and developing individual modes of expression.

An example of this process within my studio practice is the creation of rhythmic, harmonic, or melodic variations on a transcribed fragment that gradually evolve into new ideas. Transcription is often a kinaesthetic process, with emulation achieved with minimal consideration of the physiological attributes required to execute the material. I have frequently been surprised at my ability to play challenging musical or technical material, such as a fast or high passage that would usually be beyond my capability, by simply concentrating on emulation. The focus on creating the desired sound outcome, rather than all the steps required to achieve it, can be an efficient and effective way of learning and developing as a jazz musician.

In addition to transcription of others, self-transcription of live performances and studio recordings is beneficial in revealing aesthetically interesting ideas for development in performance and composition, and technical and musical challenges to address in studio practice. Recording fragments of my studio practice, reflection and self-transcription, reveals aspects of my playing that I am not fully able to perceive during live performance. These include awareness of execution, rhythmic accuracy, intonation, harmonic accuracy, phrasing, rhythmic feel, melodic continuity, rhythmic density, and improvisation construction. Although audio recordings capture sound, they do not record our emotions, judgements, anxieties, or flow state. This is one of the reasons recordings tend to reveal a contrasting perspective from perception during performance.

[66] 'Transcription' for jazz musicians is a process whereby the practitioner learns material by ear, emulates it on their instrument, and then incorporates the material into their language and performance. Transcription can also include notating the material and subsequent analysis.

Recordings also capture interesting improvised materials that may be developed or used within compositions, and often reveal beauty and musical interest in moments considered mistakes during the performance.

Whilst it is confronting to listen back to my recorded performance, as it does not always match my performance perception, it has a constructive effect on my studio practice and development. Recording enables me to immediately assess what problems need to be solved, and provides a concrete basis for evaluating improvement through comparison to previous recordings. The reflection of recordings enables me to structure my studio practice more efficiently. I record short sections of approximately a few minutes and then listen immediately to evaluate. I repeat this process until I can discern progress, increase clarity in how to solve problems, or until I am closer to executing my ideas.

The process of studio practice, and post-rehearsal and performance reflection involves contemplation, self-transcription and analysis that contribute to developing and refining a distinctive jazz trumpet style. In short, reflection reveals what worked and what did not. Developing an awareness of one's own language and constantly refining the materials and approaches used in performance bridges the gap between conception and execution. The trigger for this awareness and refinement comes from successful performances where conception and execution are synchronised, and from less-successful performances where shortcomings are accentuated. A less successful performance can make the practitioner question and re-evaluate their preparation and practice approaches. This may result in refinement of approaches already used, the exclusion of existing approaches, or the inclusion of new methods and materials in order to develop for future performances.

1.4.3 Research-led Practice

In my search for literature that considers the practitioner's state of mind during performance, the concept of flow, which is associated with the work of Mihaly Csikszentmihalyi,[67] resonated with my experiences as a performer and has formed a basis for associating my own performance practice with an existing theoretical work.[68] *Flow: The Psychology of Optimal Experience*[69] enabled me to

[67] Mihaly Csíkszentmihályi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990).
[68] I was already engaged in a number of approaches to facilitating a heightened awareness prior to reading *Flow*, however it was useful in that it accurately articulated what I was already reflecting upon in my own practice. This included my regular experiences of heightened consciousness during performance, where conception and execution seemed instantaneous. During such performances, the present moment was heightened and the past and future receded into the background, distorting my sense of time and rendering it irrelevant. In addition, I experienced increased states of awareness, concentration, energy, creative feeling, and my self-consciousness disappeared.

better articulate how flow informs my own playing. It informs my reflective practice, providing theoretical constructs, ideas and concepts that allow me to talk more eloquently about my own practice. Whilst I had experienced and reflected on flow in my playing prior to reading the book, the processes that enable a flow state were new to me. These included setting overall and sub-goals that are achievable and measurable in terms of progress, activating concentration by adjusting the level of the activity so that it is challenging, continually refining the objectives, and developing the skills to interact with the opportunities available.[70]

Several observations by Csikszentmihalyi on the importance of the flow state to peak creative moments are applicable to jazz improvisation practitioners. These include flow enabling a practitioner to immerse in an activity to the extent that nothing else seems to matter, narrowing the focus down to the immediate moment, developing goals, and providing greater control of what happens in consciousness moment by moment.[71] Csikszentmihalyi suggests that activities such as music are conducive to encouraging flow as it has rules that require the learning of skills and the need for goals that provide feedback and make control possible.[72] Structuring studio practice towards these goals encourages concentration and involvement. Specific approaches that induce this flow state tend to fit into one of two categories: restrictive practice approaches that focus on specific materials,[73] and approaches that mimic the experience of the ensemble[74] performance context. The four principles of practising in flow, as outlined by Burzik[75], inform my studio practice in the following ways:

- Contact with the instrument relates to my desire to address technical control and efficiency.
- Development of the sense of sound relates to my exploration of timbre variation and conceptualisation of sound.
- Effortlessness relates to awareness of excess body tension and performance hindrances.
- Playing around with the study material relates to improvisation exercises with set parameters.

Within studio practice, I experiment with strategies that facilitate real-time decision-making. For example, a continuing strategy is to practise materials in a flexible and improvised manner, creating numerous variations, and allowing for integration of the material within real-time

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[69] Mihaly Csíkszentmihályi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990).
[70] Mihaly Csíkszentmihályi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990), 97.
[71] Ibid., 4-5.
[72] Ibid., 72.
[73] These materials are micro-elements that require improvement or exploration. Rules and set parameters govern the approach to and context of this practice, including a combination of elements such as tempo, key, duration, a prescribed rhythm, pitch order, and register.
[74] This includes playing along with recordings, backing tracks and shaping playing to an imagined ensemble performance.
[75] Flowskills" on Andreas Burzik's website, accessed February 11, 2008, http://www.flowskills.com/method.html

performance. Whilst it is subjective and only discernable to myself, the indication that these strategies are working is when I am able to reflexively and accurately execute melodic, harmonic, rhythmic materials and timbral effects within the real-time performance context. During these occurrences, there is no gap between conception and execution. The sensation for a practitioner when this occurs is quite different from other performances. When the gap between conception and execution is non-existent, my mind feels uncluttered and in a state of energised clarity, ready to respond to the moment. The goal of performing improvised music with a high level of interaction between ensemble members depends largely on my ability to heighten my focus to the present moment. This can be especially challenging if one has consistently practised a certain piece of music in a particular way, only to realise it is not appropriate in that form within the performance.

My goal of developing physiological and technical control is informed by research-led practice in the form of trumpet method books,[76] physiology literature,[77] ongoing lessons, reflection, and the heuristic approach of trial and error. In the formative years of my development as a trumpeter, I was fortunate to receive regular instruction on trumpet technique. Whilst guiding me through the prevalent trumpet method books, a recurring theme imparted by my teachers[78] was the need to be engaged in the practice process on a level beyond that of mechanical repetition. Essentially, my teachers suggested I focus on how to approach each exercise in order to achieve a musical outcome via efficient physical means. This aspiration has led me to question what, why and how to practice technical materials, and to set goals, assess outcomes and refine approaches if the goals are not achieved. The time spent on these different phases fluctuates, depending on upcoming performance commitments, the familiarity of the material, and the level of complexity.

Areas that are fundamental to trumpeter's physiological approach include control and coordination of breath inhalation and exhalation, a reliable functioning embouchure, tonguing (articulation), efficiency of posture, minimal muscular use,[79] and finger dexterity. In developing and coordinating these physical components, the practitioner needs a balanced studio practice methodology in order to prepare for performance scenarios that demand finesse, power and endurance. Ideally, studio practice and rest breaks alternate to allow physiological recovery and building of muscles

[76] These include the Jean-Baptiste Arban: *Cornet Method*, Max Schlossberg: *Daily Drills and Technical Studies for Trumpet*, Herbert L. Clarke: *Technical Studies for the Cornet,* Carmine Caruso: *Caruso Calisthenics*, Charles Colin: *Advanced Lip Flexibilities for Trumpet*, and Alan Vizzutti*: .Vizzutti Trumpet Method.*

[77] These include Brian Frederiksen: *Arnold Jacobs: Wind and Song*, Jaume Rosset i Llobet*The Musician's Body*, and Janet Horvath: *Playing Less Hurt*.

[78] Influential teachers in my early development as a trumpet player included David Farrands, David Newdick, Reg Walsh, Robert Simms, and John Hoffman.

[79] Brian Frederiksen, *Arnold Jacobs*: *Wind and Song* (Illinois: WindSong Press Limited, 1996), 109.

and skin tissue.[80] Development of these physiological components is often initially informed by research-led practice through method books and articles. However, a substantial amount of the methodology for addressing these areas in my studio practice is informed by kinaesthetic learning, whereby exploration, observations and adjustments are made through the physical act of playing. This kinaesthetic learning approach provides instant audible feedback, rather than over-analysing individual physiological components. Whilst becoming familiar with physical sensations is vital, brass physiology expert Arnold Jacobs asserts that focusing on the desired sound is of greater importance. He suggests that the brain will send the appropriate signal to musculature in order to achieve the practitioner's desired sound.[81]

Improvisation is a central component in small group jazz performance and a jazz trumpeter's technical requirements are governed largely by the level and complexity of their improvised ideas. This contrasts to the requirements of classical trumpeters, whose technique is determined by fixed pre-existing repertoire.[82] The improvisations of jazz musicians are often a combination of predetermined materials, shaped to the parameters of the music context, and their real-time reaction to the ensemble, both of which will differ from one performance to the next. Because of the unique nature of each performance, the improviser does not necessarily know what they will play each time they perform and, therefore, the physical and technical demands can differ from one performance to the next.

[80] It is commonly suggested that rest periods relieve stiffness from the build-up of lactate after significant stress on the muscles. In his book, *Trumpet Pedagogy,* Hickman states*,* "without removing the stiffness from the facial muscles, it is impossible to play with peak physical ability" (p.151). Hickman suggests that rest periods allow for blood circulation, which removes excess fluids and acid wastes (p.152).

[81] Brian Frederiksen, *Arnold Jacobs*: *Wind and Song* (Illinois: WindSong Press Limited, 1996), 128.

[82] A considerable difference between performance of through-composed music and improvised music is that the content of the former is a known quantity that can be measured and precisely prepared for. In contrast, the content of improvised performance is never entirely known.

Chapter 2: SITUATING MY PERFORMANCE APPROACH

2.1 Contextualising My Music Within Australian Jazz

Australian, American, European and Scandinavian jazz traditions and seminal recordings from each of these traditions inform my performance practice. However, despite these influences, my intention is not to emulate any one specific style. I can relate to John Shand's suggestion in the introduction to his book, *Jazz: The Australian Accent,*[83] that many current Australian jazz musicians don't feel obligated to compare or model themselves on trends or styles from any singular geographical centre, such as the United States. With increased global accessibility,[84] Australian jazz musicians are determining their tastes and influences[85] through listening to a broad variety of music.[86] A collage of aforementioned factors has influenced my own performance through this process. This combination of influences, including those beyond the historic styles of jazz,[87] is not exclusive to Australia; however, it does seem to be a common trend amongst contemporary Australian jazz ensembles and practitioners.[88]

Due to commutation, technological and communication advancements, the Australian geographical divide perhaps continues to diffuse pressure to conform to particular styles or be bound to specific stylistic norms. An example of one such pressure, which arguably has less impact on the Australian jazz scene, is the perceived agenda of organisations such as Jazz at Lincoln Centre. Led by artistic director Wynton Marsalis, this organisation has popularised resurgence in traditionalism and rejected fusions and free jazz elements. With considerable financial and media support at its disposal, the views of this organisation have influenced American venues, record companies, funding organisations and, ultimately, many musicians. Whether this American idiom reflects what is pertinent to local Australian jazz communities and individuals is questionable. Similar to musicians from previous Australian jazz generations[89], many current practitioners are

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[83] John Shand, *Jazz the Australian Accent* (Sydney: University of New South Wales Press, 2009), 3.
[84] By 'increased global accessibility', I am referring to the increased ease of travelling to remote destinations and accessing music via digital means, such as the internet, from an expanding number of global regions.
[85] John Shand, *Jazz the Australian Accent* (Sydney: University of New South Wales Press, 2009), 3.
[86] By 'broad', I am referring to music ranging from contrasting geographical regions and traditions.
[87] By 'historic styles', I am referring to jazz styles such as New Orleans, Swing, Bebop, Hard Bop and Cool Jazz.
[88] Examples of contemporary Australian jazz musicians and ensembles with diverse influences include Paul Grabowsky, Mike Nock, The Australian Art Orchestra, The Necks, Wanderlust, Scott Tinkler, Ten Part Invention, Barney McAll, Phillip Slater, Andrea Keller, Simon Barker and Peter Knight.
[89] For example, Australian Jazz artist Brian Brown Brown's "compositional ideas and group sound deviated ever more from American jazz during the 1960s, until by the 1970s, what he was doing was unique". John Shand, *Hard Bopper Kept Changing Key* (The Sydney Morning Herald. Published: February 12th, 2013).

informed by the globalisation of jazz[90], being influenced by both the American jazz tradition and also the diverse global jazz communities including our own Australian musicians and music. [91]

Even though Australia has a rich jazz tradition, it has not developed a recognisable distinctive national style in the way that American, European, and Scandinavian countries have. Without the obligation to a clear or discernible national jazz tradition, Australian musicians are perhaps more at ease with drawing on and combining influences. This looseness and flexibility in relation to stylistic conventions has arguably reduced any stigma that may exist when creating hybrid jazz styles. Prior to the 1950s, Australian jazz musicians were predominantly playing their own variations of existing jazz styles by emulating American and British recordings and visiting artists.[92] Gradually, this imitation diminished and music of increased variation and experimentation[93] emerged. Many contemporary Australian jazz musicians build on their understanding and training in the styles of the jazz tradition by adding, omitting, exploring, and combining different musical elements.[94] Examples of this include the incorporation of odd-number rhythmic subdivisions to common melodic materials by Scott Tinkler and Marc Hannaford, the fusing of world music with jazz styles by Wanderlust and the Australian Art Orchestra, and the exploration of electronic samples and triggered samples within jazz compositions by Band of Five Names, The Necks, and Peter Knight.

Consideration of Australian jazz does not necessarily reveal a single identifiable Australian style but, rather, several individually distinctive musical styles and expressions. In many cases, Australian jazz seems less identifiable by the musical outcome and more by the approach. A common sentiment, as suggested by Sydney trumpeter Phil Slater, is that Australian jazz musicians "are not encumbered by this idea of tradition",[95] which may be related to Australia's geographical removal from the iconic artists or origins of jazz. As a result, contemporary Australian jazz musicians tend to include individual interpretations and quirks that differ from original jazz styling, and have the potential to develop into a distinctive style and language.[96]

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[90] Stuart Nicholson, *Is Jazz Dead? Or Has it Moved To A New Address.* (New York: Routledge, 2005), XI.
[91] John Shand, *Jazz the Australian Accent* (Sydney: University of New South Wales Press, 2009), 10.
[92] As mentioned in the *Currency Companion to Music and Dance in Australia* by Whiteoak and Scott-Maxwell, these recordings and visiting artists included Frank Ellis and his Californians, Bert Ralton's Havana Band, Paul Whiteman Orchestra, Ray Noble's popular orchestra, Duke Ellington Orchestra, Cab Calloway Orchestra, Teddy Wilson Orchestra, Benny Goodman Orchestra, Glen Miller Orchestra, Artie Shaw, Charlie Parker and Dizzy Gillespie.
[93] Australian jazz ensembles that identified with such experimentation include those led by Brian Brown, Bernie McGann, Ted Vinning, John Sangster, Bob Bertles, Tony Gould, Phil Treloar, Bobby Gebert, Alan Browne, Roger Frampton and Miroslav Bukovsky.
[94] Contemporary artists and ensembles now frequently refer to themselves as improvisers as opposed to jazz musicians, which may be a deliberate step to distance themselves from the stylistic confines implied by the term jazz.
[95] John Shand, *Jazz the Australian Accent* (Sydney: University of New South Wales Press, 2009), 3.
[96] Ibid.

This development is dependent on forming and exploring ideas with supportive and like-minded musicians. The tradition of community, where musicians share information and teach one another, is particularly critical in Australian, as these relationships influence, provide knowledge, and foster involvement and support within the national jazz scene. Due to the relatively small community of jazz practitioners within each capital city and the large distances that separate the cities, the importance of developing musical relationships with colleagues is of increased importance.

2.2 The Influence Of Individual Practitioners On My Performance Practice

Since 1990, many jazz practitioners have influenced my performance practice, including seminal artists Miles Davis, Booker Little, John Coltrane, Sonny Rollins, Charlie Shavers, Woody Shaw, Roy Eldridge, Kenny Garrett, Dave Douglas, Kenny Wheeler, Freddie Hubbard and Tomasz Stanko. Of equal importance to my development have been teachers and mentors, including the Australian jazz trumpeters Scott Tinkler, Miroslav Bukovsky, Eugene Ball and Phillip Slater; American trumpeters Tim Hagans, Peter Evans, Ingrid Jensen, and Ralph Alessi; and ensemble colleagues including saxophonists Jamie Oehlers, Ian Chaplin and Tim Wilson, pianists Marc Hannaford, Tony Gould, Paul Grabowsky and Andrea Keller, and guitarists Stephen Magnusson and Geoff Hughes.

Many of these relationships initially developed through lessons, then mutual studio practice, performances and ongoing mentoring and correspondence. Additionally, time spent touring and before and after performances often resulted in discussions with ensemble colleagues on their performance practice and approaches. The informal sharing of knowledge within jazz communities has been a part of the jazz tradition since its inception,[97] and it provides me with direct insight into colleagues' methods before, during, and after performances. These exchanges provide knowledge that is not always obtainable from listening to recordings, reading accounts, or speaking in the abstract about the creative processes at work in the performance of jazz music.

Timbre and its manipulation is a key attribute of my performance practice, being an essential component of my musical language. I have been influenced by the tone[98] of both classical and jazz trumpet players with traditional[99] trumpet tones, but also by practitioners who incorporate timbre manipulations.[100] Traditional trumpet tone[101] is epitomised by orchestral players and is perhaps the

[97] Paul F. Berliner, *Thinking in Jazz* (Chicago: The University of Chicago Press, 1994), 37.
[98] I am using the term 'tone' here with reference to the sound colour of the instrument.
[99] Traditional trumpet tone is being referred to as one that is brilliant, clear and compact as is demonstrated by the orchestral players and soloists. Surprisingly, most of the common trumpet method books do not discuss tone quality.
[100] Tonal manipulations are often produced with extended techniques; their sound reminiscent of other instruments as much as the trumpet. Examples include Norwegian trumpeter Arve Henriksen, who performs with a quiet and velvety

most common tone produced on the trumpet if played without manipulations. Practitioners whose tone has most influenced my playing are those who employ a combination of both traditional and contemporary tonal approaches.[102] Timbre manipulations are common in the jazz tradition, with many applied by jazz trumpet greats with such frequency that they are now considered conventional techniques for jazz trumpeters.[103] The timbres of other instruments, such as the saxophone, have also influenced my approach. The broad, semi-diffused and breathy tone of tenor saxophonist Sonny Rollins is one such example.

2.2.1 A Jazz Trumpet Case Study: Scott Tinkler

Australian jazz trumpeter Scott Tinkler has been a longstanding and key influence on my development. I first saw Tinkler perform in 1990 and, shortly after, began studying with him as part of my undergraduate degree.[104] The lessons were a steep learning curve, as Tinkler's teaching approach and materials were unfamiliar to me. In particular, Tinkler had a profound influence on my approach to studio practice, the acquisition and personalisation of materials for jazz improvisation and on preparing for performance.[105]

Tinkler has developed a distinctive and flexible vocabulary for improvisation and composition. A central approach is his discovery and development of language through improvisation. In response to an interview in John Shand's book *Jazz The Australian Accent,*[106] Tinkler states that the turning point in his development as an improviser was the realisation that the studio practice he needed to undertake was more than just developing physical strength and learning common jazz patterns. In order to be able to improvise and interact within real-time performance he realised that it was both possible and helpful to practise improvisation within studio practice. Many of Tinkler's studio practice methods focus on specific goals within set parameters, and are challenging but achievable. The improvisation exercises practised together and individually facilitated a sense of

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sub-tone and often sounds like a shakuhachi, and German trumpeter Axel Dorner who creates tonal manipulations reminiscent of industrial sounds, or white noise.

[101] Jazz trumpet practitioners who exemplify a traditional trumpet tone and have influenced me include Charlie Shavers, Booker Little, Freddie Hubbard and Woody Shaw.

[102] These practitioners include Polish trumpeter Tomasz Stanko, with his use of pitch bends between notes and shrieking glissandos, both reminiscent of vocal sounds; Miles Davis, whose timbral inflections on the start and endings of notes add expressive variation; Dave Douglas, who utilises vibrato and pitch bends; Scott Tinkler, who makes use of stop-tongue and split-tone techniques; Roy Eldridge, who incorporated a guttural growl and a wide vibrato reminiscent of Coleman Hawkins; and Wynton Marsalis with his employment of very diffused tone.

[103] These include techniques such as rips, growls, smears, variations in vibrato speeds, diffusion of tone, falls, and extremities in brightness and darkness of tonal colour.

[104] The undergraduate degree was a Bachelor of Music Performance at Victorian College of the Arts, Melbourne University.

[105] The discovery, exploration and development of jazz language and materials through improvisation have enabled Tinkler to develop a distinctive and personalised language for improvisation and composition.

[106] John Shand, *Jazz the Australian Accent* (Sydney: University of New South Wales Press, 2009), 128.

being in the zone and resulted in increased focus, fluidity of performance, presence, playfulness, interaction, and feelings of control and effortlessness. Whilst not discussed specifically in our lessons, this experience of being in the zone was, in retrospect, a form of practising in a flow state. During these exercises, I was immersed within the moment whilst still aware of the set goals.

Mentors, such as colleague, saxophonist and leader of the Freeboppers ensemble, Mark Simmonds, significantly influenced Tinkler's development. A core approach within Simmonds' Freeboppers was the correlation between improvisation and composition materials. Simmonds' approach to jazz performance stemmed from a direct relationship between materials used for both composition and improvisation. He used compositions as vehicles for improvised exploration of technical and harmonic materials, and formed new compositions from those improvisations. This process of developing improvisation materials and compositions extended to rehearsals and performance, where the Freeboppers collectively developed these elements. The music relationship with Simmonds revolved around developing ensemble intersubjectivity, a goal that has been an influential component of Tinkler's subsequent performance practice and collaborations. This is evident in collaborative performances and recordings with drummer Simon Barker. Barker describes the importance of developing vocabulary together through the process of improvisation:

> We practised rhythmic ideas, developing them and improvising on them, until we had this rhythmic language: a conversational language that we could bring to every new composition.[107]

Tinkler's vocabulary is adaptable to the context of his real-time performances, which consist predominantly of highly interactive improvisation. The flexibility of his materials is the result of both prepared and spontaneous variations, in addition to knowledge of fixed materials such as patterns or licks. Importantly, many of Tinkler's defining musical relationships involve the development of intersubjective language. Performances between Tinkler and colleagues such as Simon Barker, Ken Edie, Carl Dewhurst, Marc Hannaford, and Adam Armstrong draw on a shared understanding of language and trust in musical gestures that enables them to improvise entire performances that display structure, logic, cohesion and a discernible relationship. This idea of shaping one's improvisation with the members of the ensemble has influenced my own ensemble interaction. In order to do this, one's language needs to be malleable to the moment and the differing ensemble dynamic during each individual performance.

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[107] John Shand, *Jazz the Australian Accent* (Sydney: University of New South Wales Press, 2009), 129.

One of the first approaches that Tinkler showed me for developing flexible materials through the process of improvisation was a restrictive practice exercise. It addressed common elements of jazz repertoire including musical form, harmony, meter, rhythmic variation and feel, phrasing, and melodic construction. The exercise consisted of simultaneous improvisation on the circle of fourths harmonic sequence[108] on a set chord quality, such as dominant seventh chords. The pitch was restricted to chord tones and the duration was set at four or eight bars, which are common form division lengths within the jazz standards repertoire. The restrictive parameters of the exercise had several primary foci. The restriction to chord tones encouraged clear outlining of the underlying harmonic sequence and, in particular, the guide tones[109] clarify the harmonic change between adjoining chords. The fixed bar durations develop awareness of form and, in particular, the ability to hear time in larger segments than single bars. The steady surface pulse[110] provided by the metronome is reinforced with foot tapping. This action provides the brain and body with a physical response mechanism and creates an outward manifestation of internal pulse. The reduced note choice options necessitated greater emphasis and exploration of rhythm and phrasing variety. Simultaneous improvisation encouraged listening, real-time interaction, and creativity.

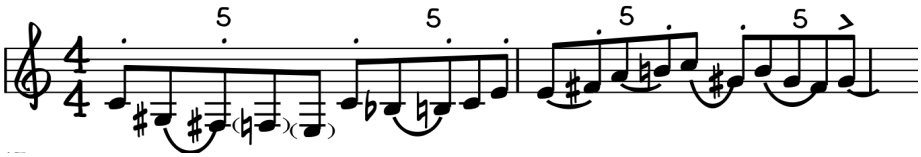
Tinkler stressed the importance of regular reflection on one's own technique, style, materials, improvisational variation, ensemble dynamic, and compositions. He suggested several ways of assisting reflection, including keeping a journal and a practice diary to create focus and structure. Regular recording of studio practice and performances was encouraged to provide a clear and holistic perspective, and one that contrasted to the emotional and physical perception experienced during the immediacy of performance. Tinkler encouraged me to listen to music with an enquiring mind and consider questions such as: What does the music make me feel? What processes are occurring? What materials are used? Moreover, how can understanding of these questions inform my practice and performance?

While Tinkler challenged me to learn from iconic jazz masters, he also encouraged exploration beyond the common possibilities and limitations of jazz trumpet. An example of this within Tinkler's music is his fascination with rhythm. The usual approach by jazz trumpeters is to construct their melodic ideas predominantly with rhythmic subdivisions based on crotchets, quavers, triplets and semiquavers. Tinkler combines these common subdivisions with less frequently used divisions

[108] The cycle of fourths was selected as it is one of the most common chord movements of the jazz standards repertoire.
[109] 'Guide tones' in jazz are generally considered to be the third and seventh degrees of the chord and serve the function of determining whether a chord is major, minor, or dominant.
[110] Whilst the term 'pulse' usually gives an indication of tempo, the term 'surface pulse' is used here to describe a secondary faster pulse that can emerge if the regular pulse (which in most cases is the notated beat) is divided evenly over a continuous stretch of time.

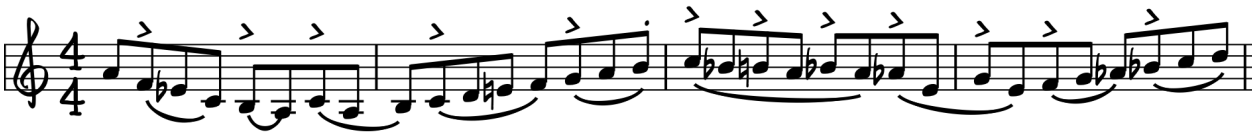
such as quintuplets, as shown in Figure 2, in Tinkler's solo on *Positively Glowing*[111], and septuplets, implying different surface pulses to the underlying meter.

Figure 2. Quintuplets in Tinkler's solo on *Positively Glowing*, Bars 41 - 42.



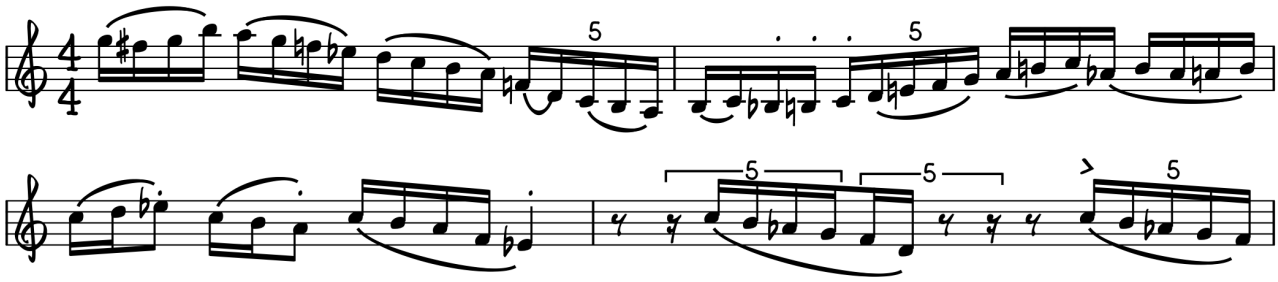
His rhythmic devices also include accenting common subdivisions, such as quavers, to create asymmetrical groupings of five and seven as shown in Figure 3, in Tinkler's solo on *Fragments*[112], and extended rhythmic-cycles that are common in music traditions such as those of India. A particularly interesting and distinctive outcome occurs when Tinkler's rhythmic language is synthesised with common melodic and harmonic jazz language, producing a vocabulary that is not common within jazz music. Another distinctive trademark of Tinkler's approach is the rhythmic velocity with which he plays, irrespective of the tempo or the underlying pulse. The fluidity of his rhythmic approach creates continuity and momentum, and the seamless movement between different subdivisions, as shown in Figure 4, in Tinkler's solo on *Positively Glowing*, heightens tension and often delays the rhythmic resolution.

Figure 3. Asymmetrical accent groupings of quavers within Tinkler's solo on *Fragments*, Bars 161 - 164.



[111]Scott Tinkler, *Shrike Like*. (Origin STT/1999SL, 2000, compact disc).
[112] Scott Tinkler. *Dance Of Delulian.* (Origin OR028, 1996, compact disc).

Figure 4. Fluidity of movement between subdivisions within Tinkler's solo on *Positively Glowing*, Bars 188 - 191.



Certain aspects of Tinkler's approach to language also stem from traceable influences within the jazz tradition. For example, his melodic lines have a relationship to the harmony and musical forms of compositions, but they include increased levels of dissonance and tension. This is partly due to Tinkler's increased emphasis of chord extensions, chromaticism, as shown in Figure 5, in his solo on *Positively Glowing*, and wider intervallic approach, as shown in Figure 6, in his solo on *Positively Glowing*, that create a sense of increased dissonance.

Figure 5. Chromaticism within Tinkler's solo on *Positively Glowing*, Bars 172-173.

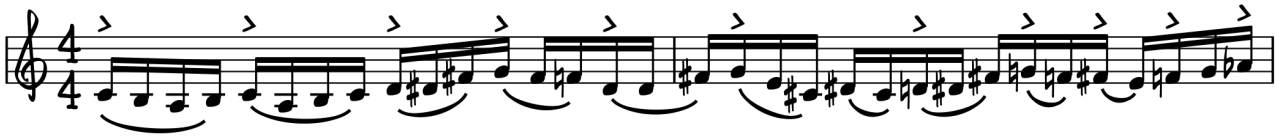
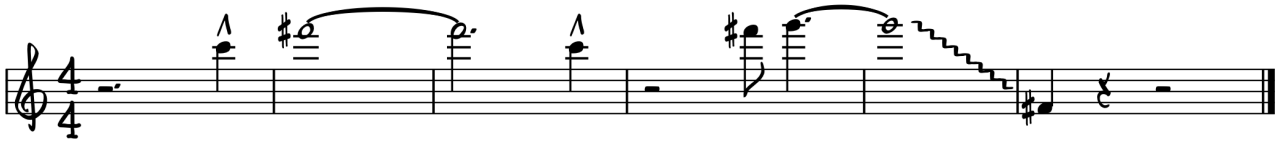


Figure 6. Wider intervallic approach within Tinkler's solo on *Positively Glowing*, Bars 201-205.



Extended trumpet techniques have become a key attribute of many contemporary jazz trumpeters such as Scott Tinkler, Peter Evans, and Arve Henriksen, and I utilise them as part of my performance practice. My particular motivation for exploring different timbral possibilities is to gain

a wider expressive palette. Tinkler develops exercises within his studio practice and compositions within which to explore extended techniques. Rather than applied as occasional effects, several extended techniques such as split-tones, quarter-tones, circular breathing and extreme upper register are interwoven in Tinkler's vocabulary on a regular basis.

2.3 Contemporary Improvising Ensembles: Predecessors And Influences On My Performance Practice

Post-bop jazz, a form of small-group jazz music that evolved in the early 1960s, has been influential on my conception of and approach to ensemble playing. Two focuses of my performance practice are to shape my improvisations to the real-time performance context and to perform improvised music with a high level of interaction between ensemble members, both of which were prevalent and generally required by practitioners in post-bop jazz. Ensembles that are aligned with the post-bop style and have influenced my own ensemble approach include the Wayne Shorter Quartet, Charles Mingus Sextet, Wynton Marsalis Quartet, Scott Tinkler Trio, Tim Hagans Trio, Dave Holland Quintet, Ralph Alessi Quartet and Mark Simmonds' Freeboppers. Of significant influence is the1960s post-bop quintet of Miles Davis, which was "one of the most cohesive and original groups in contemporary jazz"[113] and one that embodied a "radical reinvention of jazz style … a dangerous, high-flying, exhilarating act of communal communication, virtuosity, and trust."[114] The Davis ensemble has influenced my approach to developing strategies to facilitate ensemble intersubjectivity, interaction and creativity. The aim within my ensemble dynamic is not to replicate or re-create what the Davis Quintet played, but to attempt to apply the ensemble's processes to my music.

It is widely acknowledged that Davis assembled individuals of exceptional creativity and made use of the ensemble's gestalt to create a balance between the role of the individual practitioners and that of the collective. In order to encourage this, Davis relinquished control over the music, "allowing space for the band to be part of the direction."[115] The relinquishing of control as a performer, bandleader and composer is an ongoing pursuit within my music. This aspiration correlates with my desire to shape my performance to the immediate musical context in conjunction with my co-performers, rather than relying heavily on a predetermined approach. This

[113] Dan Morgenstern, "Miles Davis, Miles Smiles Downbeat Review" in F. Alkyer (ed.) *The Miles Davis Reader* (New York: Hal Leonard Books, 1967), 243.
[114] Jeremy Yudkin, *Miles Davis, Miles Smiles, and the Invention of Post-Bop* (Indiana: Indiana University Press, 2008), 120.
[115] Gene Santoro, "Miles Davis: The Enabler, Part 1" in F. Alkyer (ed.) *The Miles Davis Reader* (New York: Hal Leonard Books, 1988), 140.

balance between allowing music to be flexible and guided by real-time context on the one hand and maintaining structure and relevance to the compositional parameters and style on the other is constantly in flux within my music. It has inspired my ongoing investigation into how musicians improvise collectively so as to encourage a sense of ensemble within music that has predetermined structure and parameters. My aspiration to develop ensemble projects that encourage group interaction and flexibility of the compositional parameters is realised when the ensemble dynamic allows for individual expression, development of a collective language and ensemble rapport.[116]

Davis made a deliberate attempt to keep the performances of the quintet fresh. As stated by Wayne Shorter, "He was the only bandleader who paid his personnel not to practise at home … so as to avoid the polish that makes even some improvised music boring … he always wanted it fresh."[117] Whilst this may be true, the Davis rhythm section was constantly discussing and analysing performances and the development of the music. Bassist of the Davis Quintet, Ron Carter, recalled that, "After gigs the rhythm section would talk for hours trying to understand and analyse as best we could what took place and to have a clearer view of it to work on … for tomorrow night."[118] Comments by Herbie Hancock, Ron Carter and Wayne Shorter in interviews within Jack Chambers book *Milestones: The Music and Times of Miles Davis*[119] suggest that connectedness and musical trust within the quintet were the vital ingredients to keeping the music fresh, irrespective of how familiar the musicians were with the music.

Davis' quintet identity was comprised of contrasting but musically sympathetic individual approaches that seemed to intensify the potency of each individual's artistic voice. This coexistence of both an ensemble and individual identity seems to be an important attribute of many high-level improvising ensembles. The act of pursuing process seems to have been valued more highly than the product within the Davis Quintet. However, due to the rapport and exceptional technical and creative attributes of all members of the quintet, more often than not the risk-laden processes resulted in exceptionally cohesive and interactive musical outcomes.

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[116] The collective language and ensemble rapport of my quartet centres on four components. Firstly, a command of Bebop language, which is considered the basis of modern jazz language. Secondly, a mutual interest and knowledge of the flexible approach and deconstruction of bebop language as exemplified by groups such as the Miles Davis Quintet, which combined free jazz approaches with materials of the underlying composition. Thirdly, to incorporate styles that extend beyond the jazz canon, and a wide spectrum of consonance and dissonance, and finally, the incorporation of rhythm as a primary element in improvisation.

[117] Miles Davis 1969, cited by Jack Chambers. *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 87.

[118] Robert Hodson, *Interaction, Improvisation, and Interplay in Jazz* (New York: Routledge, 2007), 69.

[119] Jack Chambers, *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 93.

Davis's quintet made a conscious decision to move away from 'playing it safe', and instead adopted a more spontaneous and less determined approach, which involved "a lot of chance taking", according to the quintet's saxophonist, Wayne Shorter.[120] The quintet was searching for increased levels of collective improvisation, interaction and creativity, in the process redefining the stereotypical concept of a jazz ensemble[121]. Author Michelle Mercer states, "The musicians acted on 'common knowledge' intuitively, in real-time, before it was articulated in later discussions."[122] This suggests that to an extent, the quintet members were not sure exactly what the outcome of their searching would be.

Some of the observable processes and strategies characteristic of the Miles Davis Quintet that have influenced my approach to jazz ensemble interactions and processes are:

• Flexibility of meter, tempo, harmony and melody. [123]

• The freeing of and experimentation with musical form. [124]

• Space incorporated into compositions. [125]

• Performance in an unbroken continuum that link compositions. [126]

• Improvised transitions between tunes. [127]

• Sonic and gestural cues.[128]

• Variation of ensemble combinations: solo, duo, trio, quartet, and quintet combinations.

• Musical and personal rapport between musicians. [129]

• Technical accomplishment of musicians well versed in the jazz tradition.

• Assimilation of like-minded musicians creating instant musical rapport and ensemble sound. [130]

• Ensemble members' individuality afforded space within the collective ensemble. [131]

• Ensemble members encouraged to take chances. [132]

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[120] Bob Beldon, "Miles … What Was That Note?" in F. Alkyer (ed.) *The Miles Davis Reader* (New York: Hal Leonard Books, 1995), 163.
[121] Michelle Mercer, *Footprints: The Life and Work of Wayne Shorter* (New York: Tarcher/Penguin, 2004), 110.
[122] Michelle Mercer, *Footprints: The Life and Work of Wayne Shorter* (New York: Tarcher/Penguin, 2004), 113.
[123] Robert Hodson, *Interaction, Improvisation, and Interplay in Jazz* (New York: Routledge, 2007), 110.
[124] Robert Hodson, *Interaction, Improvisation, and Interplay in Jazz* (New York: Routledge, 2007), 108.
[125] Michelle Mercer, *Footprints: The Life and Work of Wayne Shorter* (New York: Tarcher/Penguin, 2004), 264.
[126] Jack Chambers, *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 101.
[127] The improvised transitions included changes in mood, tempo, key, meter and tonality. Jack Chambers, *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 101.
[128] An example of the use of cues by the Davis quintet was their approach to performing "improvised suites organised around a few common themes", with the themes acting as sonic cues. Jack Chambers, *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 101.
[129] Michelle Mercer, *Footprints: The Life and Work of Wayne Shorter* (New York: Tarcher/Penguin, 2004), 100.
[130] Jack Chambers, *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 86.
[131] Gene Santoro, "Miles Davis: The Enabler, Part1." in F. Alkyer (ed.) *The Miles Davis Reader* (New York: Hal Leonard Books, 1995), 140.

• Contrasting voices of ensemble members.

• Ensemble members extend and explore in solos. [133]

• Simultaneous ensemble improvisation. [134]

• Repetition of a set repertoire that evolved in order to sustain the ensemble's interest.[135]

• Interplay within the rhythm section. [136]

• Conscious effort to keep the music fresh by the bandleader. [137]

• The music contains fixed and flexible components. [138]

• Breaking away from the traditional theme-solos-theme arrangement. [139]

• Loosening of role-playing. [140]

• Music that combines elements of post-bop and free jazz. [141]

Examples of several of the above characteristics occur within the Four In One recording of *If I Were A Bell* (Track 1 on the Audio CD, Appendix 11), between 11:20 – 14:55. These include flexible outlining of the meter, instigating a new tempo by stating it in the melody, deconstruction of the harmony and melody, incorporating freely improvised transitions between solos and tunes, using sonic cues, such as melodic fragments, varying ensemble combinations by use of unaccompanied solos, duos, and trios, loosening of the traditional role-playing, and collective improvisation. Four in One performed the same repertoire at each performance, but there was a collective understanding that the ensemble would strive to keep the music fresh by taking chances, allowing individuals increased space to experiment and expand ideas in improvisations, and being open to deviating from the post-bop jazz style. As bandleader, I assumed the role of asserting directions, such as cueing melodies and transitions, when I felt it was required.

2.4 Chapter Summary

International and Australian jazz recordings, ensembles and distinctive individual musicians have influenced my approach to jazz performance. Artists such as Scott Tinkler, who has developed a

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[132] Bob Beldon, "Miles … What Was That Note?" in F. Alkyer (ed.) *The Miles Davis Reader* (New York: Hal Leonard Books, 1995), 163.
[133] Robert Hodson, *Interaction, Improvisation, and Interplay in Jazz* (New York: Routledge, 2007), 110.
[134] Michelle Mercer, *Footprints: The Life and Work of Wayne Shorter* (New York: Tarcher/Penguin, 2004), 110.
[135] Michelle Mercer, *Footprints: The Life and Work of Wayne Shorter* (New York: Tarcher/Penguin, 2004), 109.
[136] Jack Chambers, *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 85.
[137] Jack Chambers, *Milestones: The Music and Times of Miles Davis* (New York: Quill, 1983), 87.
[138] Robert Hodson, *Interaction, Improvisation, and Interplay in Jazz* (New York: Routledge, 2007), 110.
[139] John Ephland, "Miles' Decade, Part 1" in F. Alkyer (ed.) *The Miles Davis Reader* (New York: Hal Leonard Books, 1995), 314.
[140] Robert Hodson, *Interaction, Improvisation, and Interplay in Jazz* (New York: Routledge, 2007), 107.
[141] Michelle Mercer, *Footprints: The Life and Work of Wayne Shorter* (New York: Tarcher/Penguin, 2004), 112.

distinctive vocabulary through his practice-led approaches to studio practice and trumpet technique, and ensembles such as the Miles Davis Sextet, who performed with flexibility, interaction, variety, and spontaneity, have been sources of inspiration for the approaches and processes in my music.

Australian jazz musicians are currently significant contributors and participants in the global jazz community, both in terms of the volume and quality of output. Contemporary Australian jazz musicians, such as Mike Nock, Tony Gould, Paul Grabowsky, Scott Tinkler, Dale Barlow, James Morrison and Simon Barker have made distinctive contributions to jazz nationally and internationally. The achievements of these musicians have instilled the belief for musicians such as myself that Australian performance and creativity is on a par with international jazz artists. The increased appreciation[142], by students and professional musicians, of the value and achievement of Australian artists as role models has been an important trend in Australian jazz in recent decades.[143] These role models mentor, inspire, and exemplify the value of local music communities, even if the status of these artists within the international scene is relatively inconspicuous. Many established Australian artists, such as Barker and Tinkler, are active in encouraging emerging musicians to contemplate the context and purpose of jazz performance on a deeper level.

The current Australian contemporary jazz scene has many examples of distinctive individual sounds and ensemble approaches that are the result of long-standing musical relationships. In addition to influence from American, European, and Scandinavian jazz traditions, Australian individuals and ensembles are developing their own dynamic and idiosyncratic languages for interactive musical dialogue. At the core of this approach is the idea that the ensemble can express more than the sum of its individual members. [144]It is within this ensemble context that my performance practice as an improviser, composer, and Australian jazz musician is undertaken.

[142] This increased appreciation of Australian jazz musicians has been partially due to the inclusion of Australian jazz content within tertiary undergraduate degrees and the growing body of recordings that document distinctive approaches and compositions.
[143] John Shand, *Jazz the Australian Accent* (Sydney: University of New South Wales Press, 2009), 10.
[144] Australian jazz trumpeter Phillip Slater refers to the fruitfulness of collectively developing a vocabulary and ensemble sound within the ensemble *Band of Five Names,* in an interview within *Extempore.* Phillip Slater, *Phil Slater in Conversation with Michael Webb*. (Kew: Extempore, 2009), 57.

Chapter 3: ISSUES OF PERFORMANCE PRACTICE IN RELATION TO THE RECITAL

3.1 Artistic Value

A primary pursuit within my performance practice is to create music that has artistic value. Whilst years spent developing one's performance practice may improve a practitioner's craft it will not necessarily produce art. There needs to be another dimension added in order for the craft to transform into something of artistic value. To undertake thousands of hours of practice, or specific exercises or transcriptions, does not itself constitute a path to artistic value. In my music one of the key indicators of artistic value lies in having sufficient layers of complexity to make the music function on several levels. In works such as *Buzzby* (Track 2 on the Audio CD, Appendix 11), these layers include a demonstration of musicality, virtuosity, balanced form with continuity, interactive improvisation, engaging melodic material, coherent harmonic progression, energetic rhythmic material, a balance between composed and improvised materials, a sense of spontaneity, and music that features strong individual and ensemble performances. These elements combine to produce a work that is aesthetically satisfying to the performers and discerning listeners.

There are a number of subjective and less tangible elements that contribute to artistic value. Within my music, these include ensemble synchronicity during improvisation, sustained antiphony, timbre and dynamic variations, nuances that convey energy, expressiveness, intensity and excitement, and a sense of momentum and direction within the composition and performance. In the rubato interpretation of the *Piece for Peace* melody, between 0:50 – 5:11 (Track 3 on the Audio CD, Appendix 11), the use of vibrato, breathy tone, dynamic shape, half-valve inflection, growling, pitch sliding, and complementary phrasing between the trumpet and piano contribute to the musical expressiveness, intensity, and sense of momentum. The music contains both composed material and sections for improvisation, which allows for control over the layers, material and structure of the music whilst still enabling input by individual ensemble members.

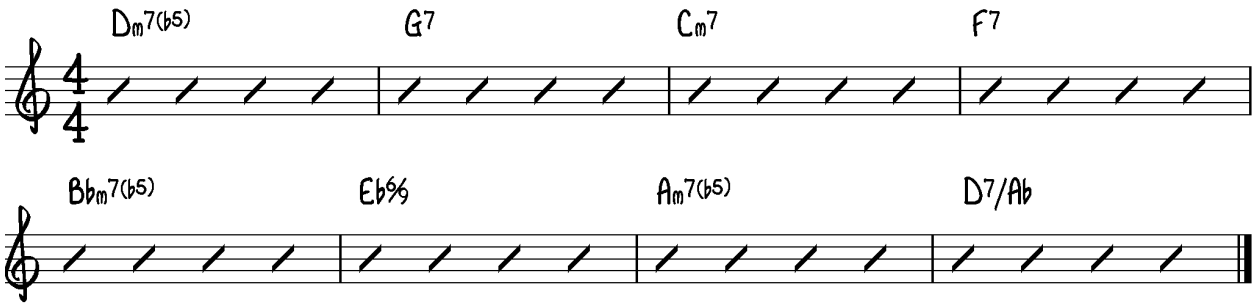
In order to facilitate the creation of artistic depth, I have found it advantageous to bring together practitioners who interconnect effectively in an ensemble context. These fundamental requirements for interconnectedness include having significant control of instrumental craft, a mutual understanding of seminal recordings, language and repertoire, an ability to communicate whilst performing, and the intention to shape their performance to the real-time context.

Another consideration that increases the potential for artistic depth is to combine practitioners who have distinctive, yet complementary musical capacities that are suited to the desired performance aesthetic and compositions. This is demonstrated on the Four In One performance of *If I Were a Bell* (Track 1 on the Audio CD, Appendix 11), which conveys a sense of individual and ensemble spontaneity whilst maintaining continuity. The approach to this jazz standard demonstrates the ensemble's mutual understanding of common jazz language and the influence of seminal ensembles, such as the Davis Quintet. The performance features interactive improvisations with engaging melodic material, unconventional harmonic progressions, and energetic rhythmic material. Whilst this interpretation of *If I Were a Bell* features strong individual improvisations, it is the flexibility and willingness by all ensemble members to manipulate musical ideas to the real-time performance context that creates a synchronistic and spontaneous performance. This is particularly evident in the section between 7:10 – 15:00 (Track 1 on the Audio CD, Appendix 11), where the ensemble gradually deconstructs the swing rhythmic feel and the harmonic sequence. The sense of steady pulse and adherence to the thirty-two measure musical form are abandoned and the ensemble switches to a free jazz approach that is increasingly textural. The consideration, creation and development of interesting and aesthetically satisfying layers helps me develop my compositions and performances. This ongoing creative process is both subjective and intersubjective; it involves individual reflection and ensemble experimentation.

3.2 Influence Of Composition On Improvisation

Composition influences the creation of improvisational materials in my performance and predetermines fundamental elements such as tempo, meter, musical form, harmonic progressions, harmonic rhythm, and rhythmic feel. When a composition features common jazz materials, such as a well-known jazz chord sequence, it is possible to apply existing vocabulary in improvisation. For example, the bridge section of *The Beginning of the End of The Beginning,* shown in Figure 7*,* has a common harmonic sequence of ii – V7 chords descending in a common jazz harmonic rhythm of one chord per bar.

Figure 7. Harmonic progression of *The Beginning of the End of The Beginning*. Bars 17 – 24.

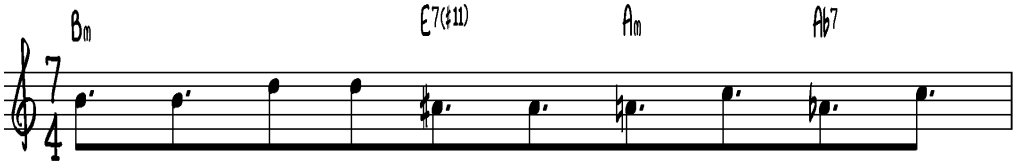


However, when the composition contains parameters or materials that are different from those commonly found within the jazz tradition, or my own knowledge base, familiarisation with the new material must occur in order to improvise with continuity. For example, the harmonic progression of *Buzzby,* shown in Figure 8, contains a harmonic sequence and motion that was different to anything I had previously encountered. In particular, the repetitiveness of the short, three-bar harmonic progression and the unconventional harmonic rhythm[145] in the third bar required studio practice to build a store of creative options for the performance. To assist with melodic continuity, I explored the harmonic relationships between the neighbouring individual chords, finding similarities and differences between chord tones. Exploration of new materials in response to challenges in the recital compositions has generated new material and helped personalise and broaden my vocabulary. Whilst often developed in conjunction with a specific composition, newly acquired materials also inform my improvisations within other repertoire.

Figure 8. Harmonic progression of *Buzzby*. Bars 1 – 3.

Composition influences improvisation in my performance practice by requiring me to consider new ways of organising and developing materials. The discovery of these materials inspires focused studio practice exploring the materials in an improvised context. For example, the rhythm in the tenth bar of *Finding the Balance*, shown in Figure 9, involves a syncopated subdivision of the 7/4 meter characterised by a dotted quaver pulse with an interruption by means of two consecutive quavers.

Figure 9. Melodic rhythm in *Finding the Balance*. Bar 10.

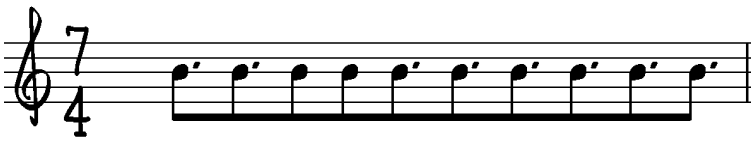


[145] The 'unconventional harmonic rhythm' within *Buzzby* includes the density of the progression that contains between three and four chord changes per bar, and the placement of the chords on off beats in the third bar.

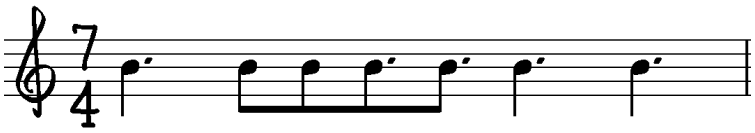
My interest in this bar inspired me to explore ways of further subdividing the rhythm, such as decreasing the rhythmic increments of quavers and semiquavers. Figure 10 shows examples of the rhythmic subdivision variations that I explored whilst improvising in studio practice. I also explored displacing the two quavers to different points within the bar, as shown in Figure 11.

Figure 10. Rhythm subdivisions improvised on Bar 10 of *Finding the Balance*.

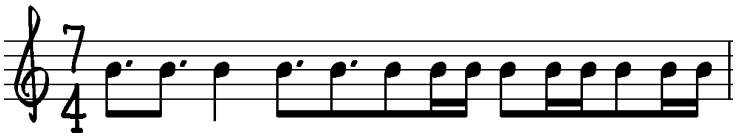
Original Rhythm



Variation 1



Variation 2



Variation 3

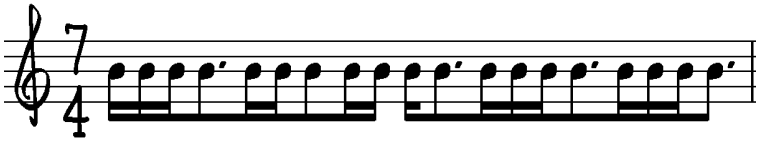
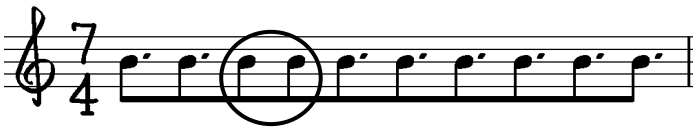
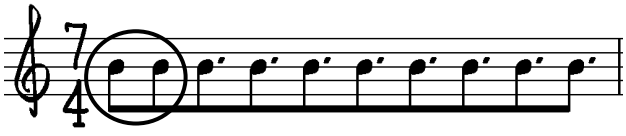


Figure 11. Displacement of the quavers of the Bar 10 rhythm of *Finding the Balance*.

Original Rhythm



Displacement of the quavers



Combining these rhythmic ideas with pitch created a number of different melodic possibilities for improvisation. By exploring such processes, composition helps to develop and expand my materials, technique, and improvisational ability. For example, the rhythmic variations that were developed from the bar ten rhythm of *Finding the Balance* were also applied to improvisation within other bars of the musical form.

The improvised sections in my recital compositions have a relationship to the written materials and are often based on a similar harmonic sequence, rhythmic feel, and musical form. I always try to achieve continuity between written and improvised sections in terms of the established mood and compositional character. Improvising in this way means the written component maintains an important role within improvisations and the overall structure of performance. Using composition materials as a basis for the improvisation contributes to the distinctiveness of each composition. Melodic variation is a common improvisation technique that maintains a relationship to the composition. When improvising on *Finding the Balance,* components of the melody such as the rhythm and its subdivisions, the intervallic construction, the harmonic implication of the notes in relation to the underlying harmony, contour and pitch are used as materials within improvisation. Figure 12 shows the original melody and Figure 13 an improvisation on the first two bars of *Finding the Balance* that incorporates the melodic rhythm, pitch, and intervallic construction. The ongoing relationship between improvisation and composition is critical within my music.

Figure 12. Original melody of *Finding the Balance.* Bars 1 – 2.

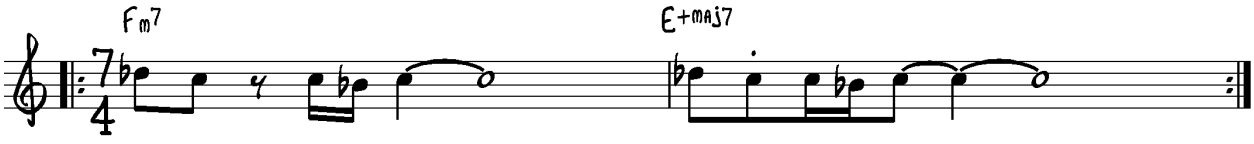
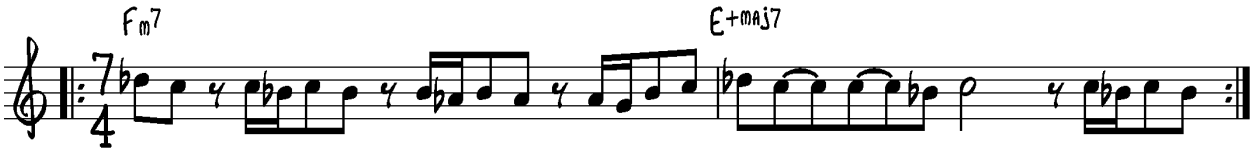


Figure 13. Improvisation on *Finding the Balance* incorporating the original melody, rhythm, pitch, and intervallic construction. Bars 1 – 2.



Another example of composition influencing improvisation is the anticipated harmonic rhythm within in the 'A' sections of *Marshmallow Man*, shown in Figure 14, which influences the melodic construction in improvising. A preparatory exercise within studio practice was to familiarise myself with these harmonic rhythm anticipations as a source of rhythmic targets within my melodic line as shown in Figure 15. Once these rhythms were intuitive, I improvised increasingly complex melodic ideas whilst continuing to play the root note of each of the harmonic rhythmic anticipations, as shown in Figure 16. During performance, these harmonic rhythms are also outlined by the ensemble members, so the choice of whether to play them is determined by the ensemble activity in the performance context.

Figure 14. Harmonic anticipation in *Marshmallow Man*. Bars 1 – 8.

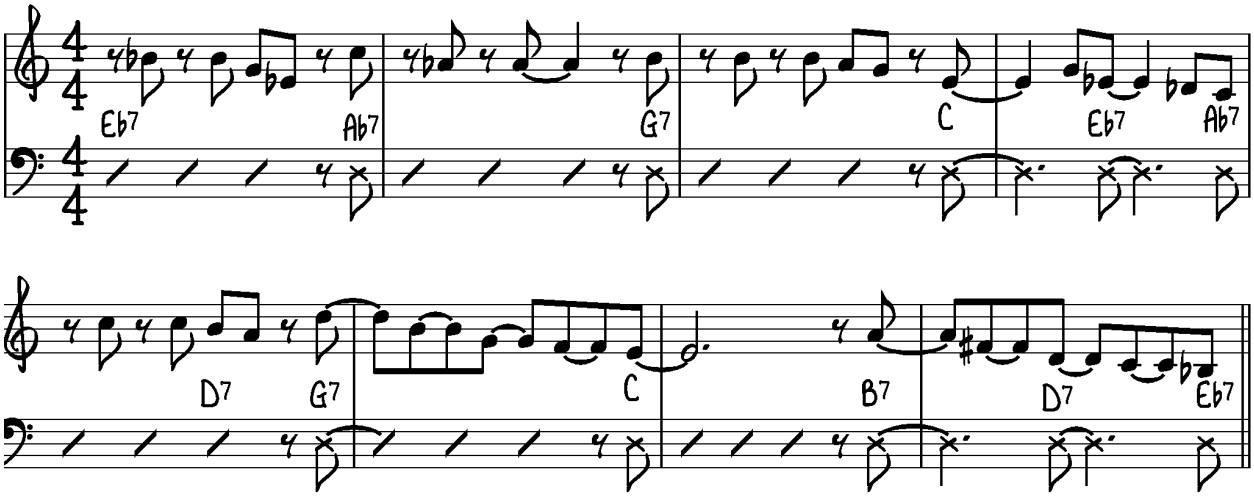


Figure 15. Melodic preparatory exercise based on harmonic root notes outlining the harmonic rhythm anticipations in *Marshmallow Man*. Bars 1 – 8.

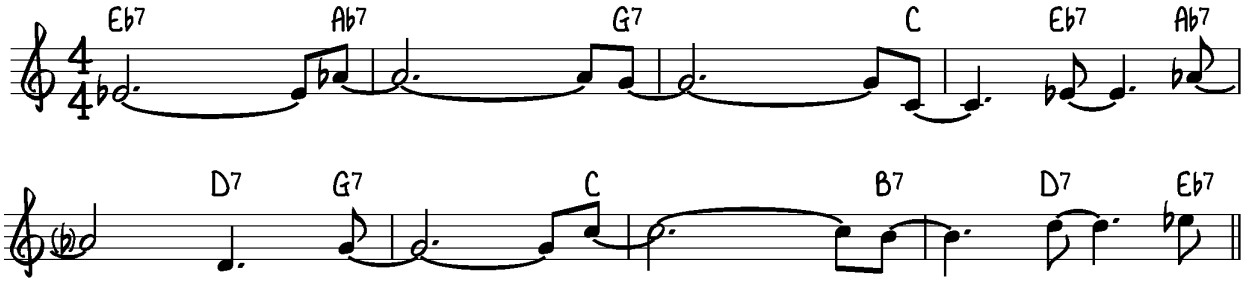
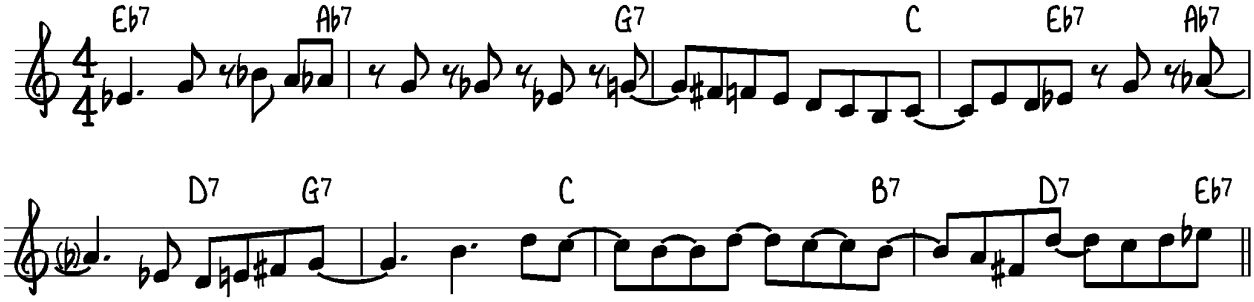


Figure 16. Improvised melodic line combined with outlining the harmonic rhythm of *Marshmallow Man*. Bars 1 – 8.



The short and repetitive harmonic sequence of the *Rollercoaster* trumpet solo, shown in Figure 17, encouraged me to explore phrasing and pacing variations beyond the implied symmetrical chord progression. Varying phrase lengths and incorporating rests contributed to variation of density and climactic points within the ensemble interaction. With the harmony perpetually revolving around the

F major seventh (#11) tonic chord, I find it challenging within performance to depart from the underlying diatonic harmony for more than a few bars without sounding inappropriately dissonant, unless the ensemble members also alter the harmony from the underlying chords. In order to develop thematic material within the repetitious harmonic structure of *Rollercoaster,* I incorporated rhythmic, melodic and harmonic variations. Many of these variations were created from the materials within the composition. Figure 18 shows the four bars of the melody of *Rollercoaster* and then several thematic variations used as a basis for development within improvisations, shown in Figures 19, 120, and 21.

Figure 17. Harmonic sequence of trumpet solo in *Rollercoaster*. Bars 41 – 49.

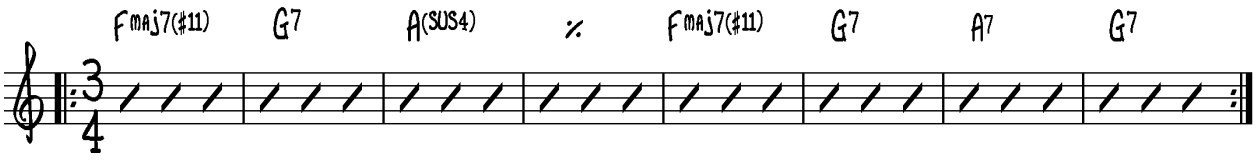


Figure 18. The original theme from the trumpet solo in *Rollercoaster*. Bars 41 – 44.

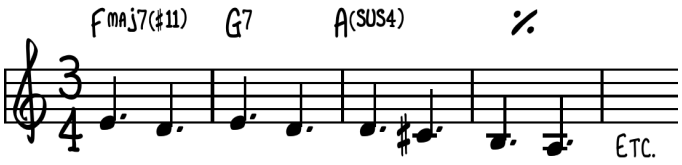


Figure 19. Rhythmic variation of theme from the trumpet solo in *Rollercoaster*. Bars 41 – 44.

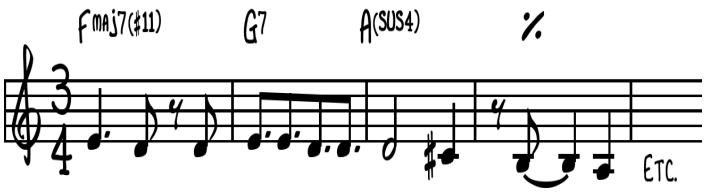


Figure 20. Melodic pitch variation of theme from the trumpet solo in *Rollercoaster*. Bars 41 – 44.

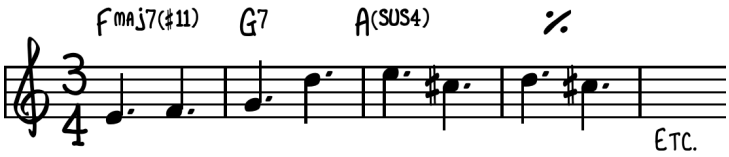
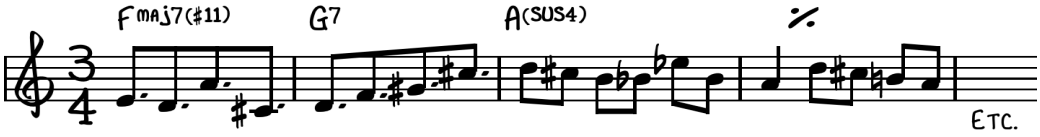


Figure 21. Non-diatonic harmonic and rhythmic variation of theme from the trumpet solo in *Rollercoaster*. Bars 41 – 44.



The materials and structures in both the notated and improvised sections of my compositions present physiological and technical challenges. In the recital compositions, the primary one is to develop the endurance required to perform extended improvisations and then accurately play notated sections. The notation is often continuous, providing little chance for embouchure rest. This can affect the ability to accurately execute both written and improvised materials, control sound production and extended techniques, and limit the control of the upper and lower registers. When these physiological limitations repeatedly hinder the execution of notated and improvised ideas, they can sever my flow state and focus during performance. The consideration of endurance within improvisation requires incorporation of intentional silence and pacing.[146] The inclusion of extended and frequent rests and alternating long and short phrases allows for increased physiological recovery and accuracy of execution within my performance.

3.3 Manipulating Performance Within The Real-Time Context

Reacting to the real-time context within performance is an ongoing consideration in my music. For me, jazz performance requires a balance between preparation, fixed materials, interpretation and improvisation. Manipulating improvisations to the real-time musical context is not the sole technique used by jazz musicians, even though the term ‘improvisation’ suggests a spontaneous real-time action. It is common for jazz musicians to develop a personalised catalogue of materials, as I have done for the recital works, which are recycled with degrees of variation on harmonic

[146] ‘Pacing’ is a term that describes the balance between playing and resting, and the frequency and duration of sound and silence.

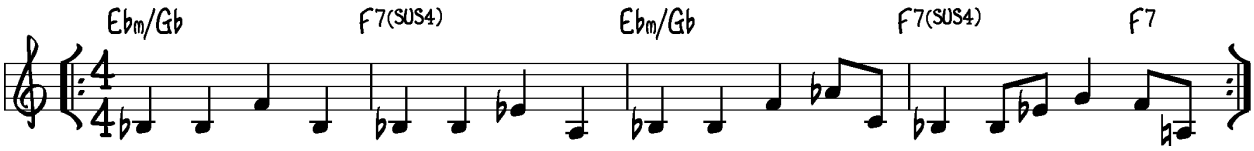
sequences or formal structures. The ability to deploy that vocabulary with minimal conscious thought or intention is essential to improvisation. Ideally, preparation of vocabulary provides a store of material that is accessible to the practitioners during performance. However, the real-time performance decisions lie in how to assemble materials according to the musical context. My intent to react to the real-time performance context, rather than relying on a fixed, predetermined plan involves several components.

I aim to incorporate vocabulary developed in studio practice into performance only if it is contextually relevant, responding reflexively. When I am in a flow state and deeply engaged this reflex occurs frequently. However, when not in a flow state I have found that incorporation of vocabulary involves restraint, especially with material extensively explored within studio practice that I gravitate to out of habit rather than suitability to context. An example of reacting to the real-time context is at 3:10 on *Buzzby* (Track 2 on the Audio CD, Appendix 11), where I responded to Marc Hannaford's accented semiquavers grouped in threes, by using the same rhythmic material with variations in pitch. Whilst I had practised this rhythmic grouping previously, it only surfaced during the performance in response to Hannaford. The advantage of maintaining an openness to the immediate performance context is the potential to heighten the reliance on interaction and spontaneity among the ensemble members. This has also been my experience in the case of my recital ensemble.

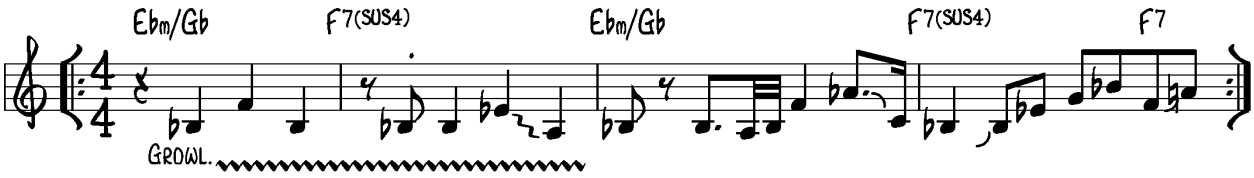
In addition to manipulating improvisations within the real-time context, notated sections of melody and harmony are also open to interpretation. Many of the recital compositions, such as *Drift* (Appendix 9), *When the Stars Align* (Appendix 3), and *Piece for Peace* (Appendix 4) are designed to be performed with melodic interpretation and harmonic variation, with the notated scores merely providing a guide. Figure 22 shows an example of interpretation and variation of the melody of *When the Stars Align.* Ensemble consensus and intersubjectivity facilitates shaping of the music in real-time and this, in turn, allows for flexibility within performances. This shared understanding and knowledge, developed through rehearsals, discussions, and performances of the recital material, provides a basis for mutual understanding and possibilities for future performances.

Figure 22. Original notation and performance interpretation of *When the Stars Align* melody. Bars 17 – 20.

Original notation

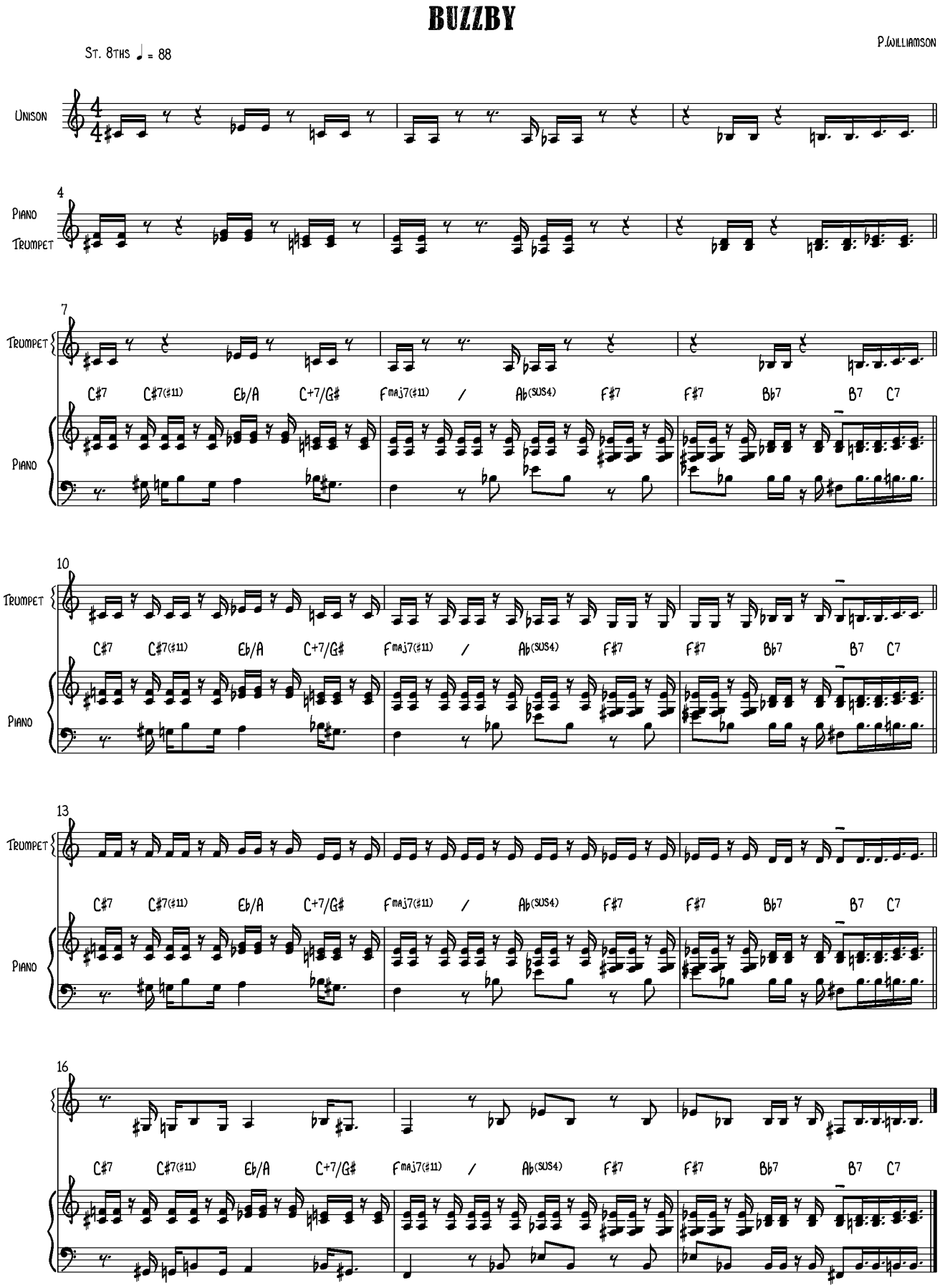


Performance interpretation



Another example of shaping composition to the real-time context is *Buzzby*, which is comprised of a six-bar score (Appendix 2). Whilst the score provides a fixed polyphonic melody, harmonic sequence, it is through ensemble interpretation and improvisation that these elements and musical form are developed, organised and extended. Through rehearsals, aesthetically satisfying results were achieved by layering the different parts and polyphonic harmonies of the six-bar score, thus expanding the recorded performance of the melody to eighteen bars, as shown in Figure 23. This melodic order was not entirely set, but through repeated performances it was agreed that starting the melody in unison on the lower harmony of bars 1 – 3 (Appendix 2), provided a concise beginning, and the trumpet playing the bass clef melody in bars 4 – 6 was the cue for the last time before the improvisation (Appendix 2). This organisation and the length of the melody vary with each performance.

Figure 23. Transcription of the recorded version of *Buzzby* (Track 2, Audio CD, App 11).



3.3.1 Improvisation

Since commencing studies with Tinkler in 1990, a key ambition has been to develop material with multiple variations to enable flexibility within performance. Fixed materials, such as transcribed melodic phrases or patterns, are useful, but flexibility is required to manipulate my performance according to what the ensemble members play, the performance environment, and the stylistic demands of the performance. There are sections in my recital works, such as the melodic interpretation, style and improvisation within *Finding the Balance* (Appendix 1), that vary with each performance. This requires flexibility on behalf of the ensemble members to adjust to the deviations. Manipulating vocabulary in real-time, as opposed to relying predominantly on rigid predetermined materials, takes courage, as there is less control of the outcome due to the increased risk-taking and experimentation. In particular, the ensemble synchronicity can vary. However, it has been my experience that individual and ensemble willingness to be flexible with materials can result in an increased focus on the present moment.

Expanding a vocabulary through variations of materials involves ongoing improvisation in studio practice. Further exploration of materials that emerged during performance, which are selected according to their aesthetic success as they occurred, is based on the assessment of whether the materials can be developed further. The materials can be harmonic, melodic, rhythmic and timbral in nature, but the underlying objective in my performance practice is to develop materials that are relevant to the repertoire of my current performance projects. For instance, I have explored material, such as the melodic shape and intervallic structure shown in Figure 24, in different harmonic contexts and chord progressions in the recital repertoire. Figure 25 is an example of an improvisation based on the same melodic material over bars 5 – 12 of *Drift.*

Figure 24. Melodic material applied to the harmonic sequence of *Drift*. Bars 5 – 12.

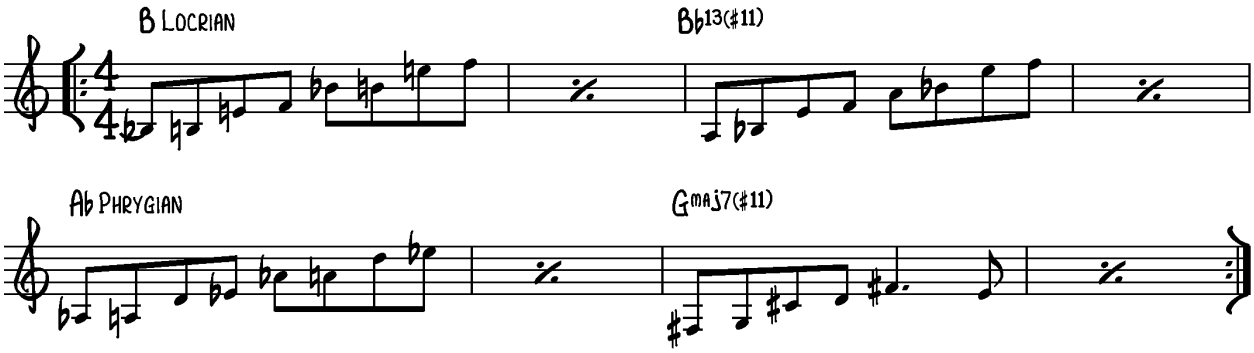
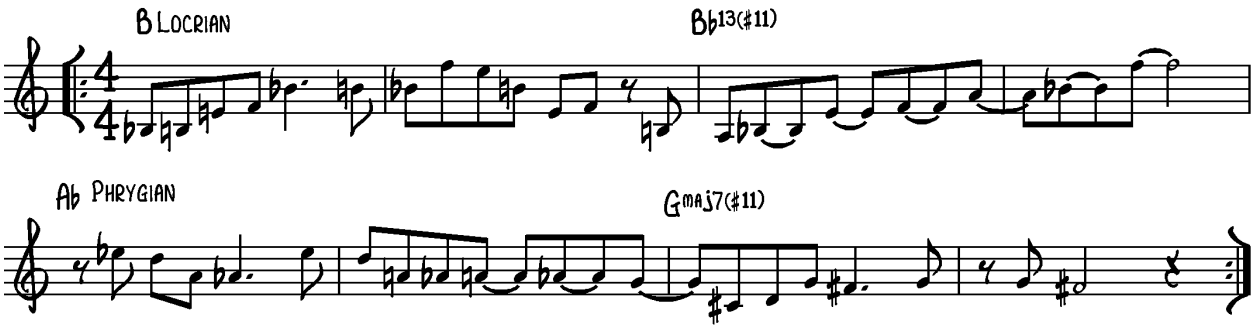


Figure 25. Improvisation on *Drift* based on melodic material shown in Figure 24. Bars 5 – 12.



In my performance practice, I am interested in harmonic and melodic variations of materials, such as changing the harmonic rhythm,[147] anticipating/delaying the harmonic progression, chord extensions, triadic playing,[148] melodic augmentation and diminution, chromatic and diatonic embellishments such as note-encircling, motivic development, variation in melodic contour, and register considerations. However, in the course of this research I became aware that my approach to melody and harmony was to a greater extent within the conventions of post-bebop jazz. It also became apparent to me that the distinctiveness of my playing was largely anchored in rhythm and timbre. Whilst I continue to explore the aforementioned harmonic and melodic variations within my practice, my particular interest in developing flexibility and variations in rhythm and timbre will be the focal points of the following discussion.

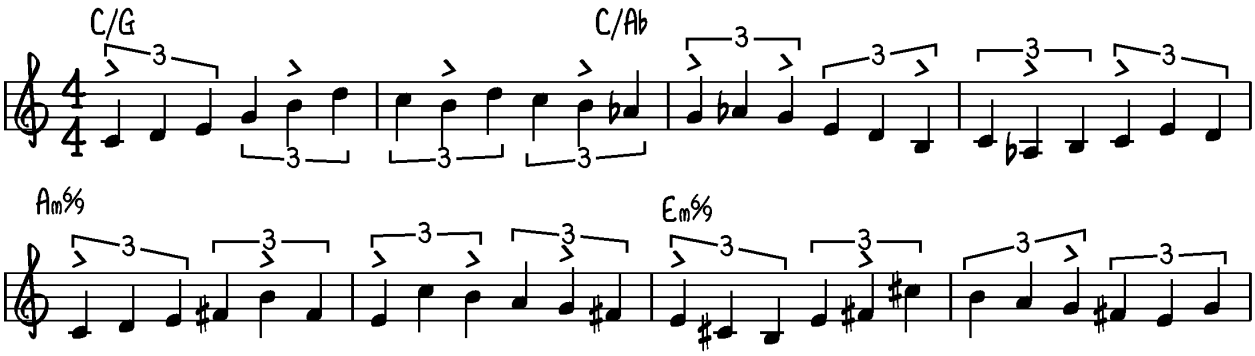
3.3.1.1 Improvisation: Rhythm

Developing rhythmic flexibility alleviates the sense of constriction I feel when performing in a fixed underlying meter, pulse, harmonic rhythm and music structure. I also experience an increased level of ensemble response and engagement when I play with varied and contrasting rhythmic material. Rhythmic elements that I frequently use within my performance include hemiolas, syncopation, accents, odd and even rhythmic groupings, rubato phrasing, combining different subdivisions, and the use of rhythmic motifs. These rhythmic devices create tension and momentum, and can imply different surface pulses. Often, these rhythmic devices occur simultaneously, for instance, a melody line may involve switching between different subdivisions, accents, and syncopation. I am particularly attracted to the sound and effect of switching between subdivisions, including triplets, quintuplets and septuplets, and defining combinations of two and three notes through accents. Figure 26 shows an improvisation using rhythmic subdivisions and

[147] The term 'harmonic rhythm' refers to the placement and duration of the chords.
[148] By 'triadic playing', I am referring to the use of triads as a basis for generating melodic line improvisation.

accented groupings of two, three and four notes. The improvisation melodic content is comprised of chord tones and related modes combined with a predetermined crotchet triplet subdivision.

Figure 26. Improvisation exercise based on chord tones and related modes of the first eight bars of *Flow* to develop accent variations of crotchet triplet rhythms.



Once I am fluent with several different subdivisions, I practise switching between them, as is demonstrated in Figure 27, which alternates quavers, crotchet triplets, and quintuplets. Figure 28 is an excerpt from my improvisation on *Flow,* between 1:55 – 2:01 (Track 4 on the Audio CD, Appendix 11), comprised of quavers, crotchet triplets accented in duple groupings (circled) and minims. The effect of the accented crotchet triplets grouped in twos implies a decelerated surface pulse and creates tension.

Figure 27. Improvisation combining different rhythmic subdivisions on the first eight bars of *Flow*.

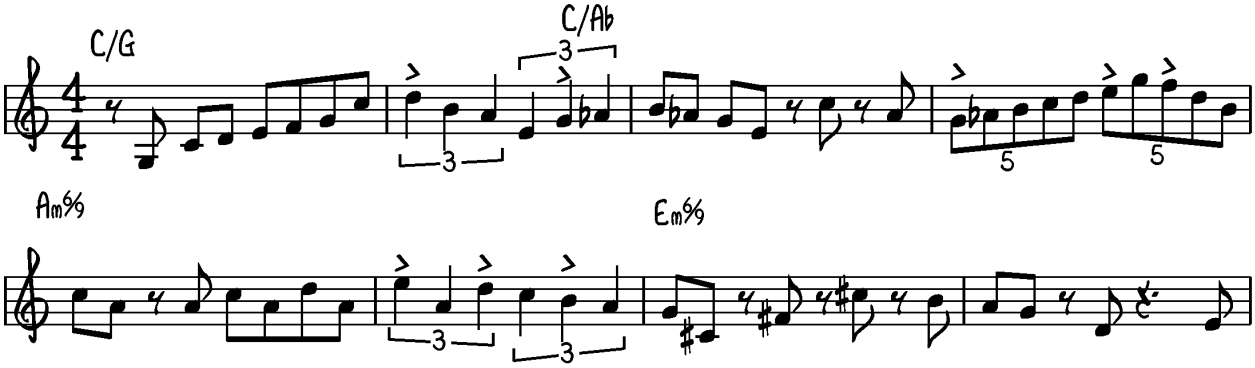
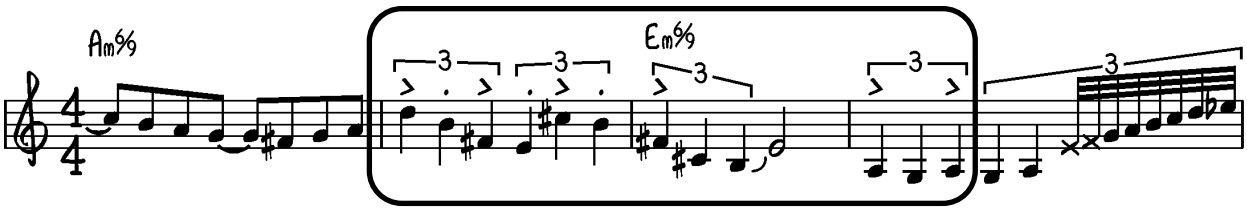


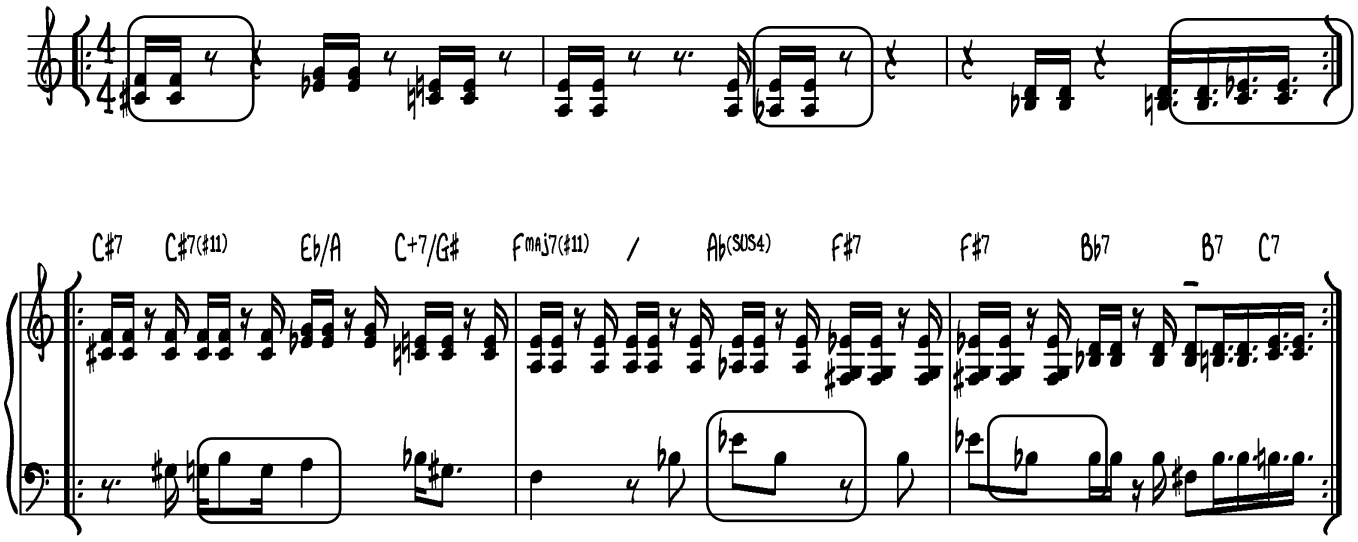
Figure 28. Trumpet improvisation on *Flow* demonstrating use of triplet crotchets accented in duple groupings.



Rhythmic sequences, displacement, augmentation, contraction, and the development of rhythmic cells derived from thematic material are rhythmic devices that influence my improvisations. Figure 29 is an example of rhythmic cells in *Buzzby* that I incorporated and developed in improvisation. Figure 30 shows examples from the *Buzzby* recording of rhythmic displacement and variations of rhythmic cell 2 (Track 2 on the Audio CD, Appendix 11).

Figure 29. *Buzzby* rhythmic cells that feature within the recorded improvisation. Bars 1 – 6.

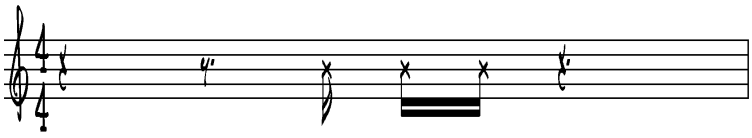
Rhythmic cell 1 Rhythmic cell 2 Rhythmic cell 3



Rhythmic cell 4 Rhythmic cell 5 Rhythmic cell 6

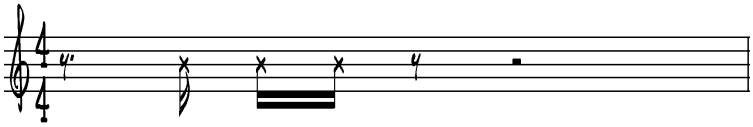
Figure 30. Examples of rhythmic displacement and variations of rhythmic cell 2.

Rhythmic cell 2



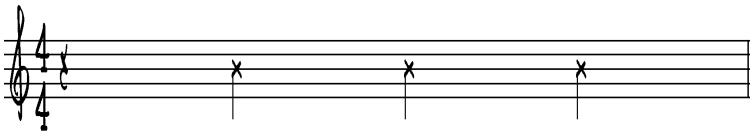
Displacements

1:08 (Track 2 on the Audio CD, Appendix 11)



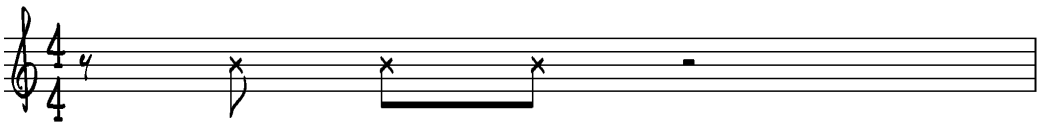
Augmented Variation

1:11 (Track 2 on the Audio CD, Appendix 11)



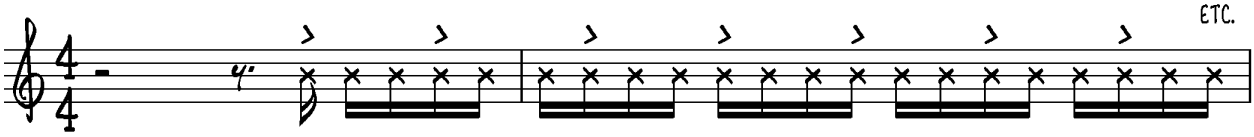
Augmented Variation

1:24 (Track 2 on the Audio CD, Appendix 11)



Rhythmic Sequence

1:54 (Track 2 on the Audio CD, Appendix 11)

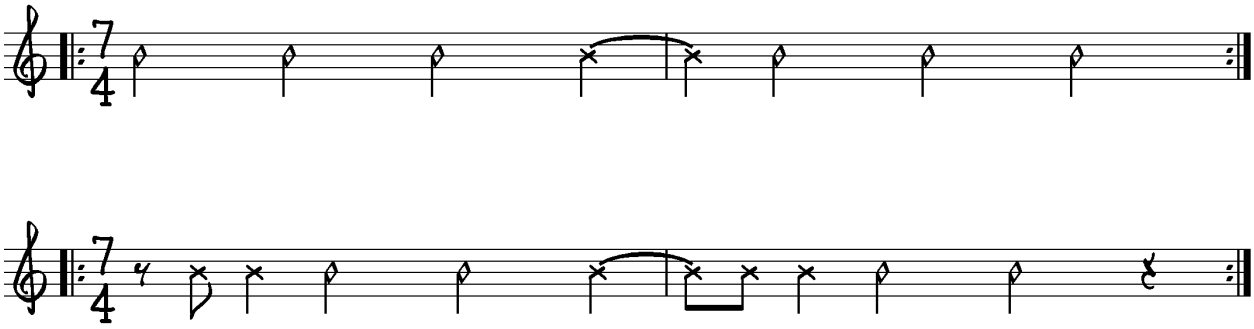


Another aspect of rhythm that is useful for creating variations is the shaping of symmetrical rhythmic material to odd meters. Improvisations are often developed within the 4/4 meter, but the exploration of odd meters within my music, such as the 7/4 meter of *Finding the Balance,* inspires new ways of organising materials. In addition to being comprised of different rhythmic pulses, odd-time meters increase melodic, rhythmic, and phrasing flexibility, as they require different harmonic rhythm, phrasing and rhythmic choices to those of common symmetrical meters, such as 4/4.

For example, the sixteen-bar musical form of *Finding the Balance* is divided into eight groups of two-bar phrases, according to the melodic phrasing, bass ostinato and harmonic sequences. One rhythmic and phrasing consideration when improvising over the two-bar melodic phrasing and bass ostinato is whether to rhythmically outline the two-bar segments or, alternatively, to be rhythmically independent of them. My performance incorporates both approaches, shaping melodic ideas within the two-bar phrases, with the bar lines functioning as rhythmic points of unification and resolution, and at other times stretching beyond these two-bar lengths to delay the rhythmic resolution and create tension. An initial approach in studio practice was to incorporate fixed two-bar rhythmic cells, shown in Figure 31, aimed at increasing tension before rhythmically resolving to a strong downbeat at the beginning of either two or four-bar phrases. This created the effect of increased elasticity and elongation of the phrasing.

Figure 31. Two and four-bar rhythmic cells devised to extend the phrasing resolutions of single bars.

Two-bar examples



Four-bar example

3.3.1.2 Improvisation: Timbre

Timbre is arguably one of the most identifiable aspects that distinguish jazz musicians. Acquiring proficiency of tone production is one of the initial challenges when playing trumpet, and maintenance and development of tone continues to be an important component of my studio practice. The ability to create a resonating tone with control and continuity through the entire register of the trumpet is required to execute ideas efficiently and accurately within performance. Additionally, the development and incorporation of timbral variations and effects are important in widening my expressive palette and providing variation within my vocabulary. Timbre serves two main functions within my performance; to enhance expression of rhythmic and melodic elements, and as a textural device for creation of, and combining with, other sounds. The timbral effects in my vocabulary (as demonstrated in examples from *If I Were a* Bell, Track 1, Audio CD, Appendix 11) include vibrato (9:27 – 9:35), growling (10:30 – 10:50), airy-tone (13:38 – 14:10), whisper-tone, variations on bright, dark, light, and heavy tone spectrum, half-valve (14:38 – 14:54), smears, bends, falls and glissandos. I also play timbral effects considered to be extended techniques, including tongue-stop tone, slap tone, lip-trills, multiphonics, split-tones (8:50 – 9:00), circular breathing, extreme upper register (11:03 – 11:15), pedal notes, quartertones, and false fingering.

The synthesis of timbral variation with rhythmic and melodic elements is an ever-present characteristic of my playing. In many cases, timbre functions as an inflection of the rhythmic and melodic idea, rather than being the focus. For example, the descending glissando and half-valve effect, between 3:13 – 3:25 in *When the Stars Align* (Track 5, Audio CD, Appendix 11), embellishes and adds expressiveness to the improvised melodic line, shown in Figure 32. In this example, the melodic pitch, contour, and rhythm are still the primary focus. At other times, timbre, rhythm and melody are intertwined and of equal importance. For example, the stop-tongue effect and melodic pitch, contour and phrasing, shown in Figure 33, between 3:26 – 3:36 in *When the Stars Align* (Track 5, Audio CD, Appendix 11), are of equal importance.

Figure 32. Descending glissando timbral effect embellishes and adds expressiveness to the improvised melodic line within *When the Stars Align*.

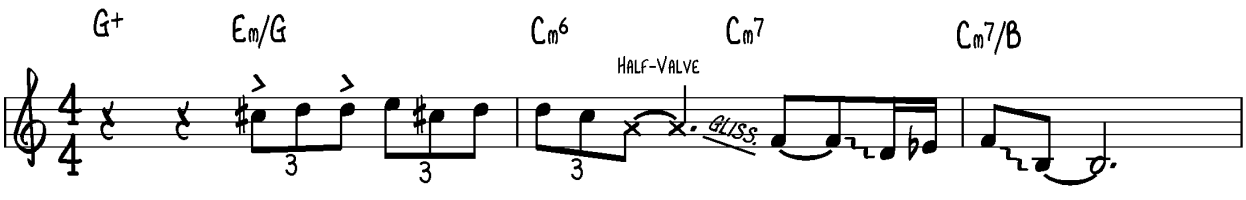
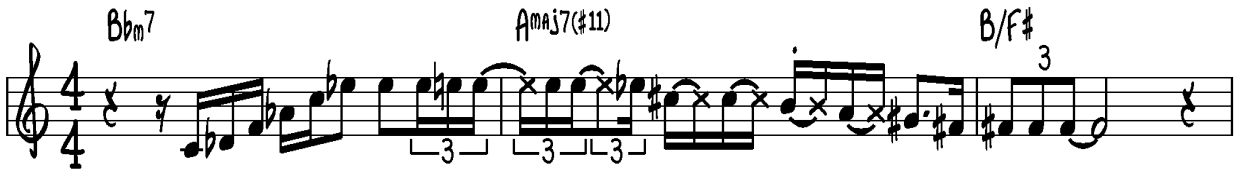


Figure 33. Stop-tongue (marked as a cross-note) timbral effect intertwined with the improvised melodic line in *When the Stars Align*.



I incorporated timbre as a textural device within my compositions as a background accompanying effect, over improvised vamp sections, and within ambient ensemble improvisations that focus on the combination of sounds rather than distinct melodic lines. An example of an improvised segue between compositions is on Track 6 (Audio CD, Appendix 11). In this instance, I play whisper-tone, half-valve, split-tone, stop-tongue, extreme upper register and false fingering timbral effects to contribute to the collective textural ambience. In examples such as this, timbre variation diversifies the role-playing possibilities of the trumpet beyond its primary function as a melodic instrument to also being an instrument capable of an accompanying textural role.

Timbre effects and variation also feature in my composed melodies and their improvised interpretations. Often, through effects such as vibrato, the alteration of tone colour and added expressiveness to the melody is sufficient without needing to alter the notated pitch or rhythm. This is useful when the notated pitch and rhythm is essential to the composition. For example, without altering the essential pitch and rhythm of the first eight-bar melody of *When the Stars Align*, I add expressiveness and variation through vibrato, smears, and half-valve timbre effects. Many timbral effects have several variation possibilities, such as the speed and pitch components of vibrato. Sometimes, improvised timbral effects become integral to the melody and are incorporated in future performances of the composition. The growl effect applied to the melody of *When the Stars Align (*bars 5 – 8 of the 'B' section, Appendix 3), was improvised in performance. This effect adds tension and conveys a growing intensity that became an essential part of the melodic line (2:20 – 2:39, Track 5, Audio CD, Appendix 11).

Exploring timbre through improvisation has resulted in the discovery of aesthetically interesting sounds, especially through combining of two or more different techniques. For example, *Inconsolable* (Track 7, Audio CD, Appendix 11) features a split-tone combined with a valve trill between 5:14 – 5:32. This creates an effect that is reminiscent of a processed and distorted electronic sound. Importantly, this timbral effect enabled me to express and convey emotional anguish and rawness that would not have been possible with a more traditional timbral quality.

3.3.2 Creating The Semblance Of Ensemble In Individual Studio Practice

For many years, I approached improvisation in individual studio practice differently to ensemble performance, which limited my capacity to interact with other musicians. In studio practice, I tended to focus on refining technique and improvisation materials at the expense of practising other valuable components required for ensemble jazz performance, such as pacing, phrase variation, and overall improvisation contour. Listening back to recordings revealed a pattern of habits developed in studio practice that also existed in my performance, including monotonously outlining chord tones and over-playing with only limited silence between similar length phrases. Habits such as these limited my ability to engage in interactive ensemble performance, with the majority of my performances based on predetermined materials applied with limited relationship to the contributions of the co-performers. While there is no substitute for the experience of performing and interacting with musicians, there is value in addressing aspects required during improvised ensemble performance within individual studio practice. Preparation for ensemble performance, such as responding and instigating in real-time to musical ideas, hinges on my ability to develop aural skills through a combination of practice techniques and audio aids that can replicate common components of performance.

Developing awareness during individual practice by imagining performances and reactions of a drummer, bassist, and pianist, is a simple but effective approach. However, when practising, I often unintentionally assume the role of several of these ensemble instruments, filling-up space by outlining the harmony, form and rhythmic pulse within my melodic ideas. Applied to performance, this approach can limit the space for co-performers to interact. Restricting melodic improvisation solely to chord tones is not necessary to outline harmony as the bassist and pianist periodically also state the harmony. Within the recital compositions, the ensemble members tend to listen and react to my playing with a complementary yet contrasting approach. For instance, if my melodic lines contain chord tones outlining the harmony, Paul Grabowsky or Frank Disario may play extended harmonies or incorporate chromaticism. At other times, if my melodic lines obscure the harmony, Grabowsky or Disario tend to outline the underlying harmony. Variation of density within the ensemble is not organised through strict role-playing but, rather, it occurs through constant individual adjustment in response to the contributions of ensemble members.

Whilst ensemble interaction is largely intuitive during performance, the ensemble rehearsal or performance need not be the first place awareness of interaction is developed. As it is not always possible to rehearse or perform with other musicians, the sound and experience of ensemble

performance can replicated by playing along with records and backing tracks.[149] I program backing tracks to simulate the instrumentation, harmonic sequences, rhythmic feel, and style of my recital repertoire. Nevertheless, these backing tracks are not interactive and with repetitive practice, they become predictable, which detracts from the skill of responding to music created in real-time. It has been my experience that practising with randomly selected music can simulate the spontaneity of performance. This ensures less predictable and repetitious accompaniment.

3.4 Correspondence Between Performance And The Flow State

There is a correspondence between certain features of my performance and the flow state. Although flow is a highly subjective experiential state, it is nevertheless possible to define the indicators of the flow state that matter to me as a performer. These indicators enable me to establish whether I am in flow, and they include the experience of an increased level of connectedness and interaction with co-performers, clarity of conceived musical ideas, immediacy and ease of execution, absorption in performance, a sense of timelessness, and performing with a kinaesthetic approach, whereby I physically respond to the sounds that I imagine in real-time. This focus on creating the desired sound outcome, rather than all the steps required to achieve it, has been an effective way for me to access a state of flow. Whilst musical performances can occur without the experience of flow, the feeling of connectedness, ease of performance and clarity of improvised ideas make it an ideal state of immersion for jazz practitioners.

Several approaches in my studio practice help eradicate the gap between conception and execution and facilitate a state of flow. These include: strategies to remove or minimise physiological, technical and musical hindrances, including playing with an efficient posture; awareness and acceptance to reduce nervousness; developing an efficient and reliable technique that matches the demands of performance; familiarity with repertoire; and developing a flexible vocabulary of materials. I memorise the repertoire so that theoretical considerations, such as improvisation materials, harmonic function, melodic variations, and the sections within musical form, are familiar prior to performance. Translating conceived ideas to the instrument also helps reduce the gap between conception and execution. When the ideas are simple, I am able to convert them directly to the instrument. When the ideas are more complex, I use singing as a means of translation, as it allows me to imitate musical ideas intuitively and automatically without having to execute the technical or physical challenges of the trumpet. Once I have a clearer sense of the pitch and rhythm through pre-hearing and singing, it is easier to accurately produce the correct pitch and play the specific idea on the trumpet.

[149] I use the Technimo iReal Book application and Jamey Aebersold play-along recordings for backing tracks within my studio practice.

My knowledge of what the ideas are supposed to sound like is what guides the translation to voice or instrument. Alternating vocalisation with instrumental playing has the following benefits: it helps concentration, provides rest for the embouchure, clarify phrasing, inflection, a sense of breath, dynamics, and overall awareness without the distraction or reliance on habitual patterns and motor skills associated with continuously playing the instrument. A common studio practice technique is to alternate improvised sung and instrumental choruses on performance repertoire. Whilst singing pre-heard ideas, I hold the instrument and approximate the pitch and rhythm whilst fingering the valves. The sung chorus provides time for my embouchure to rest and, at the same time, inspires ideas and clarifies existing materials that I then replicate and explore on the instrument. This self-transcription improves my ability to play what I hear and focuses my consciousness to the present moment, helping induce a flow state.

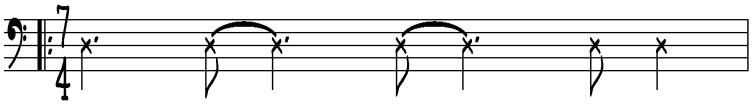
Performing with technical control and efficiency of sound production and flexibility is important for me to access and remain in a flow state. When in flow, I primarily focus on the sound I want to create without technical constraints or distractions. My ability to pre-hear heightens and, as a result, my technique becomes more physically efficient as I perform with the optimum amount of effort and coordination. Excess tension is minimal, with no sense of extraneous effort and playing feels physically energising. This contrasts to my experience when not in a flow state, where conscious effort often results in unnecessary physical tension. For example, when performing melodies such as *When the Stars Align* (Appendix 3), I focus on the desired sound and timbre variations I want to achieve. This has the effect of uncluttering my mind, increasing technical accuracy, reducing physiological tension, providing clarity and reducing the focus to the immediate moment in which I concentrate on executing the conceived sound. When the tone produced does not match the conceived sound, my flow state can become interrupted. Being in a flow state also reduces the rhythmic density in my playing and my phrasing feels increasingly related to the ensemble members.

Accessing a flow state results in a more playful, interactive, and expressive approach within my performance. I experience an increased awareness of connection to the co-performers and the collective musical dialogue, and sense that the ensemble members understand and respond to my musical gestures and subtle cues. I am able to focus on my playing and the connection between the ensemble and myself concurrently. Whilst these connections also exist when I am not experiencing flow, being in flow brings a sense of clarity, focus, and awareness. Connection with co-performers helps direct my focus from being self-absorbed and feeling disjointed from the ensemble, to experiencing my playing as an integral component of the combined ensemble performance. Importantly, this connection allows the recital works to develop organically through collective ensemble input rather than that of any one practitioner.

My increased connection through flow also seems to affect my sense of hearing, whereby I am able to adjust my sound to balance and blend with the ensemble, rather than experiencing my sound as isolated and on the periphery when not in a flow state. When in a flow, nervousness disappears and I feel comfortable on stage, at ease with the audience, and can readily adapt to the acoustics of the performance space.

Spontaneity from co-performers stimulates and inspires me to react naturally with responses that are free from conditioned patterns. When this type of spontaneous interaction occurs, my state of consciousness is in the present moment. Spontaneous events that inspire real-time reactions in performance include changes in the ensemble configuration, variation within the open-ended introductions, seguing between tunes, embellishing melodies, and varying the rhythm and harmony. For example, during a performance, bassist Frank Disario incorporated an unplanned segue between *Drift* and *Finding the Balance,* tapping the rhythm of the *Finding the Balance* ostinato*,* shown in Figure 34*,* on his double bass (27:00 – 28:30 Track 8, Audio CD, Appendix 11). This spontaneous gesture was unexpected and seemed to invigorate and focus the ensemble in a flow state for the remainder of the performance set.

Figure 34. The bass ostinato rhythm of *Finding the Balance*.



The inclusion of introductions and coda sections within my compositions, comprised of open-ended improvised vamps, is a deliberate attempt to incorporate spontaneity and variation within performance. Whilst these sections include details such as chord qualities and sequences, tempo and meters, they allow the ensemble space to improvise into, and out of, the non-improvised notated sections of the composition. Whilst related to the notated compositions, these improvised vamp sections vary each time and can induce a flow state by allowing for unplanned, surprising and inspirational musical events that encourage real-time engagement. For example, the ensemble's playing in the introduction of *Finding the Balance* at 27:38 – 29:45, and the coda vamp, at 40:54 – 41:48 (Track 9, Audio CD, Appendix 11), helped settle, inspire and focus my attention in the moment during performance.

Sometimes, ensemble improvisation within performance extends to the point of departure from the notated composition. This is possible when there is understanding and acceptance between the ensemble that parts of the compositions are not entirely fixed and are open to deconstruction. A particular challenge when departing from fixed elements of the compositions is to find an aesthetically suitable way to merge back into the composition and establish the original pulse, harmonic sequence, melody line and musical form. Sometimes the transition back into the composition is subtle and gradual, and at other times it occurs quickly. For example, at 1:01 in *If I Were a Bell* (Track 1, Audio CD, Appendix 11), the ensemble makes an immediate transition from the improvised introduction vamp into the theme in response to the first three notes of the melody cued by the trumpet (Appendix 10). Fragments of the melody also act as cues for the gradual transition from the free improvisation back into the swing pulse, harmonic sequence, and thirty-two-bar musical form between 11:28 – 12:40 (Track 1, Audio CD, Appendix 11).

Whilst I have a heightened experience of the present moment while in flow, it nevertheless contains elements of linearity, where the meaning of the present event is dependent on its relationship to what precedes and follows it.[150] My sense of past and future does not fully disappear. Improvisation components shaped to preceding and upcoming possibilities include motivic development, expectation of intensity, melodic trajectory and climax points. Often, a co-performer will play an idea that triggers expectations about what is to follow. When the expectation is realised, it creates a sense of rapport within the ensemble. When the expectation is unfulfilled, it creates a sense of surprise and stimulation for co-performers. I experience a heightened sense of expectation when I have developed an understanding of the common performance characteristics and responses of the ensemble members. Performers also generate expectation by incorporating previously performed ideas collectively developed in previous performances. Whilst awareness of past and future events involves mid-performance reflection, which is something that can cause unwanted distraction when not in flow, it is particularly useful for maintaining continuity, and developing themes and overall contour in improvisations when in flow. While in flow, I am focused on playing the next idea I hear. However, being mindful of where the melodic phrase has developed from, where it is heading, and of upcoming landmarks to aim for in the musical form informs my choices of articulation, pitch, duration, and timbral quality. In the flow state, the past, present and future feel connected, and time seems to be moving slower. Sometimes I move in and out of a flow state during performance, but when experienced regularly, the ability to re-engage with the flow state increases and interruptions have minimal impact on the overall performance.

[150] Ed Sarath, *Music Theory Through Improvisation* (New York: Routledge, 2010), 15.

An example of performing in flow is my improvisation during *If I Were a Bell,* between 8:45 – 15:00 (Track 1, Audio CD, Appendix 11). At the start of the trumpet improvisation, the song structure has been abandoned and the ensemble performs a collective free improvisation. This was not a planned event, but there is an understanding and trust within the ensemble that while deviations can occur, at some point there will be a return to the song structure. Rather than immediately trying to reinstate the elements of the song, it felt appropriate to react according to the ambient context with some timbral effects, such as split tones. As my improvisation progressed, I responded with immediacy to my conceived ideas and the playing of my co-performers, without consciously thinking or trying. I felt as if I was in control of my playing without trying to exert control over the course of the performance. Instead, my playing developed through instantaneous reaction to the ensemble dialogue. The continuity, ensemble interaction, effortlessness, and immediacy of this performance would have not been possible if I was not in flow.

3.5 Ensemble Interaction

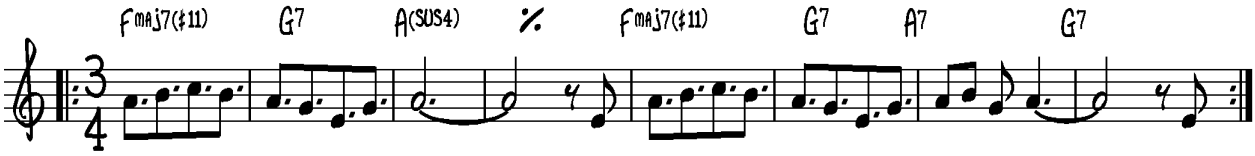
Focus on ensemble interaction during performance of the recital works requires competence within the musical material and style. Whilst all music performance involves interaction between performers, performers and audience, performers and sound, performers and instruments, and performers and their physical bodies, jazz performance particularly relies on the process, unpredictability, and collective contribution achieved through interaction. In my ensembles, each improviser contributes to the performance as a whole, but they also stimulate, inspire and support the other ensemble members. This interaction can encourage creativity. For example, although it was predetermined that Tony Gould and I would perform *Piece for Peace* (Track 3, Audio CD, Appendix 11) with rhythmic freedom in a rubato tempo, I would not have thought to phrase the melody without the inspiration and gestures from Gould. The interaction resulted in melodic interpretation and improvisation that neither Gould nor I could have individually imagined.

The Miles Davis Quintet influences my approach to ensemble interaction, in that there is a desire to interrelate beyond the traditional role-playing jazz performance. I have assimilated certain attributes that facilitated interaction within the Davis Quintet into my own ensemble approach. These include, being flexible with the harmony, melody, rhythm, and form, as is exemplified in the performance of *If I Were a Bell* between 11:28 – 12:43 (Track 1, Audio CD, Appendix 11). Whilst the basic formal scheme embodied in the music score is implied, it is not strictly 32 bars, the harmonic sequence contains original chords and reharmonisations, and the rhythmic pulse fluctuates between a swing feel and a rubato rhythmic approach. The melodic fragments, played by the trumpet, are the basis from which the other references to the composition are shaped. The flexible and loose interpretation of these elements was not predetermined and, despite the many

deviations, there is still a strong sense that the recurring melodic theme, harmony, and formal scheme of the notated score (Appendix 10) are central to the performance, rather than sounding like an unrelated free improvisation.

In some performances, freely improvised transitions occur between tunes and the music continues in an unbroken continuum, with the improvised segues linking compositions. In the absence of predetermined structural elements, these segues rely on interaction between performers. Similarly, compositions such as *Rollercoaster* contain open-repeat vamps comprised of few harmonic, melodic, and rhythmic details. These details establish parameters, such as tempo, rhythmic feel, and harmonic sequences that relate to the subsequent notated composition, but still allow flexibility for interaction through collective improvisation. Although each performance is comprised of the same repertoire, variation and experimentation occurs with each rendition. Soloists' experiment during extended solos and ensemble members have distinctive yet complementary musical voices. Sometimes, ideas improvised during performance develop into fixed parts within the composition. For example, a melodic idea played within the trumpet solo of *Rollercoaster*, shown in Figure 35, became a fixed part of the composition to cue the transition between the trumpet and drum solos.

Figure 35. Trumpet melodic cue in *Rollercoaster* that evolved through improvised performance.



There are configuration variations within the quartet ensemble, with unaccompanied solos, duos, and trios formed spontaneously during performance. These configurations allow for diversity of interaction density and texture. Breaking away from strict head-solos-head arrangements, such as within *Rollercoaster* (Appendix 6) and *Drift* (Appendix 9), also contributes to interaction. All of these ensemble attributes require openness to meritocracy, trust between the practitioners, and a group consensus that elasticity and deviations are important within performance.

3.6 The Influence Of Composition On Flow And Ensemble Interaction

The role of composition and the effect that it has on ensemble interaction is a consideration in my recital works. These compositions allow practitioners the space, flexible materials, and freedom to

interpret and improvise. It has been my experience that the density of scored information presented to musicians can affect ensemble interaction. If the composition is dense with information, it can reduce the practitioners' ability to interact, as they are preoccupied with adhering to the materials, which can create rigidity and inhibit flow. However, if the composition is over-simplified it can lack direction and create a sense of uncertainty between the practitioners. The ability to facilitate ensemble interaction through composition is dependent on both the individual practitioner's familiarity with the material and the intersubjectivity shared by the ensemble. When composing the recital works, I was mindful of musical form, space, style, rhythmic feel, harmonic structures and melodic ideas that suited both the individual practitioners and ensemble interaction. As a result, I notated the compositions in a lead sheet format approximating melody, rhythmic and harmonic possibilities. The simplified notational approach encourages and relies on input and interpretation from each practitioner, and the reduction of fixed detail allows for flexibility and variety in repeated performances.

Composition can influence ensemble interaction through the way it is notated, the materials used, its suitability for the individual practitioners, and the space it allows for interpretation and flexibility within performance. Composing music that will allow for interaction through deviations from predetermined parameters is a priority in my music. Incorporating these improvised segments amongst the fixed notated elements of the compositions can facilitate interplay and allow for risk, randomness and the expansion of ideas during improvisations.

3.7 Performance Considerations and Post-Performance Reflection

I record and reflect on live performances and excerpts of my studio practice to monitor development and streamline preparation for upcoming performances. These recordings reveal aspects of my playing, such as intonation, harmonic accuracy, phrasing, rhythmic feel, melodic continuity, rhythmic density and improvisation construction that I assess and subsequently refine. For example, reflecting on recordings of *When the Stars Align* revealed the need to pace the intensity and rhythmic density when improvising over the long musical form. In many cases, my experience and perception during a live performance contrasts with my impressions upon listening to the recording. This disparity highlights the need for regular reflection to bridge the gap between my perception and the actual performance. During performance, it does not feel like I am over-playing and the space left between phrases seems to be of several beats duration. However, reflection often reveals a high level of rhythmic density with only brief space between phrases. Through the process of reflection, I am able to recalibrate my perception by devising approaches that incorporate increased space and rhythmic density variation in my performance.

At times, a performance perceived as being high quality, accurate, and artistically interesting during real-time performance is revealed to be sloppily executed and of less musical interest upon listening to the recording. Likewise, after other performances I have been despondent about a perceived low quality individual and ensemble performance only to be surprised at the accuracy, melodic flow and ensemble interaction when listening to the recording.

3.8 Chapter Summary

This chapter has discussed the principal components of artistic value in my recital, including the compositions, performers, improvisation, flow, and ensemble interaction. Compositions are a source for improvisation materials, and each work presents musical and technical challenges that develop my musicianship. Compositions also establish aesthetically interesting themes that form a relationship between notated and improvised sections. My recital is characterised by a balance between fixed and non-fixed materials that require interpretation and improvisation, with the goal of interacting and reacting to the immediate context during performance.

Relinquishing control as a performer, bandleader and composer is an ongoing pursuit in my music making. This aspiration correlates with my desire to shape performance to the immediate musical context in conjunction with my co-performers, rather than relying heavily on individually predetermined approaches. This balance between allowing music to be flexible and guided by real-time context on one hand and maintaining structure and relevance to the compositional parameters and style on the other is one that is constantly in flux within my music. It has inspired my ongoing investigation into collective improvisation as a means of encouraging a sense of ensemble within music that has predetermined structure and parameters.

My studio practice is targeted towards developing approaches that encourage interactive ensemble performance. This involves developing a malleable vocabulary and using audio aids such as backing tracks that partially replicate the ensemble. Creating new variations of existing materials is important during performance in order to shape ideas to the playing of co-performers. In particular, rhythm and timbre are important elements that I explore to expand the variation and expressiveness of my performance. Additionally, the skills, distinctiveness and commonalities of the ensemble musicians enhance the artistic value of the music and help facilitate interaction, flow, and interconnectedness.

Performing in a flow state produces peak creative moments that heighten my sense of connection to co-performers, clarity of musical ideas, technical execution, and ensemble interaction.

Spontaneous ensemble interaction can be triggered though the stimulation and inspiration of co-performers and by compositions structured in a way that allows flexibility and interpretation on behalf of the performers.

Post-performance reflection enables me to gain awareness of aspects of my performance and compositions that I perceive differently when performing. The process helps me structure my studio practice and subsequent performances to promote development and the inclusion of aesthetically interesting ideas.

Chapter 4: THE ROLE OF COMPOSITION IN MY PERFORMANCE PRACTICE

4.1 Composition In My Performance Practice

The primary aim of composition within my performance practice is to construct musical works of artistic value that are conducive to improvisation and ensemble interaction. Composition also serves additional roles, including documenting interesting materials, creating frameworks that establish fixed material whilst allowing for ongoing variation and development, and writing material that addresses technical concerns and articulates musical ideas. Composing also allows me to write for the strengths of the individuals and collective ensemble, and to facilitate flow in musical works that rely upon performers' input.

Composition allows me the opportunity to think more deeply about aspects such as melodic construction, chord progressions, and musical form, because I do not have to make decisions in real-time. Working outside of the real-time performance context allows me to take a more planned and refined approach to the musical materials that I am engaged with, before placing them into an improvised context where I regain spontaneity and ensemble interpretation and interaction. As the composer, I can establish gradations of control over what each instrument plays and, more importantly, what instruments play with each other at any given point in time. Composition helps me establish clarity of ideas, which assists in conveying the musical experience to the performers and audience.

With so many possibilities and outcomes generated through improvised performance, composition contributes some control, direction, focus and cohesiveness to each new work and ensemble project that I assemble. As the composer, as opposed to the interpreter, I experience an increased ownership and responsibility for the musical work. As a result, I often consider on a deeper level what, how, and why I want to perform, interact, and convey my music. Sometimes the answers to these questions extend beyond the realms of music and into broader areas of life. Such questions can make me consider the relationships I have with my fellow practitioners, the performance environment and the audience. Whilst questions also arise during performance of non-original material, being the composer affords me the capacity and legitimacy to change and revise compositions, especially if they are not suitable for interactive jazz performance.

4.2 Ontology Of My Composition

My recital compositions are only partially embodied in the score and, consequently, the notated music is not wholly representative of the musical work. Typically, my music scores are detailed and yet are similar to jazz lead sheets in that their primary function is to provide a guide to melody, harmony, meter, rhythm and musical form. The importance of the guide function of lead sheets, rather than notating highly detailed and finalised works, is to present a combination of fixed and non-fixed details. Consequently, these lead sheets are never entirely set in stone, as they can be subject to further refinement both during and post-performance. They deliberately require contributions through interpretation and improvisation from the ensemble members. For instance, in *Buzzby*, the qualities of the harmonic progression and the sequence of the notated parts vary with each performance. Beyond the notated score there are fixed aspects within my compositions, such as dynamics, articulations, and timbre and musical gestures. These materials are fixed within the performers' minds, having been acquired through repeated performances. My intention when composing is not to create compositions as finished aesthetic objects that are associated with myself as the composer, but to have certain elements of my music defined and fixed. The musical work, as such, only comes into being when it is performed. Therefore, the performance, and not the score, is the ultimate embodiment of the composition.

My experience has been that essential to the art of small group jazz composition is finding the balance of how much to freeze in time with notation and how much to leave open to interpretation and improvisation by the ensemble in performance. I used to compose for small group jazz by writing scores with detailed individual parts that provided me with increased control over the music. In recent years, I have observed that density of specific information within scores is not always conducive to increasing the possibility of interaction and ensemble contribution to the music. However, in my attempts to reduce the detail in my compositions, I realised that it is challenging to write music that is increasingly refined, maintains artistic value, and still provides room for musical explorations, especially for collective interpretation and improvisation. The compositions within the recital are a result of this ontology, which is why I have mainly composed in a lead-sheet format that depends on individual contribution and interpretation during performance in order to be fully realised. One by-product of compositions that are not entirely fixed is that the ensemble individuals are more likely to interact and rely on the responses of the ensemble as they collectively interpret and expand on the notated guide.

Areas that have the flexibility to be decided during performance include the rhythmic interpretation and phrasing of melodies, harmonic variations by soloists and accompanists, introductions and endings, rhythmic density, dynamics, sound colours, musical gestures and length of musical form

when the composition contains open-ended repeat sections that are cued by performers. My compositions allow for development and variation by all ensemble members through rehearsals and performances. In such cases, performers come up with certain ideas that work well within the initial compositional framework, which then become permanent parts of the composition. This openness to change through performance means that there is no end-point where a composition is complete. Rather, the compositions have flexible elements that change according to the context of each individual performance.

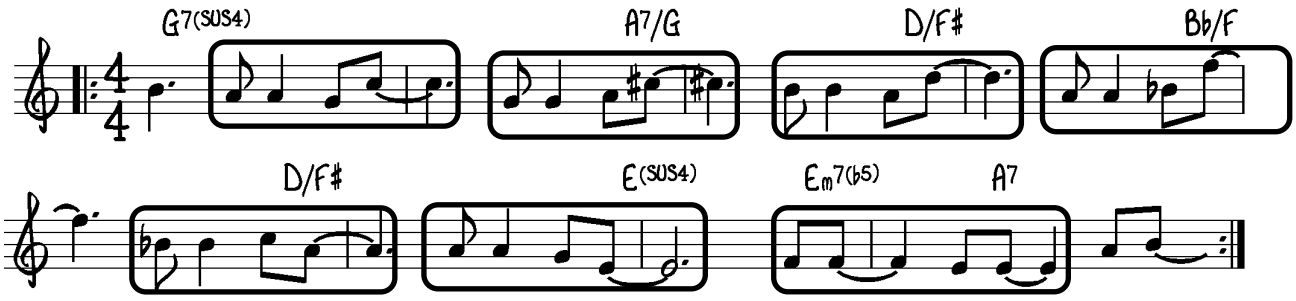
4.3 Compositional Approach, Materials And Musical Form

My approach to composition consists of several steps. These include conceiving, transcribing and notating ideas, and developing these ideas into compositions. Once I have completed the preliminary score, which characteristically consists of a detailed melody, harmonic progression, rhythmic hits, and an indication of tempo and rhythmic feel, I then proceed with further reflection on and refinement of the score within the context of performance. This occurs primarily in response to hearing the score performed as both an observer and performer and continues beyond the initial performance, with further changes and variations occurring with subsequent performances. Rather than refining my compositions within a written score that becomes notationally more and more specific, my compositional refinement takes place in studio practice, rehearsals, performances and recordings. Additionally, the verbal and musical contributions of fellow practitioners influence the development of each composition.

When exploring interesting material and composing without preconceived intent, I mainly use a piano for conceiving and developing ideas. Whilst I also compose on the trumpet, I have found it limiting being able to only produce one melodic line at a time, whereas the piano allows me to play the melody, harmony and rhythmic elements simultaneously, providing a more comprehensive representation of the composition. I have also found that the use of a non-primary instrument creates separation from the motor skills, muscle-memory, and technical limitations of the trumpet, which tends to inhibit or bias my composition approach. Irrespective of the medium used, I am trying to match on the instrument an idea that I hear in my head. Once I have matched that idea on the piano or trumpet, I transcribe and arrange it for the specific instruments. With the initial idea notated, I continue to compose following a combination of intuition and my sense of musical intelligibility, or I employ techniques such as motivic development to expand the initial material into a composition. When I compose, I rarely conceive and complete a composition or extended section but, rather, particular ideas develop over several days and weeks. Importantly, taking a break and returning to the material with fresh ears invigorates the compositional process for me.

I frequently compose by isolating interesting musical material that I want to explore in performance. An example of this is the first eight bars of the composition *The Beginning of the End of the Beginning,* shown in Figure 36. This melody emanated from my interest in a four-note pitch and rhythm motif (circled). Guided by what I heard, I varied this motif through the eight bars by changing the interval size, interval direction and melodic contour. This motif forms the basis of three-quarters of the thirty-two-bar melody, with the composition comprised of an AABA form. Musicians also use this motif as a basis for improvisation. The rhythmic design of the melodic motif also implies a Latin rhythmic feel, which impacts on the style and approach the rhythm section employ when performing the composition.

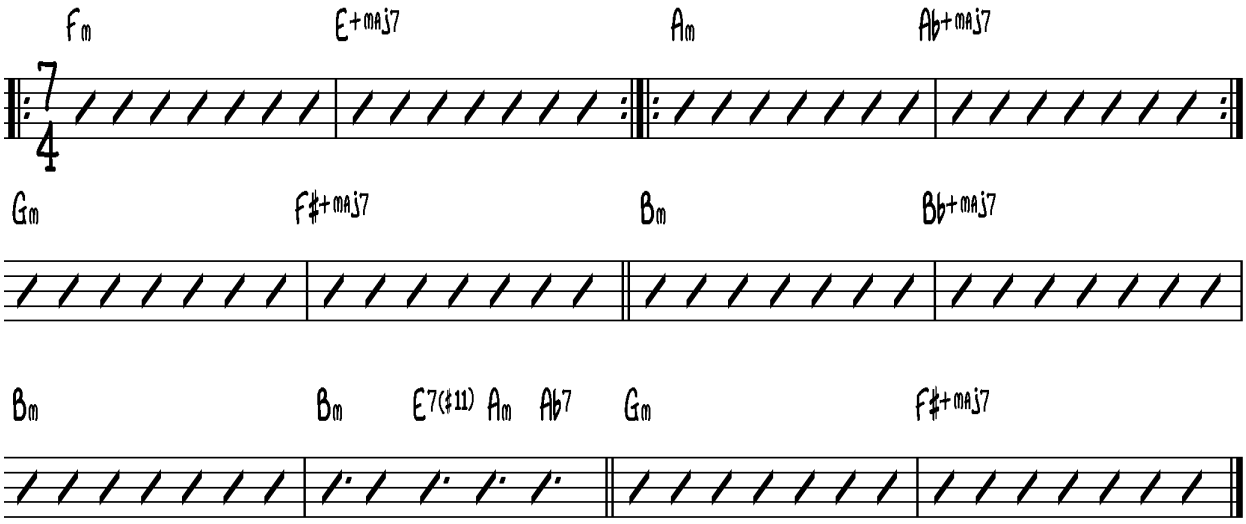
Figure 36. Melodic motif of *The Beginning of the End of the Beginning*. Bars 1 – 8.



Another example of incorporating and exploring material in both the notated and improvised sections of my compositions is the harmony in *Finding the Balance.* Figure 32 shows the design of the harmonic progression that features a small incremental change between neighbouring chords that share several common chord tones. The harmonic sequence is based predominantly on two alternating chord qualities, one bar consisting of a minor chord and one bar consisting of a major seventh chord with a sharp fifth, as shown in bars 1 – 2, 3 – 4, 5 – 6, 7 – 8 and 12 – 12 of Figure 37. Because of the root notes being a semitone apart, these two chords share three common tones; the third, fifth and seventh. With only the root of each chord changing, the minimal movement contributes to a smooth-sounding harmonic progression.

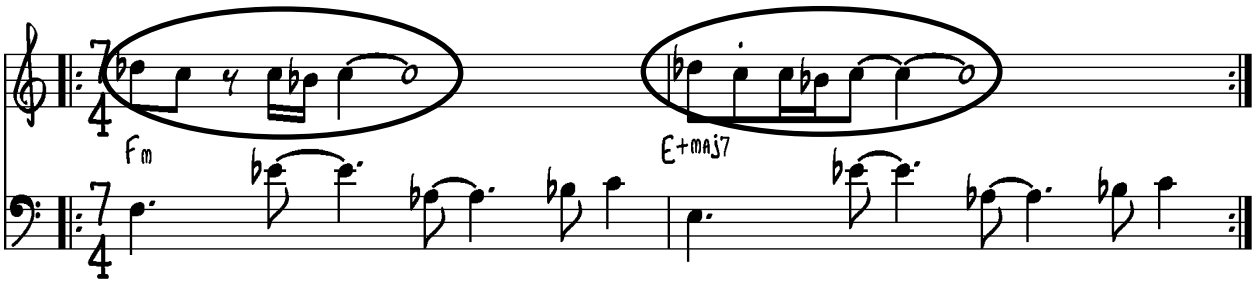
In addition to the chord tones, scales are another common material used to construct melodic improvisations. Two modes that I apply to the *Finding the Balance* chord progression, Aeolian for the minor chords and Lydian Augmented for the Major 7th#5 chords, share six common notes that also contribute to a subtle transition when improvising through the chord progression. The relationship of common tones between the two chords and modes creates a suspended effect, with the sense of harmonic change being minimal, inconclusive and unresolved.

Figure 37. Harmonic sequence and musical form of *Finding the Balance.*



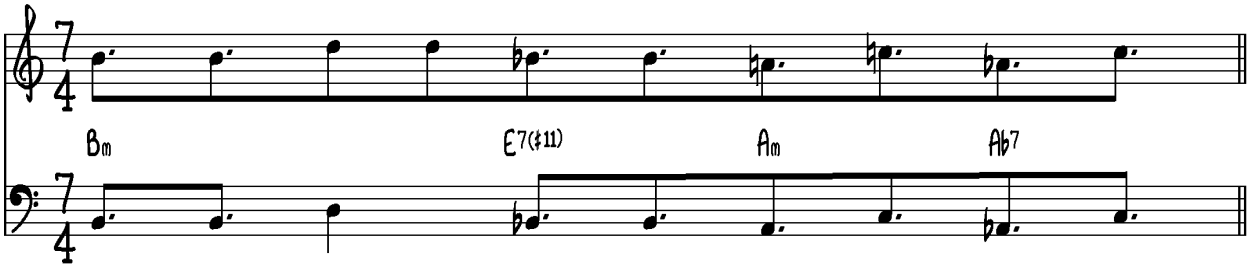
A sense of minimal change is also present in melodic construction, with similar rhythms, intervals, and melodic shapes applied throughout the melody. The melody is based on a five-note motif (circled) that is repeated with rhythmic variation every second bar, as shown in Figure 38. In performance, I tend to vary the rhythm of the melody, especially within the repeated sections. The melodic motif consists of semitones and tones.

Figure 38. Trumpet melody and bass ostinato of *Finding the Balance. Bars 1 – 2.*



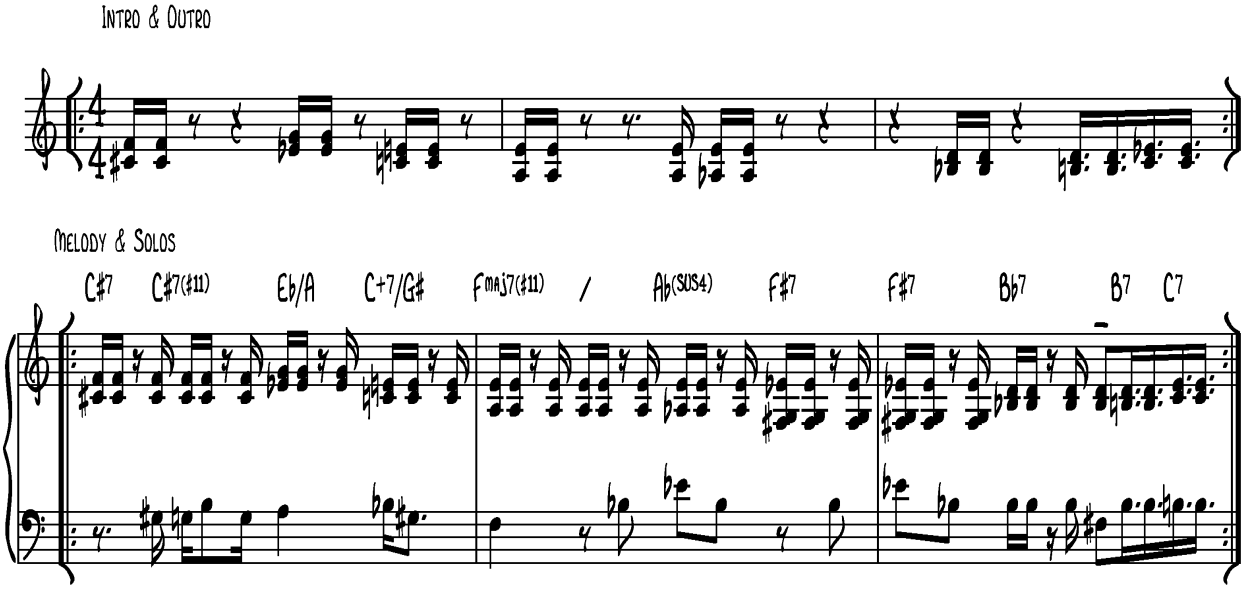
The underlying ostinato, which is of equal importance to the treble melody, also contributes momentum through syncopation and rhythmic movement when the melody line has a sustained note, as shown in Figure 38. Whilst the bass ostinato and melody delineate two-bar sections within the form, they obscure the start and end of the overall musical form, because they do not provide a clear harmonic or melodic resolution in the last two bars. This approach contrasts to endings within jazz standard compositions that tend to have clear melodic and harmonic resolutions. *Finding the Balance* has one bar, shown in Figure 39, which functions as a point of unification within the form, with both treble and bass lines playing in melodic and rhythmic unison.

Figure 39. Trumpet melody and bass line of *Finding the Balance.* Bar 10.



At times, I focus on the virtuosic and musical capacities of the performers; an approach that was utilised by iconic jazz composers such as Duke Ellington. This includes consideration of their distinctive capacities, such as extended techniques, harmonic language, and rhythmic devices, when improvising and performing notated music. I also try to match specific compositions to the existing timbre and colour of each musician. This compositional technique was critical on my duo recording, *Connect Four*, which featured four distinctive pianists: Tony Gould, Paul Grabowsky, Andrea Keller, and Marc Hannaford. I composed with these musicians in mind, considering what styles, musical parameters, and expressions would resonate with their own interests as performers and composers. For example, rhythm as a primary element, of equal importance to harmony and melody, is a core aspect of Marc Hannaford's language. Therefore, I composed the two compositions that feature Marc on the recording, *Buzzby* and *Inconsolable*, using rhythm as a primary compositional and improvisational element, as shown in the score of *Buzzby* in Figure 40. *Buzzby* explores rhythmic displacement and layering of concurrent subdivisions in improvisations, as demonstrated between 00:48 and 1:48 (Track 2 on the *Audio* CD, Appendix 11).

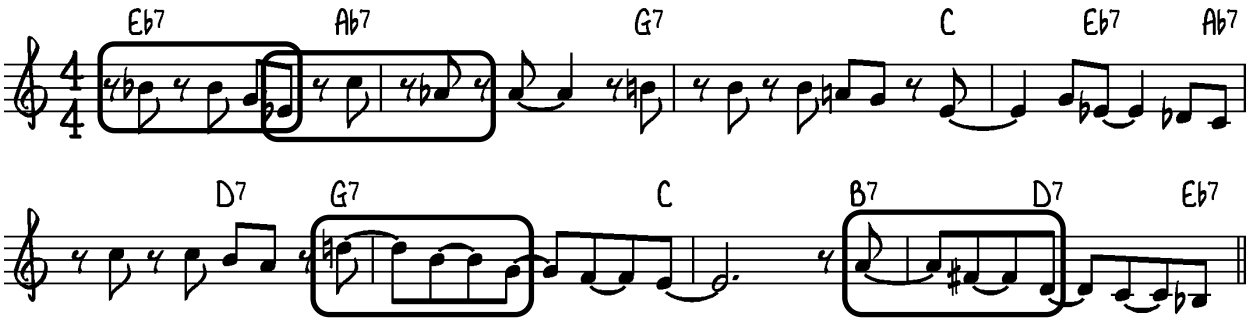
Figure 40. The score of *Buzzby.* Bars 1 – 6.



I use composition to address certain technical challenges that will benefit my development as a performer. For example, targeting the 7/4 meter of *Finding the Balance* improved my ability to improvise with rhythmic variation equal to that experienced when playing over symmetrical meters such as 4/4. The compositional objective is to combine these technical challenges with musical material that is interesting and engaging enough to become a composition in its own right. Whilst helpful for technical development, my compositions are not technical exercises, with technical control pursued as a means of accurately executing ideas that are relevant to the overall musical context. I identify areas for development through reflection of my own musical performance, in particular through recordings.

The tension between a notated and detailed composition and flow is a consideration in my compositions. I am mindful of considering complexity and simplicity, and density and sparseness of materials within my compositions. Having sections within my compositions that exclude improvisation altogether is useful in terms of establishing material at the outset of the work to provide strong guidance for the nature of the material of the improvisation that then follows. For instance, the notated melody and harmony in *Marshmallow Man* contains minimal improvisation, with only timbre manipulations, accents, chord voicings, and dynamics relying on ensemble interpretation. The materials derived from notated sections that can provide a basis for the improvisations include melodic and rhythmic motifs, rhythmic feel and subdivision, and harmonic sequences. The first eight bars of the *Marshmallow Man* melody, shown in Figure 41, are primarily comprised of chord tones, including the outlining of several major triads (circled). One approach explored in studio practice and performance is to use chord tones and major triads within the improvised melodic material.

Figure 41. Chord tones and major triads (circled) in the melody of *Marshmallow Man.* Bars 1 – 8.



The harmonic, melodic and rhythmic materials used in my compositions are not new, but derived mainly from pre-existing jazz language. My compositional approach revolves around finding subtle

ways of varying and combining these common materials in order to find musically pleasing sounds that disguise and vary the fundamental materials. *Marshmallow Man*, for example, has a common thirty-two-bar AABA jazz form (Appendix 7). Whilst the harmonic structure is comprised of common jazz chords, the harmonic sequence is less conventional, being comprised mainly of dominant chords that have varying root movements and functionality to those of traditional jazz standards. The harmonic rhythm of *Marshmallow Man* displaces, by anticipating and delaying by a quaver (circled), the common beat one and three placement of chords and the symmetrical eight-bar sections, as shown in Figure 42. Another example of displaced harmonic rhythm is the anticipated harmonic rhythm (circled) within *The Beginning of the End of the Beginning,* shown in Figure 43. This harmonic rhythm aligns with the melodic material and creates rhythmic momentum.

Figure 42. Harmonic sequence of *Marshmallow Man.* Bars 1 – 8.

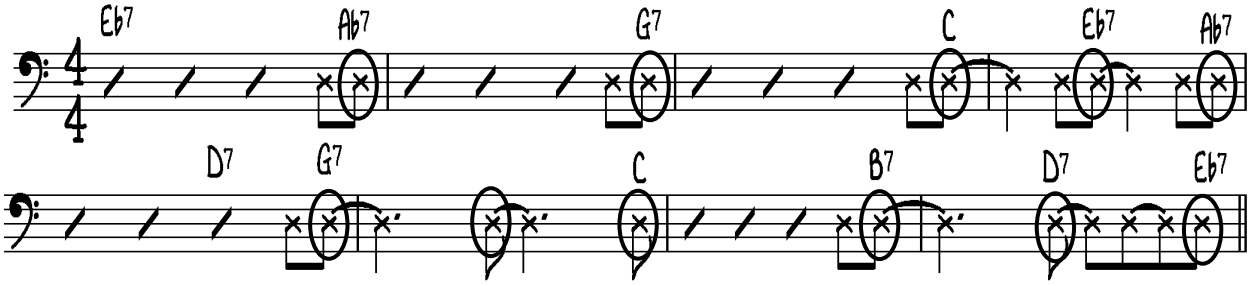
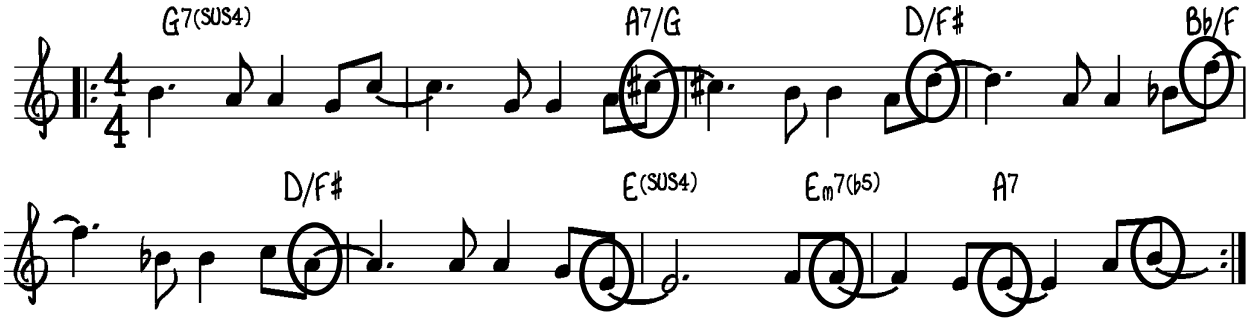


Figure 43. Harmonic rhythm of *The Beginning of the End of the Beginning*. Bars 1 – 8.



One aspect that contributes to the distinctiveness of my compositions is the strong relationship between notated and improvised sections that share common materials and themes. Shaping the improvisation to the established compositional mood contributes to the continuity and distinctiveness of the composition and performance. This creates a sense that the improvisations and improvisational frameworks are unique to that composition, which contrasts significantly with

practitioners who use the same improvised material irrespective of the composition. Such practitioners may create music that is theoretically compatible but, in many cases, the relationship to the overall musical architecture and mood of the composition is difficult to discern.

A tradition within small group jazz compositions, such as bebop standards, is to improvise on the same musical form and harmonic sequence that accompanied the melody. Several of my compositions, such as *When the Stars Align, Finding the Balance,* and *The Beginning of the End of the Beginning,* follow this format. However, compositions such as *Drift* and *Rollercoaster* have improvised sections that differ from the musical form of the notated melody. These improvisation sections are comprised of different bar lengths, sometimes elongated or contracted, and altered harmonic progressions, but still have a musical relationship to the notated composition through referencing of similar materials.

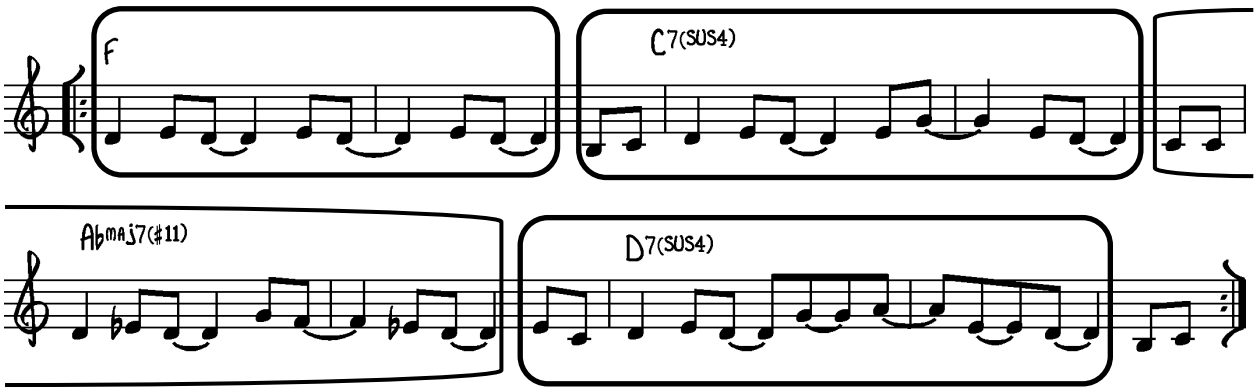
Improvisation is of significant importance to my compositions, with improvised sections being of longer duration than the notated material. Therefore, when composing I am mindful of ensuring that the compositional framework is suitable for improvisations in addition to establishing strong notated thematic material. The goal within my compositions is for improvisation to have a sustained relationship with the composed material. In this sense, improvisation takes place in dialogue with composed forms rather replacing them.[151] Whilst many of my compositions have a clear delineation between notated and improvised sections, I am also interested in composing music that sounds fluid enough to convey a sense of spontaneity within both the composed and improvised sections, but still implies structure and cohesiveness. One such example within the recital repertoire is *Drift* (Appendix 9), which alternates improvised sections with notated sections. During performance, the intuitive response of the practitioners is to blend the transition point between improvised and composed sections by anticipating some of the written material into the improvisation, therefore minimising the potentially stark contrast between sections. The intention is to create continuity within the music with a sense of organic development and spontaneity. This is achieved by incorporating fragments of notated materials within improvisations, and by embellishing the notated sections. In addition, the notated sections merge the notated material with improvisation, as demonstrated on *Drift*, between 1:30 and 2:20 (Track 10 on the Audio CD, Appendix 11). *Drift* allows space for improvisation and interaction, and the sketchy musical form contrasts to the theme-solos-theme formula that is common with the jazz standard repertoire.

[151] Vijay Iyer, *Navigation through Form: Composing for Improvisers* (Program notes for Improvise! A festival organised by American Composers Orchestra, 2004), accessed October 2012, http://www.americancomposers.org/iyer_essay_new.htm.

Whilst my compositions have detailed melodies, harmonies, bass lines, countermelodies, musical forms, rhythmic hits, tempos and indications of rhythmic feel, there are many essential details and nuances left unspecified for the ensemble practitioners to contribute in performance. These include articulation, dynamics, melodic embellishments, harmonic variations, timbre variations, musical gestures, and rhythmic variations by the bass and drums. Variations and nuances are intentionally omitted from the scores because, in most cases, they are part of the personalisation and expressiveness created by each jazz practitioner within performance. Usually, the harmonic, rhythmic, and melodic framework is only a guide for the more nuanced, sophisticated and fluid contributions by each ensemble member. For this reason, I rarely write detailed drum charts, chord voicings or bass lines.

My compositions are often characterised by lyrical melodic material written within a modest pitch range and consisting of flowing, emotive and singable phases. For example, the phrase in bars 17 – 20 of *Drift*, shown in Figure 44, contains four smaller phrases (circled) based on similar pitch and rhythmic material. The phrases resemble call (phrases 1 and 3) and response (phrases 2 and 4) melodies. The four smaller phrases combine to create one flowing eight-bar melodic line that resembles a stanza within lyric poetry. Incorporating lyrical melodies within my compositions inspires me to play with increased dynamic shape, embellishment, timbre inflections and expressiveness.

Figure 44. Trumpet and piano melody of *Drift.* Bars 17 – 20.

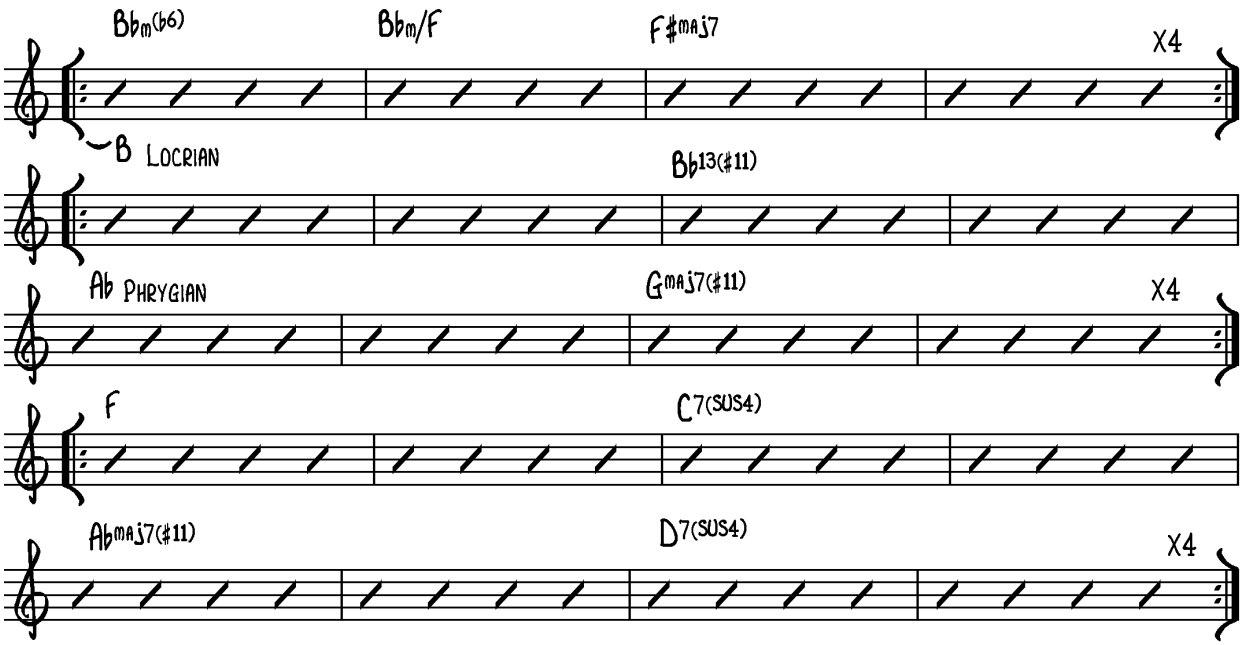


The relationship between melody and form is of particular interest within my compositions, with the length of the melody often determining the length of the musical form. The melodies are not always symmetrical, therefore, when translated into musical forms the lengths differ to common jazz forms of twelve and thirty-two bars. Examples of melody generating non-conventional forms include

Buzzby (Appendix 2), which has a three-bar form, and *Flow* (Appendix 5), which has a twenty-six-bar form.

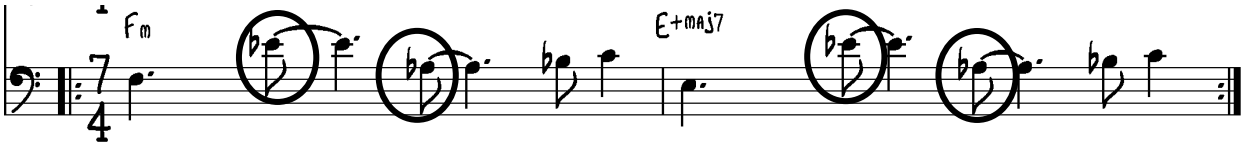
The recital compositions consist of harmony that does not rely heavily on common jazz harmonic sequences, such as ii-7 V7 I chord progressions. For example, the trumpet improvisation form of *Drift*, shown in Figure 45, is comprised of a harmonic progression that relies on a combination of functional and non-functional harmony but contains no ii-7 V7 I chord progressions.

Figure 45. Trumpet improvisation form of *Drift.*



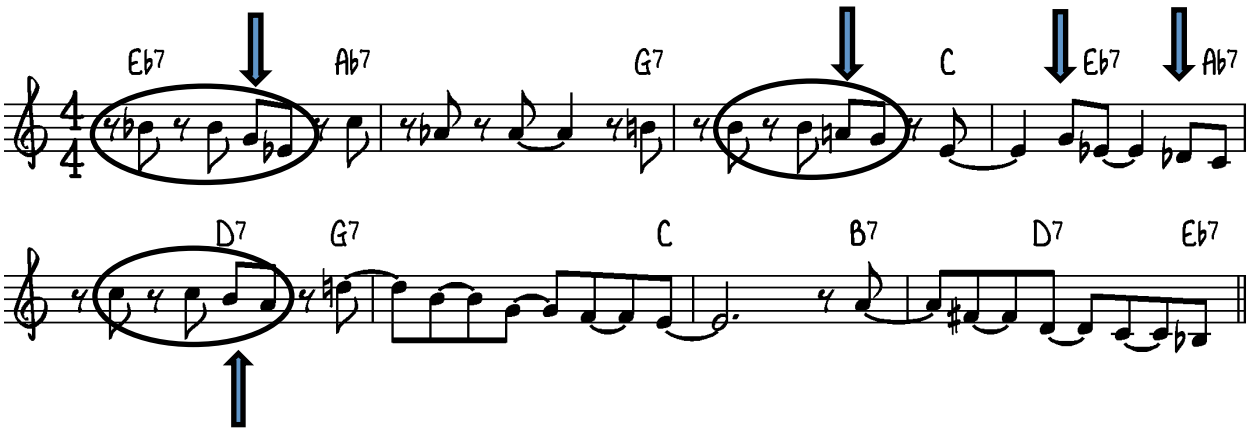
The focus of rhythm can be particularly concerned with asymmetrical meter, which is the case within *Finding the Balance,* where I explored the 7/4 meter. This asymmetric meter influenced the creation of melodic ideas, using one and two-bar rhythmic cells that contrast to ideas that I write within symmetrical meters. The change in emphasis of pulse and subdivision within the 7/4 bar adds variation to melodic ideas, without having to change the melodic pitch construction. This is an example of achieving variation by incorporating existing melodic language with an asymmetrical meter. A common inner pulse grouping found in 7/4 meter jazz compositions is crotchets in groups of two and three, such as 2+2+3, 3+2+2. Figure 46 shows the bass ostinato of *Finding the Balance* that outlines the beat one and seven downbeats in each bar, but obscures the common inner pulses with rhythmic anticipations (circled) of the downbeats on 3 and 4, creating syncopation in-between the strongly outlined first and seventh beats.

Figure 46. Bass ostinato of *Finding the Balance.* Bars 1 – 2.



Syncopation frequently occurs within my compositions. For example, the melody of *Marshmallow Man* contains a series of variations on a triadic motif (circled) that is rhythmically syncopated and displaced, as shown in Figure 47. Within the first eight bars, only five notes are placed on downbeats (marked with arrows).

Figure 47. Syncopation in melody and chord sequence of *Marshmallow Man.* Bars 1 – 8.



Rather than adhering to a strict formulaic approach, my compositional methodology varies according to the influence of interesting materials and technical challenges, the distinctive capabilities of the ensemble members, reflection on performances, and consideration of the relationship between notation and improvisation. Creating variations on common harmonic, melodic, and rhythmic elements, and establishing aesthetically interesting themes is also essential to my approach.

4.4 The Influence of Improvisation on Composition

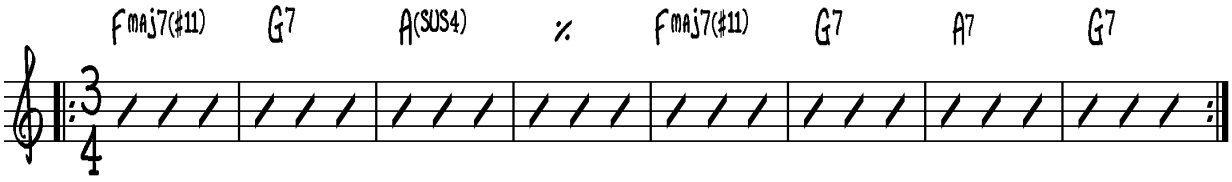
Improvisation is one of the tools by which I generate materials, melodic, harmonic and rhythmic, that I subsequently expand and incorporate into my compositions. Additionally, timbre manipulations and articulation variations feature in my compositions, although they are infrequently

specified within the score. What improvisation tends to reveal for me, is new and unexpected ways of combining existing sounds and materials. Much of my composing comes directly from those improvised materials that are particularly interesting and musically satisfying. These improvisations often start by focusing on specific musical materials, such as harmonic, melodic or rhythmic ideas, but are developed and varied without preconceived plans.

In response to my interest in exploring the major 7th chord with a sharp 5th and the Lydian Augmented mode, I composed *Finding the Balance*, which has a harmonic progression that features Major 7#5 chords (Appendix 1). Whilst initially I practised the mode and chord tones in an isolated improvisation exercise, placing it within a composition allowed me to explore and incorporate the material within a fixed chord progression and musical form.

In addition to generating composition material, improvisation generates ideas about chord progressions and musical form. When I improvise, certain ideas for chord progressions emerge and these may lead to complete musical forms. I improvise over a selected tempo, rhythmic feel and key centre until I discover chord progressions that I would like to fix within a musical form. The chord progression and musical form for the trumpet solo within *Rollercoaster,* shown in Figure 48, evolved from improvising using triads built from the notes of the F Lydian mode. Discovery of interesting chord progressions and musical forms for improvisation can also arise from rehearsals, jam sessions, and performances. In all cases, once I have refined a particularly interesting harmonic progression and musical form, I augment this with complementary melodic and rhythmic materials to make a more detailed composition.

Figure 48. Chord progression and musical form of the *Rollercoaster* trumpet improvisation.



4.5 Chapter Summary

This chapter has discussed the importance of composition within my performance practice. It enables me to document interesting materials, address specific technical and musical challenges, write to the strengths of the individuals and collective ensemble, and create frameworks that are

conducive to ensemble interaction and flow. Whilst composition allows me increased control and time to think more deeply about aspects of the music, the focus is on creating music that has the flexibility and space for ensemble input and interaction within performance. In particular, my compositions provide a guide by which the ensemble can interpret and improvise with a sense of relationship existing between both the improvised and notated material. Ontologically, my compositions are not complete when viewed solely as scores but, rather, they are fully realised and embodied within the live performances.

My composing is characterised by a number of particular approaches that focus on the creation of musical materials, in particular melodies, harmonies and rhythms. I sometimes develop materials using thematic development, as a traditional composer would, but I also develop materials through improvisation. Musical form in my writing is characterised by the balance between composed and improvised materials. This applies not just to the harmonic, melodic and rhythmic material, but also to the actual durations of each section within the musical form. Another characteristic of my compositions is a view beyond jazz standards, which applies to the choice of rhythms that are not always necessarily in a 4/4 meter, the placement of harmonies that are not always on the strong one and three beats, and other asymmetries such as the varying lengths of musical form.

Chapter 5: CONCLUSION

5.1 Summary

The concepts of flow, manipulating improvisations within real-time performance, developing technical control, and ensemble interaction have emerged as the key elements that characterise my approach to performance and have been vital in developing the recital. Whether or not a practitioner is in a state of flow is subjective and it is not something that can be discerned by an audience, but it is part of my performance practice because it enables me to be deeply engaged, focused, experience a sense of effortlessness and control. Chapters 3 and 4 are a direct crystallisation of my day-to-day practice and a manifestation of the ongoing reflection and notes within my practice journal at a higher level. In the course of this research, the methodologies presented in the literature and the ideologies of both practice-led research and research-led practice have been regular reminders of the importance of thought and reflection within studio practice in addition to actual performance. In the introduction to *Practice as Research,* Barrett and Bolt suggest that "a dialogic relationship between studio practice and the artist's own critical commentary in writing of the creative arts exegesis is crucial to articulating and harnessing the outcomes of these materialising practices for further application."[152] I have found this observation to be true, with reflective practice having a positive impact on my music, increasing focus through the process of writing, and prompting questions regarding my processes and materials.

Even though empirical research has been discussed throughout this exegesis, what is principally of value to myself and other practice-based researchers is the actual practice-based research, which is the primary contribution to knowledge in the field of practice-based research. The qualities that make the performance the embodiment of the research are the presence, discernibility, authenticity, directness, and aesthetic success of the recital performances, recordings and compositions. The recital has a distinctive sound and the musical knowledge is embodied within the performance itself. Whilst the exegesis discusses the four main research goals of my performance, these approaches align more with methodology than outcomes or new knowledge. In order to show that these objectives are discernable, I have been able to demonstrate that certain types of recognition, in terms of the success or otherwise, are actually possible in the negative. That is to say that if a performance is lacking certain elements, or shortcomings are noticeable, that will then become the clearest indication that the research goals have not been achieved within the recital performance. Specifically, physiological and technical issues of execution that impede

[152] Barbara Bolt and Estelle Barrett. *Practice as Research* (London: I.B. Tauris, 2010), 5.

the accuracy of performance, a sense that improvisations are largely premeditated and lack relationship to the real-time musical context, and ensemble performance that lacks interaction would indicate these shortcomings. For me as a practitioner, it is possible to identify certain things based on the lack of particular elements.

Following a practice-led research model generated the idea of flow in jazz performance, development of technique through improvisation, new rhythmic, melodic, and timbre materials, and has facilitated exploration within my performance practice. This exegesis has identified improvisation as central to my development of new processes, materials, technique development, and repertoire, and in simulating elements of jazz ensemble performance. Practice-led research allowed me to develop flexible vocabulary that enabled me to vary materials and create new ideas for developing this recital. This has resulted in increased ensemble interaction and a more frequent sense of improvising in the moment. Research-led practice has also been beneficial to my research. The concepts of flow, trumpet method books, and theoretical knowledge gained from jazz performance method books and transcriptions informed my approach to studio practice, improvisation, and ensemble performance. A particularly important research-led concept within this project has been flow. The state of flow has increased the clarity of my ideas, my awareness and participation in ensemble interaction, and facilitated a feeling of connectedness to my ideas, the music, and co-performers.

My exegesis has discussed that within my performance practice there is no singular or fixed approach to jazz improvisation but, rather, several approaches combined to varying degrees according to the performance requirements. These include approaching improvisation through a combination of theoretical knowledge, fixed materials, and variations, such as patterns, chord sequences, transcribed licks and melodic fragments. My aural understanding of clarity and continuity of melodic ideas, interesting timbres, rhythmic devices, and harmonic sequences also guides my improvisations within the recital. My reactions to the melodic, harmonic and rhythmic ideas of co-performers are often intuitive and reflexive, especially when I am performing in a flow state. An amalgamation of these approaches informs improvisation within the recital. This exegesis has shown how a number of additional factors, including the spontaneous musical events during performance, distinctive contributions of the co-performers, compositions, ensemble interaction, and the collective musical dialogue, also influence my approach to improvisation and composition. It has become clear that the ongoing cycle of studio practice, performance, reflection, and refinement has been essential to my ability to reach a state of flow.

5.2 Synthesis Of Main Observations

The consolidation of the various considerations within my performance practice through this research project has played an important part in creating my repertoire for the recital, and informed the performance of the recital program. The focus on the different aspects of my performance practice has had a positive impact on the creation of my own music and the way it is performed. Specifically, it has reinforced the importance of developing technique, materials, flow, the refinement of ideas, and awareness of interactive possibilities for the purpose of creating cohesive and flexible musical works and facilitating interactive musical dialogue within improvised ensemble performance.

Having identified improvisation as a means for generating ideas and compositional material, and noting multiple influences from jazz traditions and artists that inform my practice, I have observed that it may now be possible to combine the two and see how they complement each other. What makes these processes particularly important within my performance practice are the acts of listening, reflecting, feeling, exploring, creating, discovery, refining, and questioning. This research project has made clear to me that I want to be emotionally engaged, consciously or subconsciously, as I perform my music. The exegesis has highlighted how important it is to establish meaningful connection with co-performers through an interactive musical dialogue.

This project has highlighted that performances, rather than the scores, are the embodiment of my compositions. The refinement and guide function of the compositions stimulated interpretative and improvised contributions by the performers. Often, this resulted in increased variation, spontaneity within ensemble interaction, a reliance on listening, and flow in performances. Whilst strong themes and fixed elements featured in the recital, compositions were enhanced by the distinctive characteristics of each performer and the discernable relationship between improvised and fixed materials.

As the exegesis has demonstrated, developing variations of ideas through improvisation is important as it fosters a more personalised approach to performance and composition, based on what is aesthetically interesting and meaningful to me. Irrespective of whether co-performers or the audience perceive materials as distinctive or new, building a vocabulary in this manner has made me feel connected to the ideas with a sense of conviction and ownership in my recital performance. In short, the difference is not what is played but, more importantly, how it is played. I have discovered within this research that the more second nature my ideas become, the less distractions I have, and therefore the more I can focus on the playing of co-performers. One of the comprehensions that has emerged in this research project is that the dialectic between the

approach to performance and content of the recital are inextricably linked. This exegesis demonstrates that it is possible to lessen the dichotomy between the contexts of studio practice and performance by incorporating improvisation and ensemble interaction approaches within studio practice. This project has reiterated the importance of studio practice, making me feel connected to materials and familiar with repertoire. Addressing these aspects was essential to my aim to interact with co-performers and access flow in the recital.

Practice-led research and experimentation in this research project have often been inspired in response to the need to problem solve, especially when aspects such as striving to perform in a flow state regularly were not immediately resolved. There were times within this research that I was unable to acquire definitive solutions or fully understand the actions and processes occurring during performance. However, in my music, there is not always a need to be able to explain or understand every detail during the performance, such as collective improvisation and ensemble interaction. Of greater importance to the recital, is activating these processes rather than controlling them through real-time understanding, as the performance and ensemble interaction occurs irrespective of whether they are entirely understood. Illuminating discussions with co-performers after particularly interactive performances and rehearsals have revealed differing experiential levels of understanding, contrary feelings about the quality of the performance, varying levels of flow engagement, how a sense of flow affected interaction, and the generation and development of ideas. Despite these differences, many of the performances were artistically valuable to me because they conveyed continuity, ensemble synchronicity and dynamic.

Approaches that have emerged through this research project have provided me with a sense of increased accuracy and immediacy of technical execution by practising technique based on jazz materials and current repertoire, and through incorporating improvisation. By adapting common technical exercises to include jazz materials and improvisation, my execution during improvised performance felt increasingly fluent and my vocabulary was more flexible, with a reduction of fixed materials and an increase of variations created in real-time. There is scope for this area of my research to develop further, and a publication on technical approaches for jazz trumpeters that incorporates improvisation would be a valuable addition to complement existing jazz trumpet methods. A potential drawback of this improvisatory approach, especially for beginners, can be the inability to concentrate on both improvisation and technical skills simultaneously. However, advanced students and professional practitioners are likely capable of this dual focus.

This research project has raised questions such as: Is it possible to prepare for ensemble interaction in individual practice and, if so, what and how much can one prepare? Whilst the

answer would likely vary for each individual, my experience has been that being mindful of the characteristics and dynamics of ensemble performance and creating a semblance of this within studio practice contributed to my ability to react and interact to the musical events in my recital. This research has increased my awareness of the importance of shaping studio practice according to different compositions and ensemble musicians. There is also another important consideration, which is the impact of an ensemble context on an individual's performance. This is worth further investigation as the impact of ensemble context on an individual's approach during improvised jazz performance is considerable.

This project has also demonstrated that the role of composition within my performance practice is more than simply a starting point for ensemble improvisation. The exegesis has outlined a relationship between composition and improvisation that involves common materials, mood, encouraging flow, and allowing for ensemble interpretation. The recital compositions were conceived to require interpretation and improvisation and, in most cases, they are only complete in the actual recital performance. Rehearsals and performances during this project contributed to ongoing changes in the compositions and this evolution through the act of performance adds to the spontaneity and engagement within my ensemble approach. Not knowing entirely what will occur during each performance makes the musical dialogue increasingly flexible and open to modification.[153] An observation in the exegesis and approach in the recital performance was the expansion of interpretative and improvisatory possibilities by reducing the density within the scores. This refinement of scores is something I would like to explore further, creating a series of new works with a reduction in the fixed details and increasing the reliance on ensemble improvisation and interaction.

This exegesis has helped clarify ideas and develop materials with the primary objective being to more frequently achieve a connection to the ensemble and feel immersed within the music without over-thinking performance aspects or improvisation options. The research has contributed to the development of new musical works that evolve with each performance, and reflection and insight into interactive possibilities within ensemble performance. Given that flow, developing technical control, and ensemble interaction are understood to facilitate interactive jazz performance, this research has shown that if awareness and understanding is developed, these elements and approaches can be key contributing factors to developing improvisation, compositions and a major recital.

[153] Bruce Ellis Benson, *The Improvisation of Musical Dialogue* (New York: Cambridge University Press, 2003), 15.

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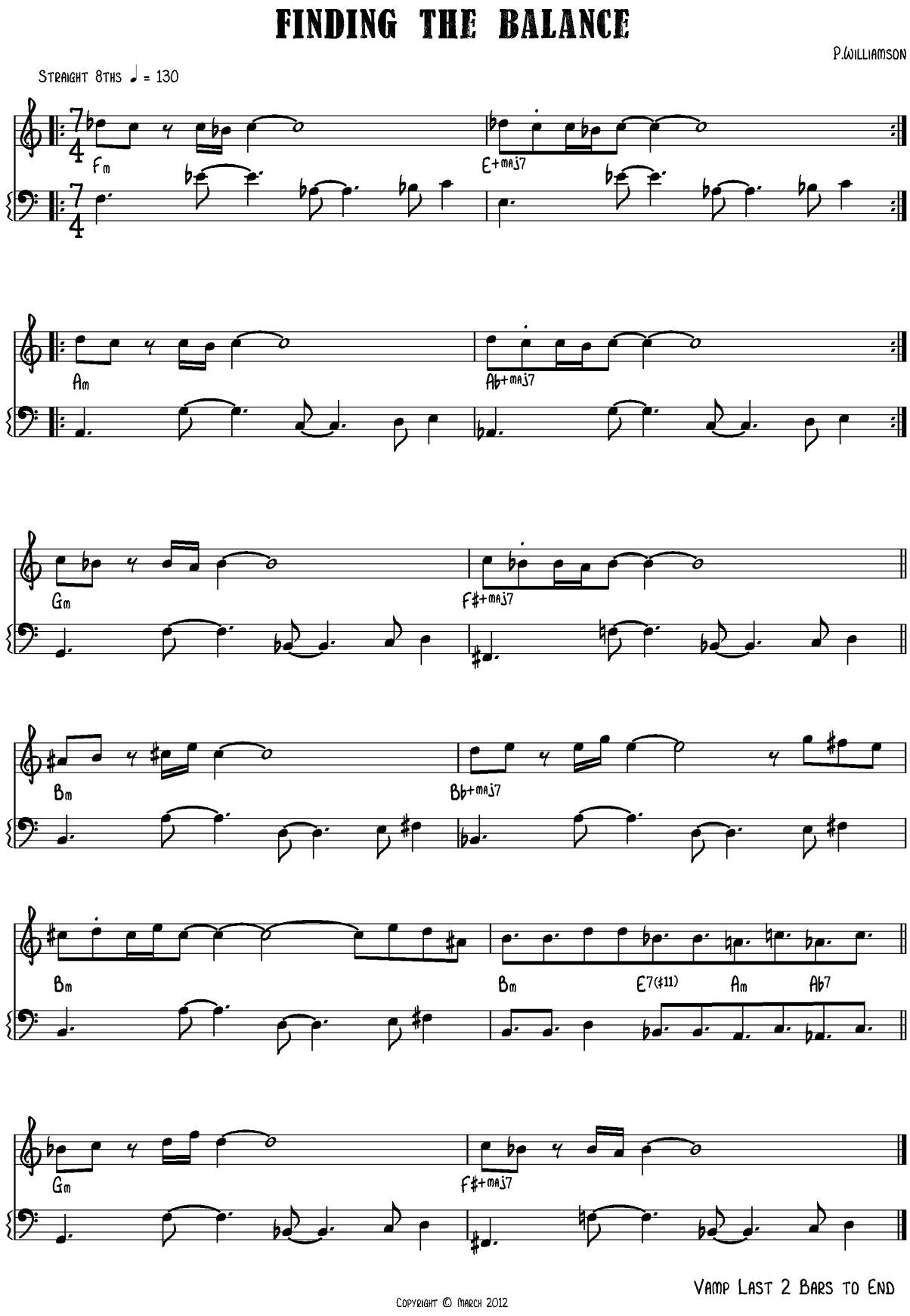
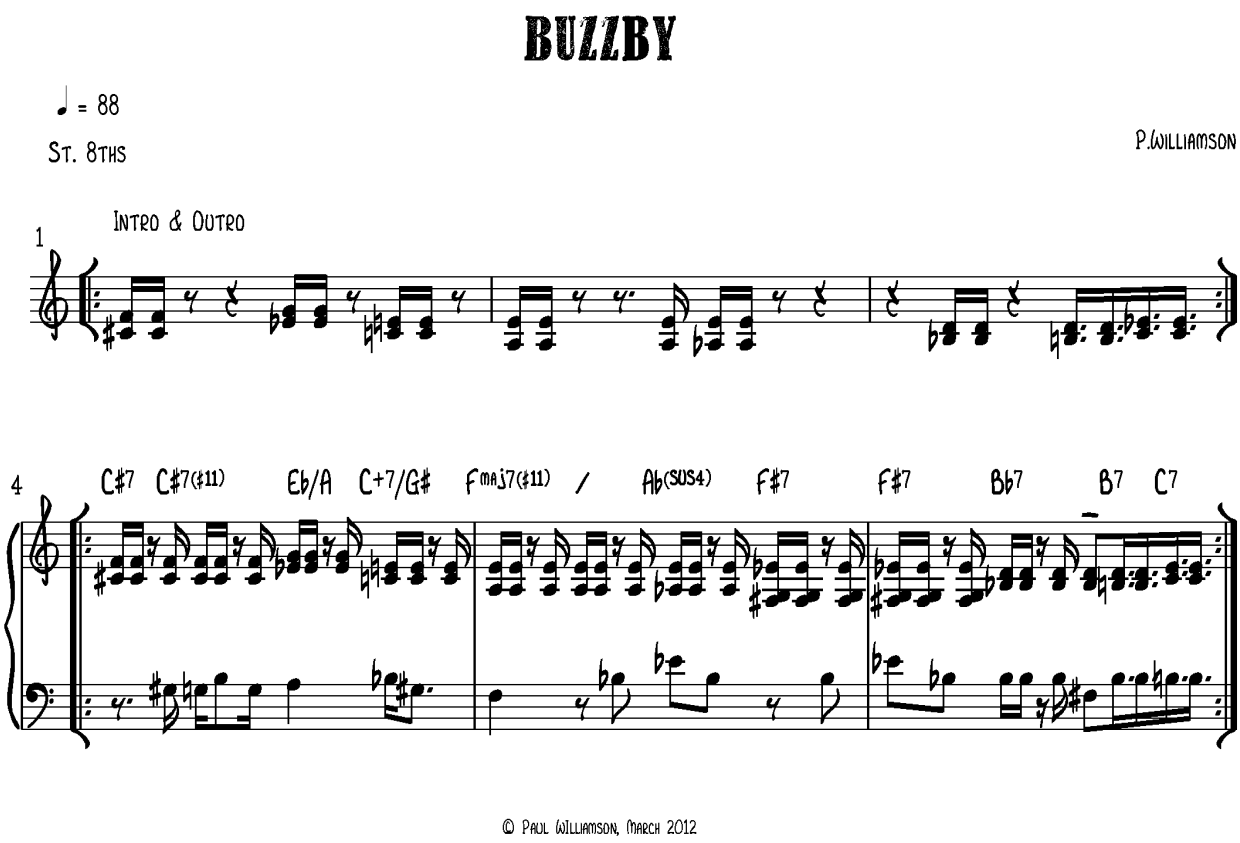
APENDICES

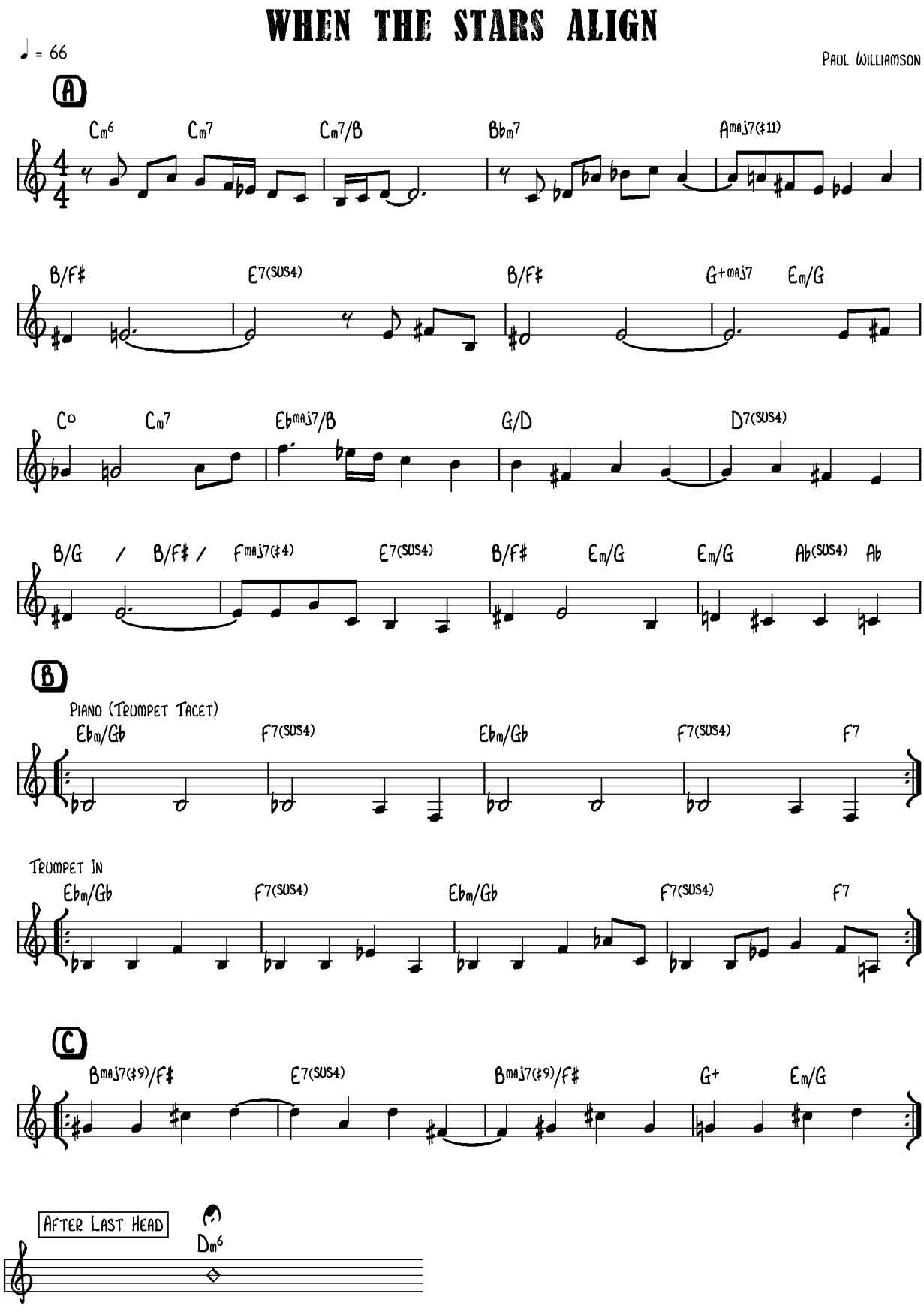
Appendix 1: *Finding the Balance* Score



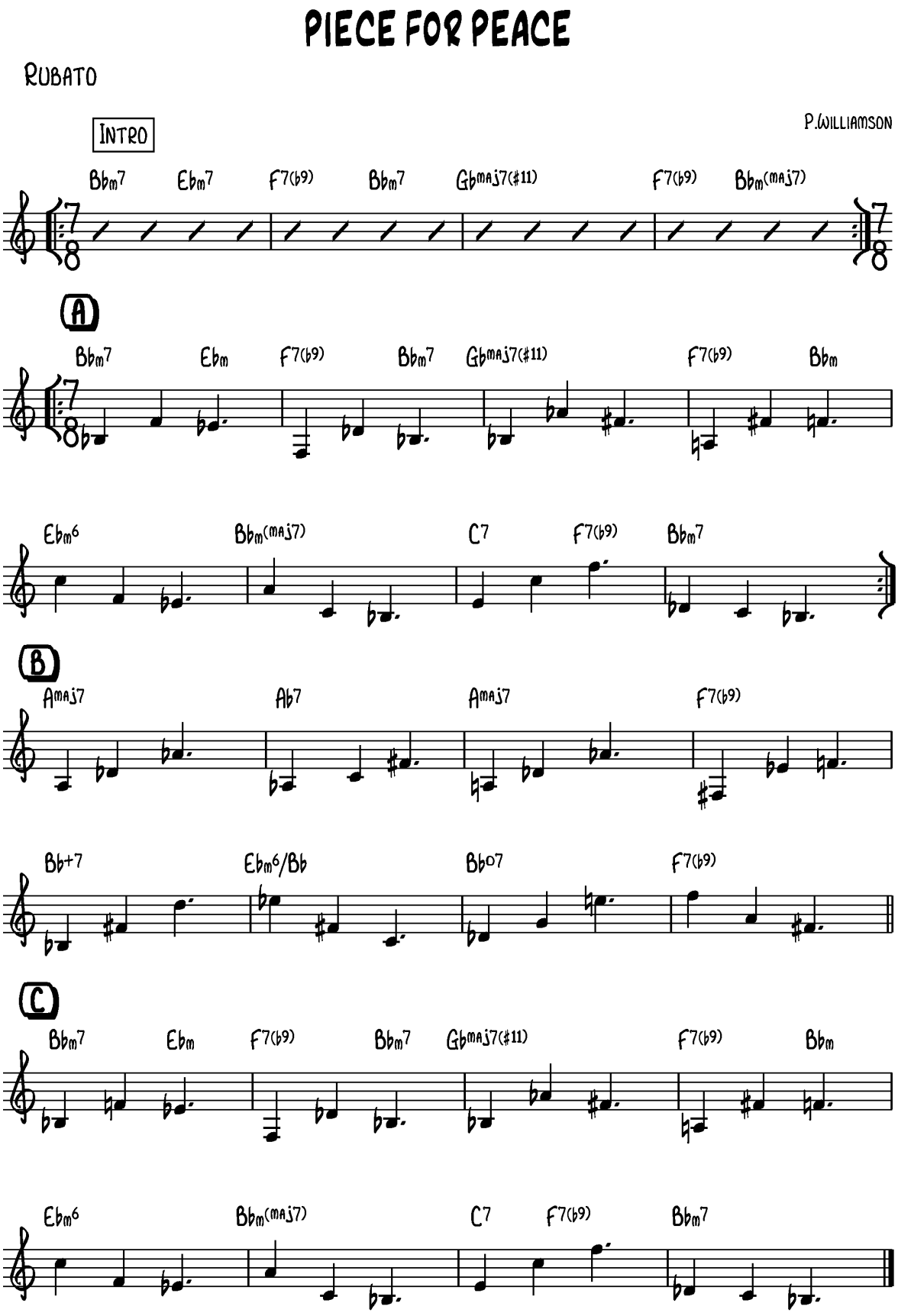
Appendix 2: *Buzzby* Score



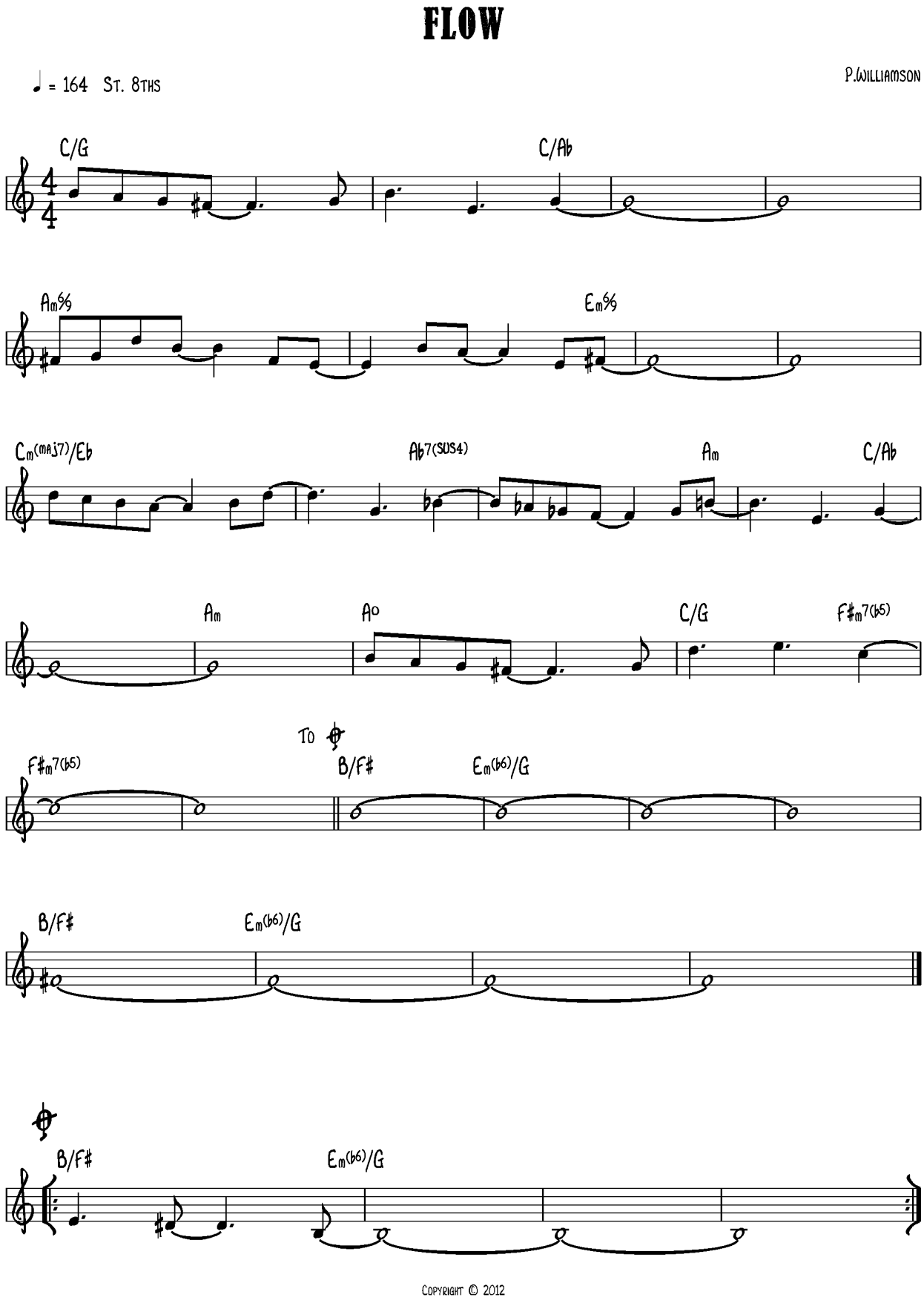
Appendix 3: *When the Stars Align* Score



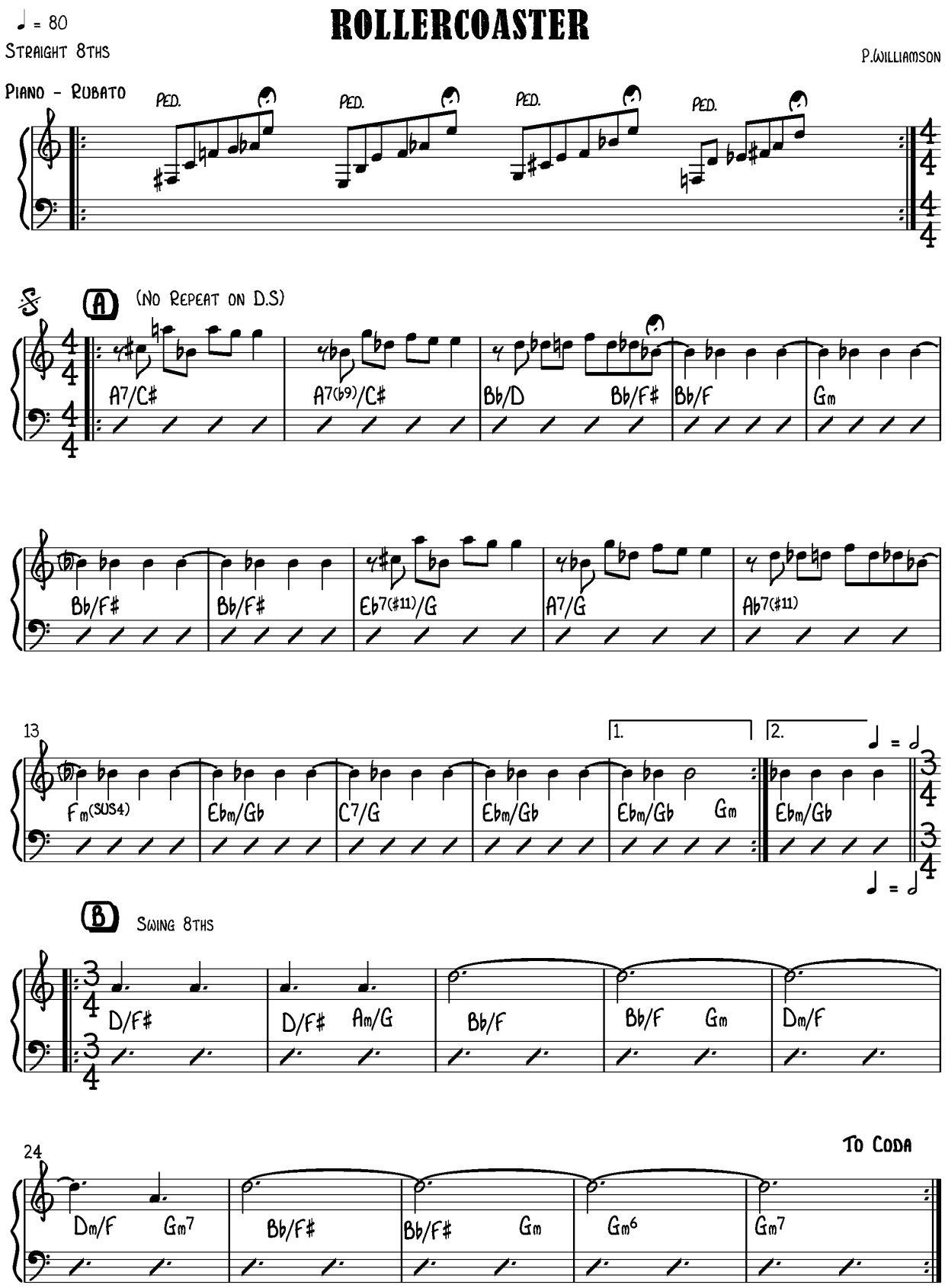
Appendix 4: *Piece for Peace* Score



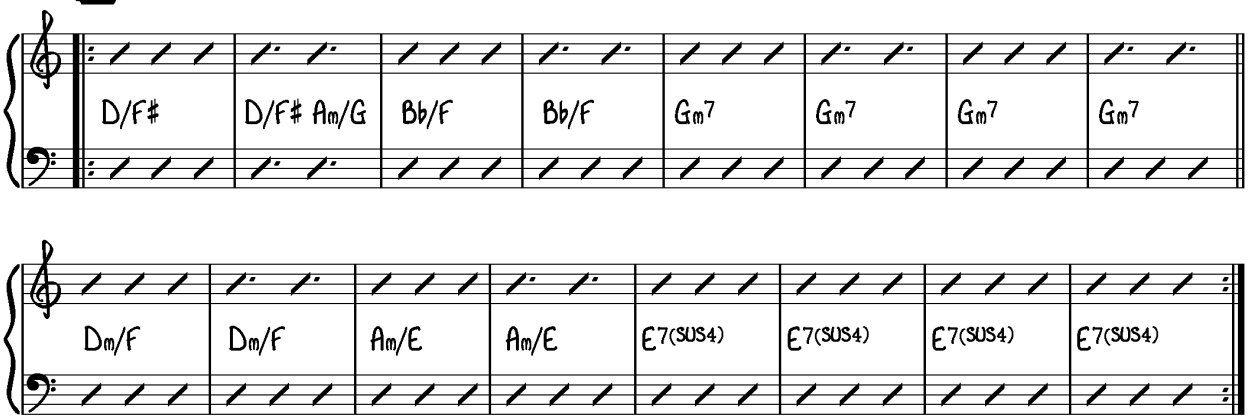
Appendix 5: *Flow* Score



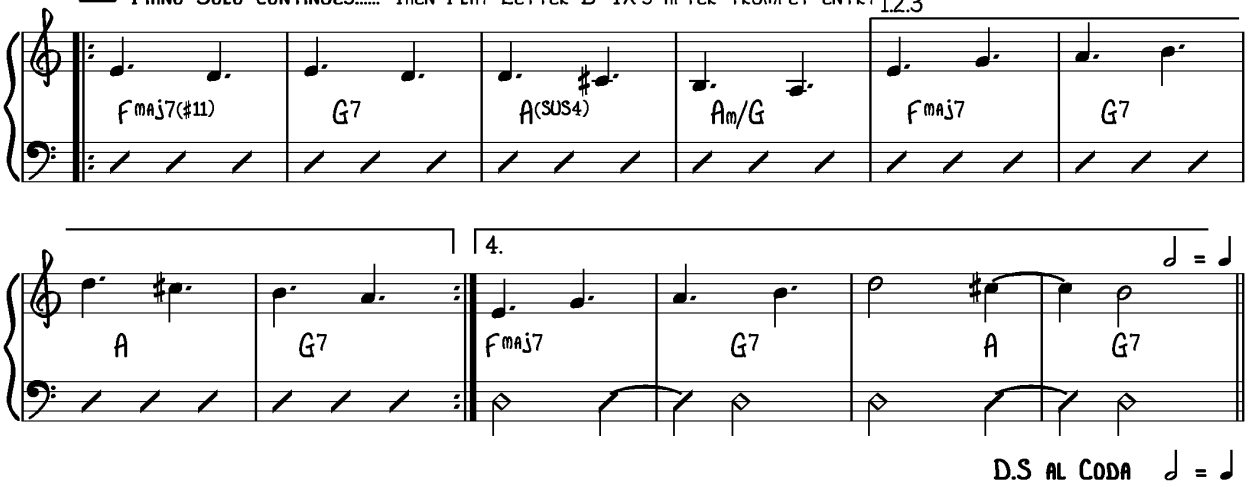
Appendix 6: *Rollercoaster* Score



C Piano Solo - Letter C Open

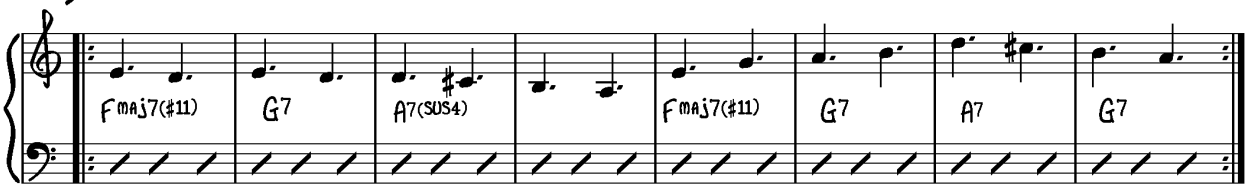


D Piano Solo continues..... Then Play Letter D 4X's after trumpet entry

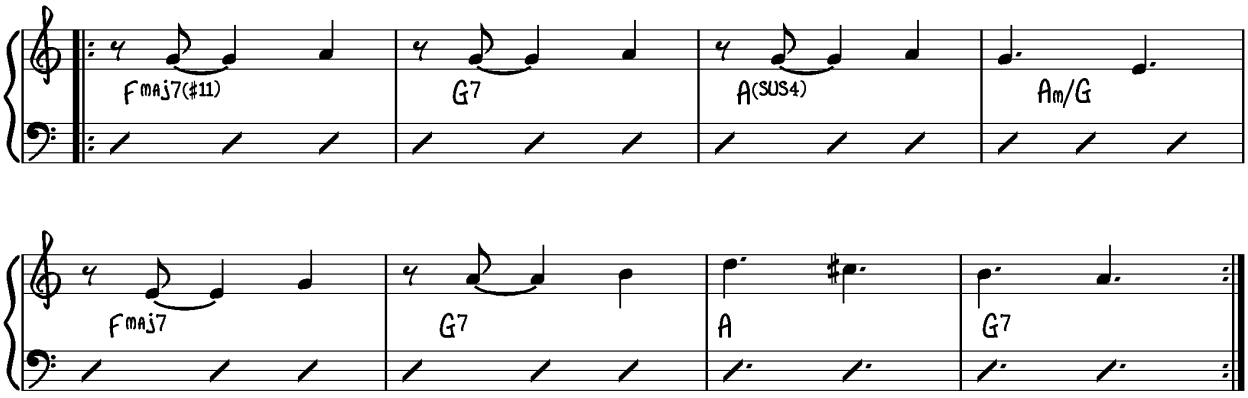


D.S al Coda 𝅗𝅥 = 𝅘𝅥

Open repeat - trumpet solo

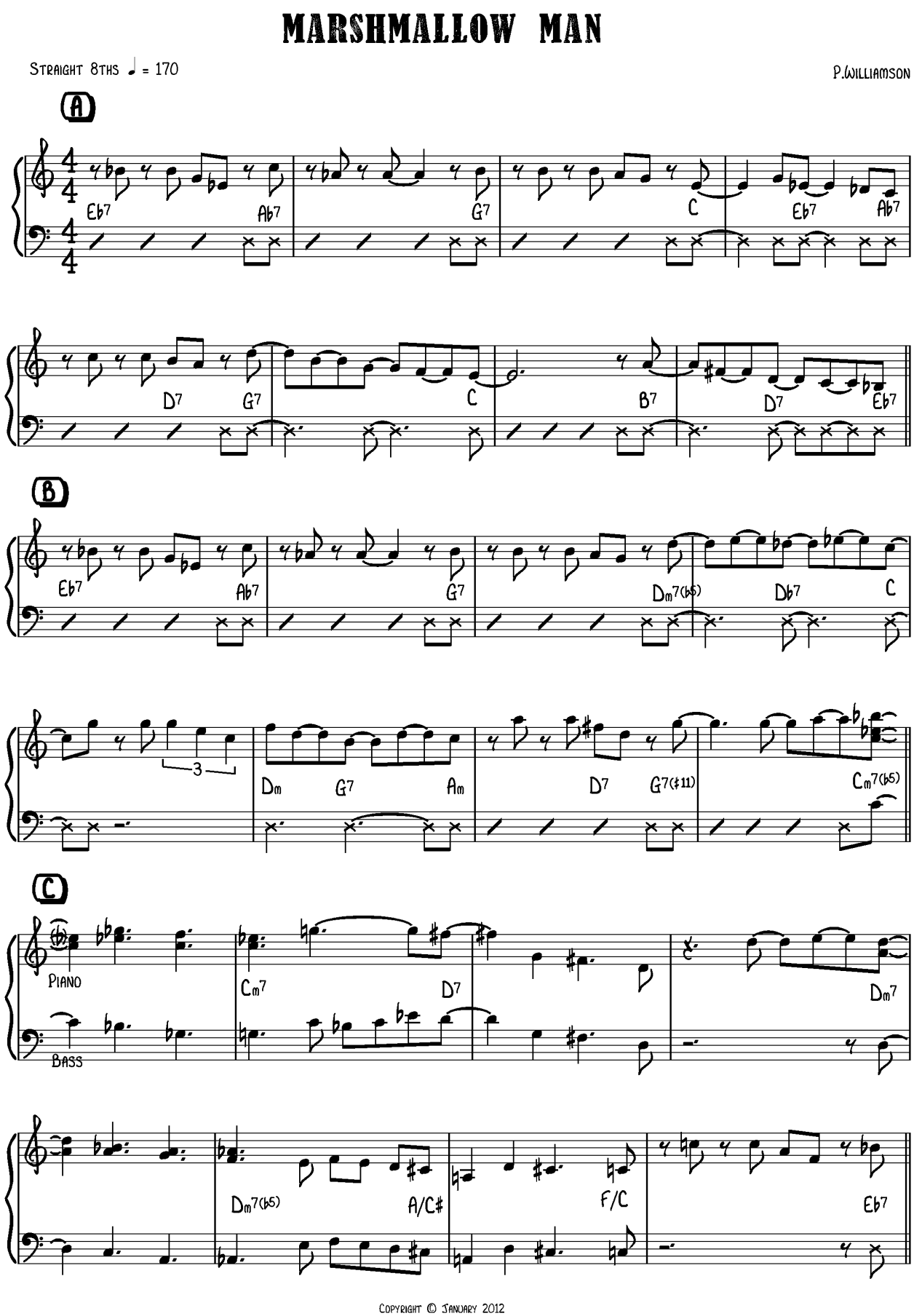


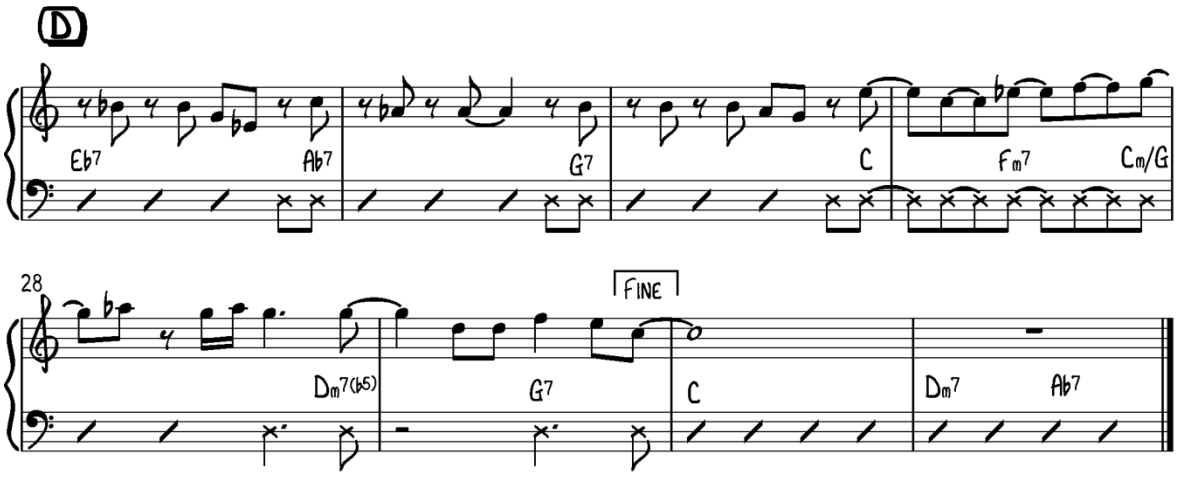
E Outro Vamp - Drum Solo then ensemble build...



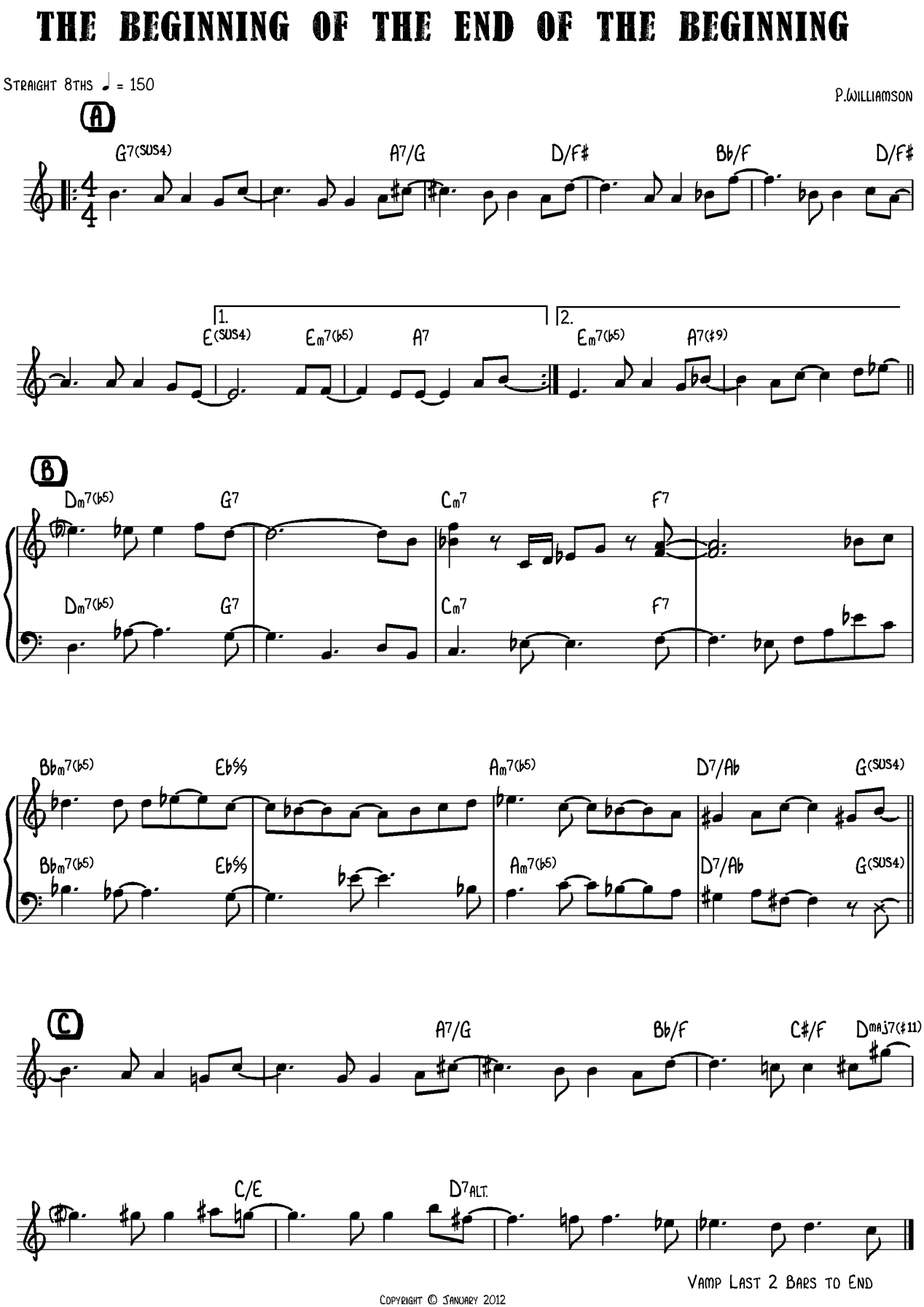
Rall To end.....

Appendix 7: *Marshmallow Man* Score

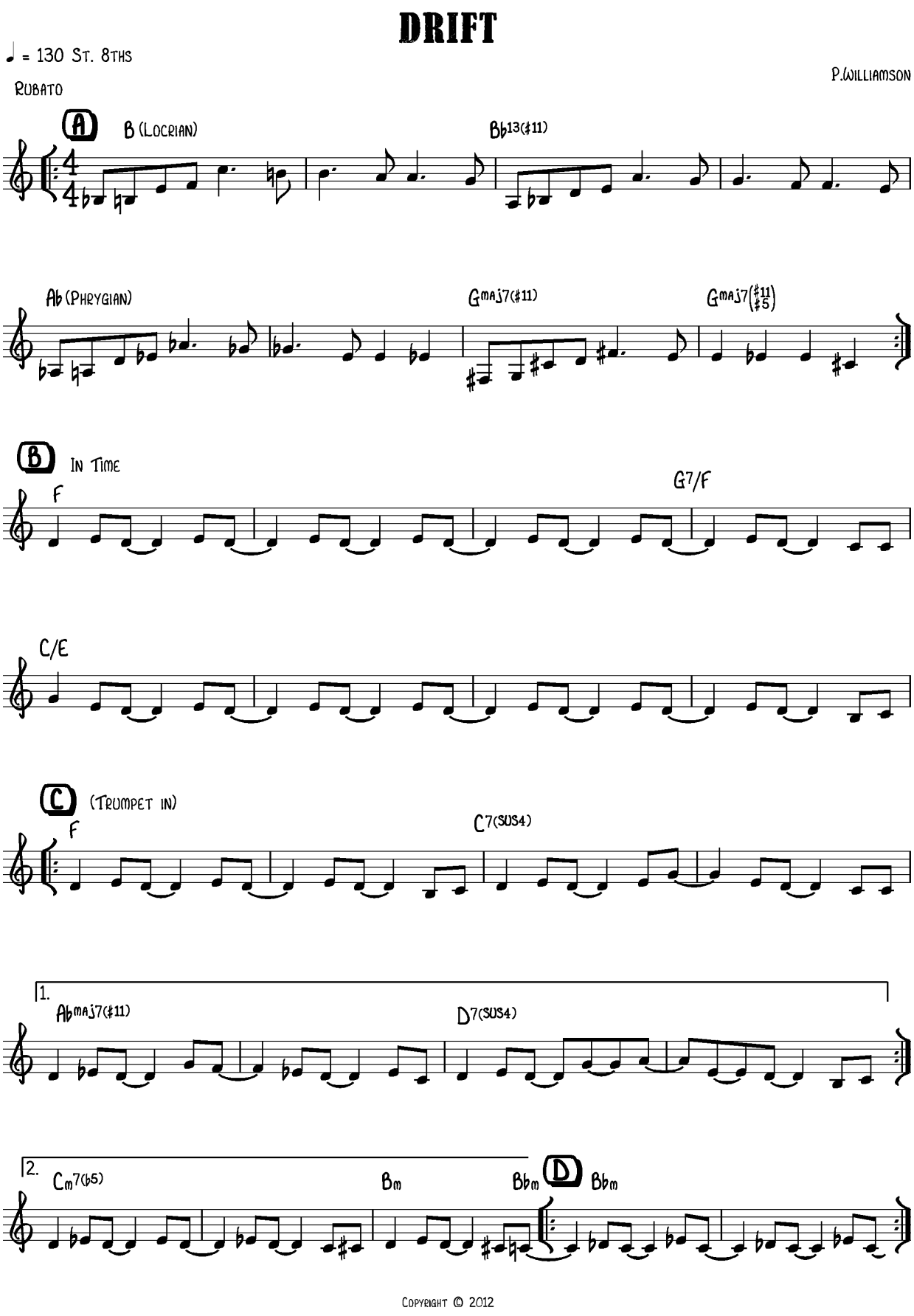




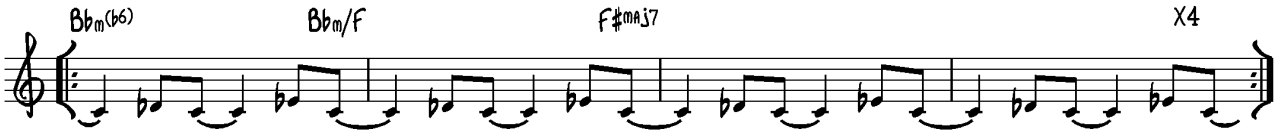
Appendix 8: *The Beginning of the End of the Beginning* Score

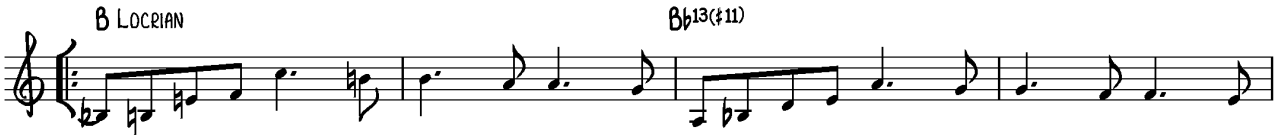


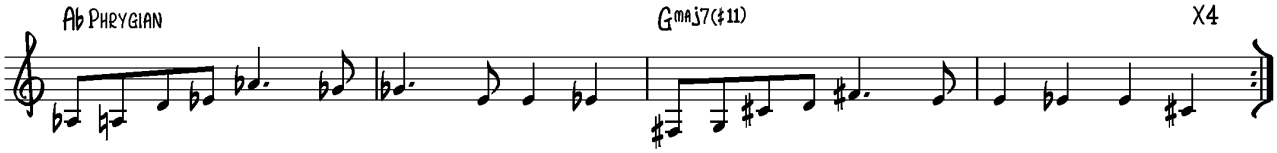
Appendix 9: *Drift* Score

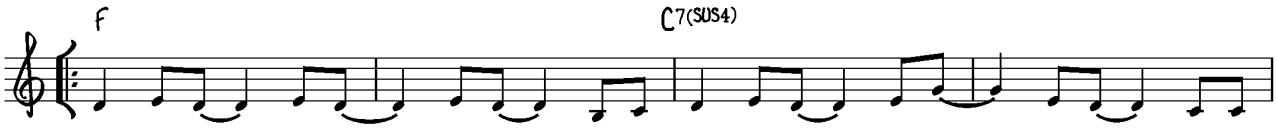


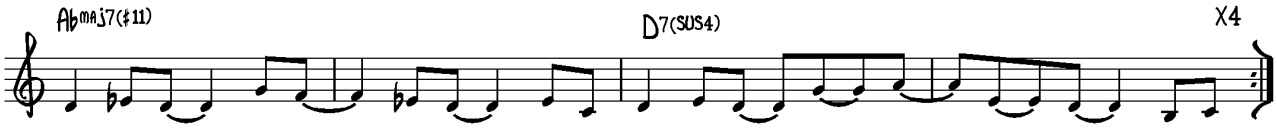
(E) SOLOS



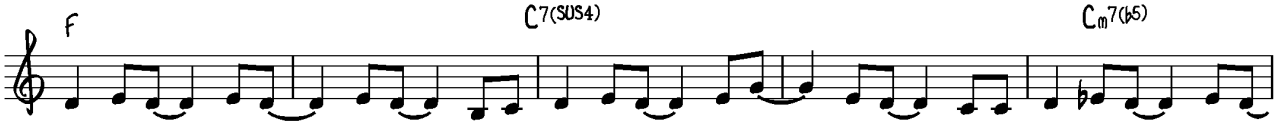


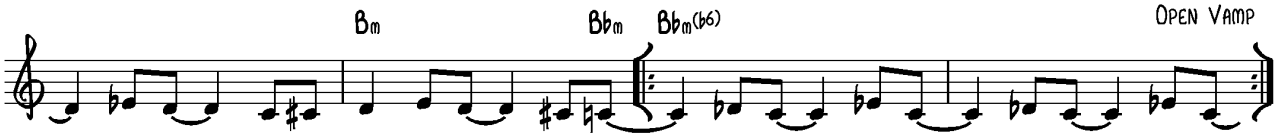




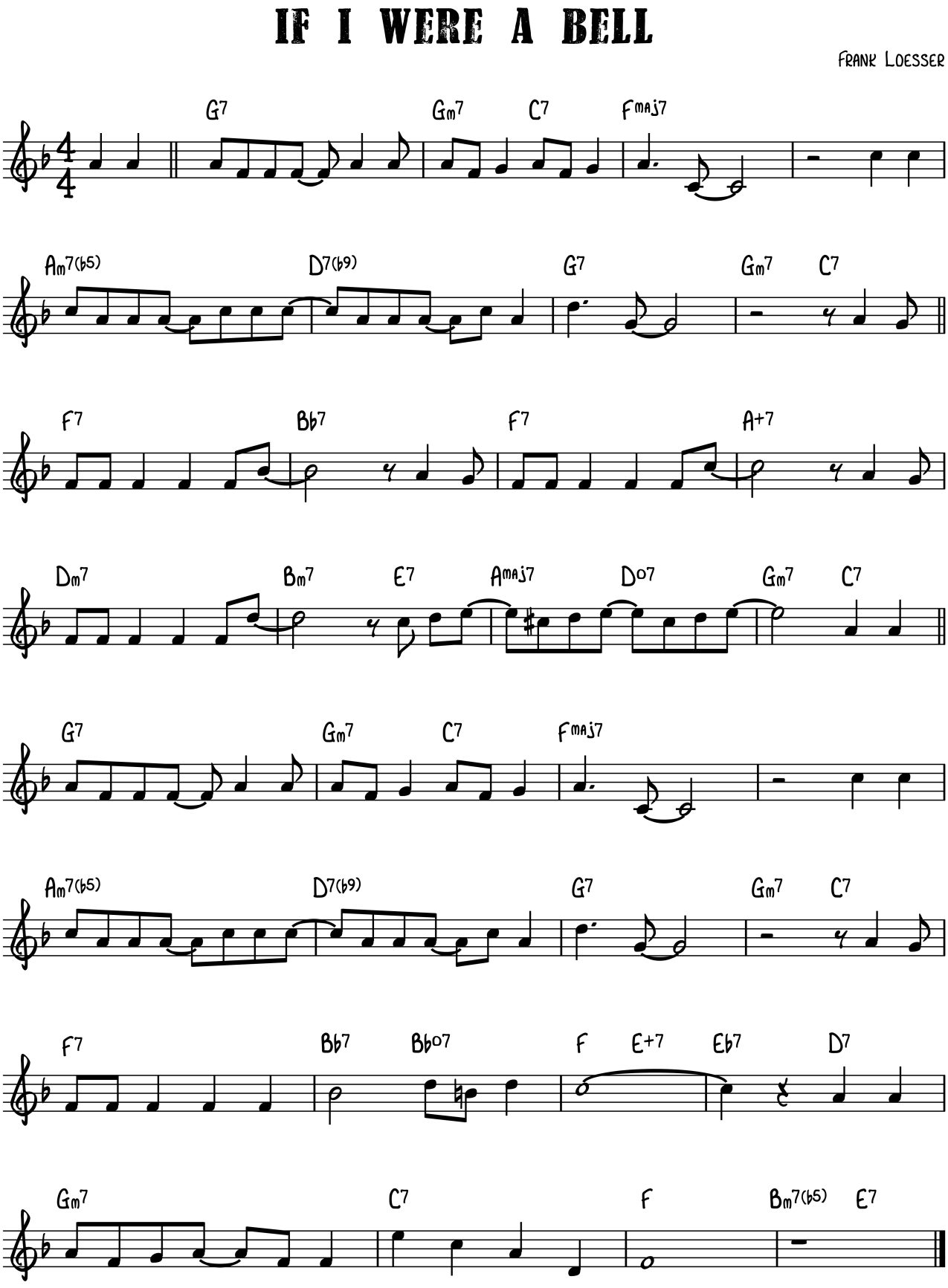


ON CUE AFTER SOLOS





Appendix 10: *If I Were a Bell* Score



Appendix 11: Audio CD Compilation

Track 1: ***If I Were a Bell*** *(Frank Loesser)*

Track 2: ***Buzzby*** *(Paul Williamson)*

Track 3: ***Piece for Peace*** *(Paul Williamson)*

Track 4: ***Flow*** *(Paul Williamson)*

Track 5: ***When the Stars Align*** *(Paul Williamson)*

Track 6: ***Improvised Segue*** *(Williamson, Browne, Hannaford, and Pankhurst)*

Track 7: ***Inconsolable*** *(Paul Williamson)*

Track 8: ***Segue between Drift and Finding the Balance*** *(Paul Williamson)*

Track 9: ***Finding the Balance*** *(Paul Williamson)*

Track 10: ***Drift*** *(Paul Williamson)*

Tracks 1 and 6: Paul Williamson (trumpet), Marc Hannaford (piano), Allan Browne (drums) and Sam Pankhurst (double bass).

Tracks 2 and 7: Paul Williamson (trumpet) and Marc Hannaford (piano).

Track 3: Paul Williamson (trumpet) and Tony Gould (piano).

Tracks 4 and 10: Paul Williamson (trumpet) and Andrea Keller (piano).

Tracks 5 and 9: Paul Williamson (trumpet), Paul Grabowsky (piano), Niko Schäuble (drums) and Frank Disario (double bass)