Different Every Time: The Integration of Improvisation into Through-Composed Music.

ANALYTICAL NOTES

(volume 1)

Paul Cutlan

A portfolio of compositions submitted in

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STATEMENT OF ORIGINALITY:

I declare that the research presented here is my own original work and has not been

submitted to any other institution for the award of a degree.

Signed:…………………………………………………………………

Date:…………………………………………………………………..

ABSTRACT:

The aim of this research project has been to write a portfolio of compositions which integrate improvisation with through-composed contemporary classical techniques. The intended result is that the improvised elements aid the development and outcome of the musical argument and help contribute to the architectural structure of each piece in performance. The stylistic elements and structure of the compositions should embrace the aesthetics of improvisation in a way that promotes both coherence and flexibility. Although the written score is an important document of the composer's intentions, equal importance is placed on the process of creative realisation. It is in performance that the benefits of improvisation can be evaluated in each piece. These will include elements of spontaneity, a heightened sense of engagement of both performers and audience, and unpredictable outcomes. Above all, the integration of improvisation into the compositions will lead to each performance being a unique experience.

Acknowledgements:

FOLIO CONTENTS:

<u>Different Every Time: the Integration of Improvisation into Through-Composed Music</u> is a presentation of six works by Paul Cutlan.

The folio consists of the following volumes and items:

VOLUME 1. ANALYTICAL NOTES

Different Every Time: the Integration of Improvisation into Through-Composed Music – written thesis.

VOLUME 2. FOLIO OF COMPOSITIONS: (including an audio CD)

1. *Emission Impossible*: musical score
2. *Back to the Ranch: G.W. Bush's Farewell Dance*: musical score
3. *Across the Top Suite* (in three movements): musical score
    i.   *Gibb River Road*
    ii.   *Lost Souls*
    iii. *Reconcile*
4. *Rustle*: musical score
5. *Times Past*: musical score
6. *Se Con Fervide Mani*: musical score

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Chapter One   Creative Background and Evolution of Style

The present folio of compositions is an attempt to develop techniques and modes of expression new in this composer's output. It also strives to integrate disparate stylistic modes of expression from the composer's creative background. These include contemporary classical music, jazz, music from the Balkans and free improvisation. This chapter looks at the salient features in a style that has been evolving over almost thirty years.

Compositions from the undergraduate years (1983–6) are predominantly classical and through-composed. Major influences at the time include Stravinsky, Shostakovich, Bartok, and Britten. Common features of these pieces can be summarised as follows:

- exploration of tonality, using quartal harmony or some harmonic device that operates in an unusual way
- keen interest in irregular rhythms, time signatures and motoric rhythms
- tendency to employ minimalist textures in later works
- some pieces are monothematic
- intervallic structure of themes is often maintained unaltered in development
- increasing interest in exploring chromaticism, dissonance and atonality.

Most of the output from this time is purely instrumental and several pieces have some reference to techniques and stylistic traits of music of the Middle Ages and Renaissance – an interest inspired in part by Stravinsky's fascination with the same periods. One current avenue of exploration which can be traced to those student years concerns the poly-metric inter-changability of 12/8, 6/4 and 3/2. The first instance of a fascination with this technique can first be detected in the 1984 *Oboe Quintet* (see Appendix II). Similar instances of metric modulation occur in *Back to the Ranch* and the *Across the Top* Suite, both in this folio. The relationship between these three time signatures forms the basis for the tempi and potential for superimposition of the themes in the *Across the Top* suite (see chapter four).

The last twenty years have seen a change of career focus from a predominantly orchestral performance career to one embracing jazz and the discipline of improvisation. This has seen a widening of scope for creative outlets, helped through association with

some of the foremost and highly specialised improvisers in Australia. Although composition took a back seat for a long time while these skills were being developed, a great deal of other twentieth-century music was being studied and listened to, including Janacek, Messiaen, Schönberg, Berg, Webern, Penderecki, Boulez and Stockhausen, as well as the symphonies of Mahler and Beethoven. This period of intense listening also took in the major figures in jazz and avante-garde jazz, such as Miles Davis, John Coltrane, Charlie Parker, Eric Dolphy, Anthony Braxton, Joe Henderson, Herbie Hancock, Dave Holland, Sam Rivers, as well as many jazz/improvisational groups in the Sydney scene. One of the most significant groups worked with in the last fifteen years is the world music/jazz ensemble MARA! With a focus on music of the Balkans and an emphasis on improvisation, MARA! rekindled a fascination with irregular rhythms and provided an opportunity to develop a personal musical style in both improvisation and composition that crosses borders of genre and style.

A commission for the 2003 Sydney Festival resulted in the composition of a body of music for jazz trio and narrator. The dramatic demands and scansion of the poetry being performed stimulated a different focus in composition—one which allowed a certain flexibility of timing. To this end the skills of improvisers were harnessed to respond to text and the dramatic requirements at hand. The music was a combination of composed material and improvised input from the performers within certain parameters. One result of this method of music making was a heightened sense of engagement in the creative process from all participants in the ensemble, as well as a feeling of collaboration and equality. The immediacy of expression occasioned by this combination of composition and improvisation enabled spontaneous communication and reaction between narrator and musicians, as well as a different performer/audience relationship-one of greater synergy and engagement.

Significance of Improvisation in the Work

An increasing desire to bring these two apparently disparate worlds of music together led to the present study which aims to integrate elements of contemporary classical compositional technique with an ethos of spontaneous composition, or improvisation. Why improvisation? Personal experience has led to an appreciation of the potential of the experienced improviser to express musical ideas of great complexity, subtlety and expressivity. The personal input required for improvisation creates a potential to

communicate and engage actively with an audience. It is a performance practice directly related to time, place and circumstance, providing the ideal platform to harness disparate styles, techniques and genres in the performer's experience.

This portfolio explores compositional techniques that develop written material within forms which leave space for improvised input to complete them. These forms seek to establish both coherence and flexibility, while the compositional processes used will also provide stimulus and direction to the improvised components. The end result will be the exploration of materials using the dual perspectives of contemporary art music techniques and improvised response.

Meaning of Improvisation

According to Grove Music Online, improvisation is

> The creation of a musical work, or the final form of a musical work, as it is being performed. It may involve the work's immediate composition by its performers, or the elaboration or adjustment of an existing framework, or anything in between. To some extent every performance involves elements of improvisation, although its degree varies according to period and place, and to some extent every improvisation rests on a series of conventions or implicit rules … .[1]

The assertion in the above definition that "to some extent every performance involves elements of improvisation ..." is a perspective expanded on by Philip Alperson[2], Carol S. Gould[3] and James J. Valone[4]. However this definition includes a large grey area of performance, possibly better defined using the word 'interpretation', as almost every area of musical performance could be perceived as employing the kind of sensitivity and responsiveness akin to 'improvisation'.

For this reason, and for the purpose of clarity in these analytical notes, the definition of improvisation will be limited to obviously generative, creative choices by the performer that result in music that would otherwise be unforeseen. This perspective is more in line with a description given by Paul Berliner: "Improvisation involves reworking pre-composed material and designs in relation to unanticipated ideas conceived, shaped and transformed under the special conditions of performance, thereby adding unique

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[1] Bruno et al. Nettl, "Improvisation", *Grove Music Online*, http://www.grovemusic.com (accessed 8 October 2007).

[2] Philip Alperson, "On Musical Improvisation," *The Journal of Aesthetics and Art Criticism* 43, no. 1 (1984).

[3] Carol S. Gould and Kenneth Keaton, "The Essential Role of Improvisation in Musical Performance," *The Journal of Aesthetics and Art Criticism* 58, no. 2 (2000).

[4] James J. Valone, "Musical Improvisation as Interpretative Activity," *The Journal of Aesthetics and Art Criticism* 44, no. 2 (1985).

features to every creation".[5] Berliner's emphasis on unique features being added to every performance captures the spirit of intent behind the inclusion of improvisation in this folio's compositions.

From the Grove definition, it can be established that the normal working process of a composer is to write music to be played later, whereas an improviser composes it as it is being performed. However when a composer writes for improvisers, he/she does it so that they can improvise according to a plan, and respond to material that has been set down in advance. From these observations, it also follows that:

1. A freely improvised piece is a 'once-only' event and not strictly replicable.
2. A completely notated piece is performed with a reasonable expectation of the outcome being *recognisably* the same or similar each time.
3. A composition featuring an element of improvisation can and should sound different every performance.

Whether or not improvisers are involved, composition on paper needs performers to turn it into music. The process of performance is critical to the phenomenon we call music. Unless the composer uses a medium in which he/she has total control of the process of generation and realisation, as in some electronic music for example, the composer has to acknowledge/surrender their trust in performers to make the work 'music'. To this end, he/she will often consider which performers will realise the music, and what skills or special attributes they have. The composer will try to take into account the normally expected skill levels of a professional symphony orchestra, an amateur choir, or a student band, for example. Similarly, the compositions in this folio employ improvisation which presupposes performers with a high degree of training and experience in the craft of improvisation.

In the context of composition, improvisation can be employed on many levels and for many reasons:

• As a kind of random indeterminism, approaching aleatoric principles;
• To provide a variable or mobile texture within an otherwise fully notated piece where some specific notes and/or rhythms are not important;

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[5] Paul Berliner, *Thinking in jazz* (Chicago: The University of Chicago Press, 1994), 241.

- As a means of generating a flexible outcome, with some elements or materials fixed and others left open;
- To generate the materials themselves and/or arrive at a form that is not predetermined.

In the case of the compositions in this folio, the aim is to achieve a high level of integration between the composed development of an idea and the improvised response to it. They aim to utilise improvisation's unique ability to respond and connect in the moment. The variability of each parameter of composition was considered when deciding where to employ improvisation. Models were considered, where improvisation played a significant generative and developmental role in the structure of each piece – such pieces would necessarily be quite open ended and lack considerable (written) detail. Ultimately it was decided that the structure, themes and principal development of each composition would be composed and fixed. These choices reflect improvisation more as a decoration or figuration of the fundamental structure.

The role of improvisation in this context may be compared to the passage work or figuration in the development section of a classical concerto. In some forms of analysis, such as Schenker analysis, such passages may be removed quite early as being non motivic surface detail. Yet in performance, it is precisely this surface detail that engages the attention of listener and performer alike. Improvisation in the current folio has the function of adding a layer of immediacy with the purpose of increasing the work's power of engagement in performance.

Historical Context

In order to appreciate the relationship between composition and improvisation, it is helpful to look at their development in an historical context. Both methods of making music can perhaps be traced back to a common origin in the aural traditions of ancient civilizations. In the case of ancient Greece for instance, music was improvised within parameters governed by aesthetics and circumstance, using suitable musical vocabulary.[6] Improvisation in this case represents the ideal combination of composer and performer as one person.

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[6] Donald Jay Grout, *A History of Western Music*, 3rd ed. (New York: W.W. Norton & Company, 1980), 5.

The main catalyst for the divergence of composition and improvisation was perhaps the development of music notation. Though lacking precision in its early forms, notation served both as a means of jogging a performer's memory and of fixing parameters of a musical work.[7] The development of notation made possible the devising and preserving of musical works too long or complex to be remembered or passed on by aural tradition.

Nevertheless, improvisation continued as an integral and living part of performance practice. In the Renaissance, improvised ornamentation of a written melody was an indispensible part of performance. The ability to add an improvised counterpoint to a written melody was another expected skill of the performer.[8] Well into the eighteenth century, the relationship of composition and performance practice still overlapped in an organic way. Composers produced works of a flexibility which assumed the performer's ability to complete the process of realisation according to contemporary performance practice.[9] The realisation of figured bass, use of ornamentation and performance of cadenzas show improvisation to be an organically integrated part of the performance discipline, practiced by musicians who were conversant with the principles of the day.

The gradual decline of improvisation in mainstream western music practice into the 20th century is described in detail by Robin Moore, who goes on to explain some of the current inhibitions behind improvisation's absence in today's classical music performance:

> One of the inherent difficulties of performing and studying historical forms
> of art music today ... is that musicians cannot rely upon much of
> their present-day aural experience to guide them in the correct interpretation of
> repertoire ... . Reverence for the music of past eras is in itself an impediment to
> improvisation.
> Spontaneous innovations cannot occur in music which is intended to be
> more a replication from 1790 than a musical event of today.[10]

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[7] Ibid., 44.
[8] Ibid., 229.
[9] Ibid., 391-2.
[10] Robin Moore, "The Decline of Improvisation in Western Art Music: An Interpretation of Change," *International Review of the Aesthetics and Sociology of Music* 23, no. 1 (1992), 78-9.

Nature of Contemporary Improvisation

In our own time, the Western musical tradition that embraces improvisation as an organic element is jazz. Its performance practice is the result of a 'living', current art form with a shared vocabulary among its practitioners. It is an art form that has developed as a result of the interaction in live performance which simultaneously draws on and reshapes that vocabulary. It allows for great individuality and personal freedom as well as instantaneous communication and response between its performers.

The main structural aspect of jazz being avoided in most of the pieces in this folio is that of the cyclical harmonic progression. A repeating chord progression is one parameter which can allow the improvisers to structure their performance with flexibility and freedom, once they are familiar with it. The harmonic structure provides a theme and variation template from which melodic, harmonic and rhythmic roles can be extrapolated in a continuous narrative.

With this structural tool removed, the issue was to harness another area of familiarity in order to employ the creative and intuitive strengths of improvisers. The strongest solution in terms of pitch content lay in modal improvisational techniques. In 'modal jazz', the performers base their melodic and rhythmic ideas on a single scale or mode associated with a static harmonic background. The modes and harmonies can and do change in this style of jazz, but characteristically less often than in repeating harmonic progressions derived from popular songs and Vaudeville. In order to afford the improviser the maximum freedom possible for creative expression, modes have been extrapolated which reflect the prevailing pitch environment at various points in the compositions. All other parameters involving rhythm, dynamics and timbre have been left open for interpretation, with the exception of a few general suggestions of mood and character in *Back to the Ranch* (chapter 3).

Improvisation Within the Composed Environment

One model which has combined notated contemporary classical composition with improvisation is so called *third stream* music. In this genre, represented by some compositions of Gunther Schuller, two distinct styles of music, jazz and classical, are combined in such a way that each retains its essential elements. An example of third stream music is Don Banks' *Nexus* for jazz quintet and symphony orchestra. Banks

develops his material on two separate stylistic planes, such that the writing for the orchestra maintains a modern classical texture, while the music given to the jazz combo employs archetypal swing rhythms, walking bass lines and syncopated melodies. Pitch content is the main unifying factor.

The exploration of the relationship between composed and improvised processes informs the analysis of selected works in the folio of compositions (volume 2). This folio also includes several works written in the course of the degree, which are not analysed in the body of this volume, but which exhibit many traits and characteristics in common with the works discussed here:

1. Times Past is a companion piece to the *Across the Top* suite, employing the same instrumentation. The interaction of composed and improvised components parallels techniques outlined in Chapter 4.

2. The unique character of the saxophone quartet *Rustle* concerns its treatment of texture and unmetered rhythm. The spectrum of improvised input in this work ranges from interpretive decisions in terms of duration, to improvised parts which are free of any stipulated parameters.

3. *Se Con Fervide Mani* for women's choir and band uses jazz related performance practices, such as the rhythmic and harmonic fleshing out of the bass and bouzouki parts, and melodic improvisation over a repeating harmonic structure.

Issues of Analysing Improvised Music

Australian performer Jim Denley points to improvisation as being "unrepeatable, immediately embroiled with sound, unpredictable, and irreducible… It makes no sense to think of the musicians or music as separate from the sound, the space the sound resonates in, or from the listeners. There is no separate work to be interpreted."[11] Denley contrasts this wholeness of the improvisation process with the aesthetics of composed music, in which composer, score, performer(s), audience, time and place are considered separately. The unrepeatable aspect of improvisation is perhaps its greatest power and also the element which makes it so difficult to grasp or analyse profoundly: "Because

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[11] Jim Denley, "Improvisation: The Entanglement of Awareness and Physicality," *Sounds Australian* 32 (Summer 1991-92), 25.

improvisational creativity is ephemeral, and does not generate a permanent product, it has perhaps been easy to neglect."[12]

In contrast to improvisation, the musical score "simultaneously records, describes, and conserves musical content ... it functions as a set of instructions to be executed ... rhythmically synchronised by the conductor, executed by means of highly-trained human movement."[13] While the notated score affords one the luxury of close examination and analysis, an improvisation is more difficult to grasp and dissect, because of its specific relationship to the time and place in which it occurs. Its very uniqueness defies one's efforts at categorisation and comparison. Therefore any analysis of improvisation needs to look at different parameters to evaluate its success.

The comparative communicative potential of written composition and improvisation perhaps parallel those of writing or print, versus oral traditions. "For an oral culture learning or knowing means achieving close, empathetic, communal identification with the known (Havelock 1963, pp. 145–6) ... Writing separates the knower from the known and thus sets up conditions for 'objectivity', in the sense of personal disengagement or distancing". [14]

Of course, the unpredictability of improvisation is not only one of its greatest assets-it is also one of its main risks: "The essence of improvisation… is the delicate balance between spontaneous invention, carrying with it both the danger of loss of control and the opportunity for creativity of a high order, and reference to the familiar, without which, paradoxically, creativity cannot be truly valued."[15] When one attempts to mix the aesthetics of predetermination and spontaneity, there can be no guarantee that the improvised elements will amplify or integrate well with the fixed elements. It helps therefore, to know the sort of performers/improvisers one is writing for, and to employ their strengths. It is just as critical that those improvisers have an attitude that is sympathetic and collaborative.

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[12] R. Keith Sawyer, "Improvisation and the Creative Process: Dewey, Collingwood, and the Aesthetics of Spontaneity," *The Journal of Aesthetics and Art Criticism,* 58, no. 2 (2000), 150.
[13] Phil Graham, "Why the Music Business Matters," *Music Forum* 18, no. 3 (2012), 55.
[14] Eric A. Havelock, *Preface to Plato* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1963), cited in Walter J. Ong, *Orality and Literacy: The Technologizing of the Word* (London and New York: Methuen & Co. Ltd, 1982; reprint, Routledge, 1995), 145-6.
[15] Nettl, "Improvisation".

Closely related to this issue are matters of performance practice, idiom, vocabulary and personality. The compositions in this folio employ improvisation with the expectation that its practitioners will be familiar with the language necessary to contribute in the style and spirit required. As David Cope notes, "in improvisation … the composer has relinquished some control over musical events to the performer. However, this is done with the full belief that the performer will play with learned skills and an integrity of context and style…The 'live' and fresh aspect of improvisation can provide a unique performance each time a work is played…".[16]

When a musician improvises, it is inevitable (and desirable) that their accumulated musical experience will inform what they play. The challenge facing the improviser within a predetermined environment is that of drawing on the appropriate musical vocabulary to contribute effectively. Composer and improviser Sandy Evans explains: "The more you can understand the materials, the more free you are going to be with your expression within that language."[17]

Issues of Authorship

Improvisation poses another issue at odds with traditional composition – that of authorship. If one or more performers contribute original improvised content to a composition during performance, they become valid co-creators of the work. Even if the composer is the improviser in a performance, the issue remains that the score does not accurately represent the totality of the sounds performed. This raises two main issues:

- Authorship of a composition employing improvisation can be problematic in relationship to intellectual copyright and attendant financial dues;
- Analysis of such compositions becomes more problematic, as the score represents less of the ultimate design of the work in performance.

Composition, manifest usually as a score, is a permanent repeatable work which is the property of its author(s). Improvisation, by contrast, is a non-repeatable creative event; it is much more inclusive in aesthetic, because of its ties to oral tradition which often draws upon a vast shared pool of style, vocabulary and ideas. Any mixture of the two modes of

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[16] David Cope, *New Directions in Music*, 4th ed. (Dubuque, Iowa: Wm C. Brown, 1984), 245.
[17] Jenny Game-Lopata, "Sandy Evans: Deep Thoughts about Improvisation," *MCA Music Forum* August - October(2005), 32.

music-making creates a new paradigm of collaboration and directed creativity. In light of these observations, improvisation is employed in this folio of compositions from the same perspective of inclusiveness, collaboration and respect for the performer's creative potential.

Any analysis of such compositions needs to consider each work in the process of performance. An observer's perception of form and structure in real time is different from a consideration of the static blocks of notated score, as articulated by Roger Reynolds:

> The awareness of form operates not at the level of precision but as an evaluative, a comparative process that draws necessarily on memory (and potentially on anticipation as well). Proportion, thus, matters as it describes general or potential relationships of weight and succession, not in terms of precise and complex ratios or of durational measurements of unrealistically explicit resolution.[18]

This experiential explanation of form presents music as a product of performance. In the context of improvised elements, it emphasises:-

a) anticipation of the unknown

b) a heightened perception and involvement in the present, due to surprise elements in the unfolding of the piece

c) a more active evaluation of the perceived success/failure of a convincing musical discourse being realised by the perfomers/improvisers.

While these concepts are difficult to substantiate with hard analytical data, they nevertheless remain the prime motivators behind integrating improvisation with pre-composed music.

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[18] Roger Reynolds, "Form and Method: Composing Music," in *The Rothschild Essays*, ed. Stephen McAdams (New York: Routledge, 2002), 14.

Chapter Two   Exploration of Process: Emission Impossible

Conception

Emission Impossible is a chamber music/jazz fusion piece scored for trumpet, French horn, alto saxophone, piano, double bass and drums. The title reflects mankind's struggle to find a solution to the dilemma of its reliance on a way of life entirely based on releasing the earth's stores of CO_2 into the atmosphere. This theme was decided upon after some of the music was composed. The mechanical and obsessive nature of the music suggested themes of industrialisation, pollution and an urgent striving for some unseen goal. These were combined with current concerns about global warming caused by rising CO_2 levels to arrive at the title.

A shorter version of the work was composed for a contemporary improvisers' group *Squall*, led by French Horn player Steve Morley. The current extended work of around 13 minutes , 30 seconds features significantly more detailed ensemble writing, which made it necessary to engage players with predominantly classical training for the first performance. This was given on 10 Dec 2009 by –Kim Griffin – trumpet, Nathan Henshaw – saxophone, Graham Nichols – horn, Tim Fisher – piano, Steve Elphick – bass and Philip South - drums. Several sections of this version still call for improvisation as a response to the written music. Much of the bass and drum writing calls for creative choices or elaboration of the given material. More will be said about the performance practice aspect of the piece later.

Aims and Processes used

The intention when writing *Emission Impossible* was to write a work which employs tightly organised tonal materials, generative processes and rhythm, and harnesses them to stimulate and regulate improvised input. Initial inspiration for the techniques used to manipulate material came from reading papers about voice leading in atonal and 12 tone works by Joseph N. Straus[19] and Brian Alegant[20]. These articles were studied out of a curiosity to understand the rarified textures of Webern's atonal and serial works, in the hope of employing their methods of cohesion and unity.

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[19] Joseph N. Straus, "Uniformity, Balance, and Smoothness in Atonal Voice Leading," *Music Theory Spectrum,* 25, no. 2 (2003).
[20] Brian Alegant, "Cross-Partitions as Harmony and Voice Leading in Twelve-Tone Music," *Music Theory Spectrum* 23, no. 1 (2001).

Its main areas of exploration are:

• Use of processes derived from serial music to generate melodic and harmonic material;

• Manipulation of the selected elements using isorhythm, use of permutation to present primary material in different orders, and the Fibonacci series to determine various durations;

• Limiting certain parameters such as time signature (always 13/8, with constant speed, except for moments of no tempo), and transposition (not used);

• A dialogue between a rhythmically driven jazz idiom, and a more contemporary classical style of chamber music writing, featuring rhythmically independent elements.

The initial material for the piece is a set of six three-note chords with a variety of different tonal implications. These 'trichords' were arranged to form a progression or series, from which melodic lines were extrapolated by following diagonal paths from one chord to the next. In turn these horizontal lines were themselves considered as discrete pitch collections. This material is initially the domain of the 3 wind instruments.

Figure 2.1 shows the original voicings of these trichords with the top, middle and bottom voices progressing in their own 'register'. Each trichord is labelled **[P] – [U]**. The lines linking the notes show the distribution of each part to a wind instrument. The next system collects each of these wind instrument pitch collections, labelled **[sax pc]**, **[trp pc]** and **[hn pc]**. Each trichord and melodic pitch collection is used to generate melodic and harmonic material. *Emission Impossible* never uses transposed forms of any of these primary materials: instead various permutations and juxtapositions of either the trichords, or the pitch collections, or both, are used as techniques of development.

Figure 2.1 Trichords and Voice Leading in Emission Impossible

These trichords move in a disjunct harmonic progression from F, through Gb and Eb minor to an unexpected G major. Their properties include clusters of adjacent major scale degrees, chords without 5ths or 3rds, and one with an ambiguous minor/major tonality. Each instrument's pitch collection has multiple tonal/polytonal implications, with the exception of the **(hn pc)**, which clearly affirms Bb major and is mostly idiomatically suited to the harmonics of the horn.

The first counterpoint to these trichords comes with the gradual introduction of a 'series' of bass notes. Starting with 4ths and 5ths, typical of tonal bass lines, this series repeats one of its 6 pitches once before resting, also on G:

Figure 2.2 'Bass Series'

As well as never being subjected to transposition, this 'bass series' is hardly ever considered in a different order to the original. One focus of the compositional method

involves exploring juxtapositions of the trichord progression against the bass series, to create new harmonic structures. For instance, the first bass note, C# (bar 2) changes the trichord against which it is first heard from F Major 7th to a sort of C# Major 7th #9 sonority or bitonal C#/C chord.

Rhythmic Concept

The dominant rhythmic aspect of *Emission Impossible* is its 13/8 time signature. This is divided into a pattern of long and short beats (2+2+2+3+2+2), derived from the Macedonian Postupano dance rhythm. While this rhythm was partly inspired by the composer's experience of performing music of the Balkans, its primary purpose here is to lend an unbalanced sense of forward propulsion. The long and short beats give different emphases to the various trichords being presented, as well as contributing to a mechanised, jerky jazz/rock fusion style. This groove[21] can be interpreted as a metaphor for the industrial backdrop to the global warming theme of the piece.

The 13/8 time signature also proved useful in giving the illusion of a slow rubato tempo, in passages such as the two chorale sections. Although the 2+2+2+3+2+2 grouping is adhered to on the whole, occasionally the first three short beats are converted to two groups of three, giving a 3+3+3+2+2 grouping. Other rhythmic variants include groups of 4:3 crotchets + 4:3 quavers + 3:2 crotchets, sometimes all in the one bar. These rhythms are employed either to break up the predictability of the principal rhythmic divisions, or to allude to a different tempo, approaching the effect of metric modulation (See Figure 2.3).

The 13/8 time signature inspired the use of the Fibonacci Series in the structure of some of the durational aspects of the piece. This series is derived by adding the last two numbers in the series together: 0 1 1 2 3 5 8 13 21 34 55 etc.

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[21] 'Groove' for the purpose of this thesis is a term which describes an ostinato based, strong rhythmic propulsion, usually featuring a particular interaction of bass and drum figures.

Figure 2.3 Treatment of rhythm in Emission Impossible △ denotes a group of 3 ♪

Formal Overview

Emission Impossible is constructed in contrasting sections which explore the material using different techniques (see Tables 2.1 and 2.2). Its principal development occurs in two episodes labelled **E** and **E^1**, in which new material is introduced or existing material developed and juxtaposed. The **A** sections share a rhythmic regularity and groove, propelled by the drums. These sections also represent a return to the basic presentation of the trichord material and bass series, each time with something added, such as the piano improvised solo of **A^1** or the piano obbligato of **A^2**. Two sections act to divide the

form, offering moments of reflection as well as a respite from the driving nature of the 13/8: the first is an improvised horn solo (labelled **I**) about midway through the piece, and the second is a serene textured group improvisation **I²**, just before the recapitulation. Two chorale sections towards the end act to sum up and attempt to resolve the tensions built up during the episodes.

Bar 1–17	Bar 18–61	Bar 62–90	Bar 91	Bar 92–129	Bar 130–141
A Fanfare motif Melody 1	**E** Fragmented	**A¹** Piano Solo	**I** Horn Cadenza	**E^I** Melody 2	**C** Chorale I
Rubato intro/ Groove enters – industrial, mechanised	Chamber music independence: Fragmentation and layering of Materials	Groove, fragmented bass line and elements of fanfare	No Tempo - Improvised	Dialogue between fanfare motifs and phased cycling of melody 2	Fanfare trichords combined with melody I in augmentation

Bar 142–151	Bar 152–155	Bar 156	Bar 168–173
A² Quasi recap of initial fanfare	**I¹** Stratosphere	**A³** Recapitulation	**C¹** Chorale II – Postlude
Obbligato piano developing Melody 1	No tempo Textured improvisation Peaceful	Groove and Fanfare Melody 1 and 2	Fanfare Trichords combined – Compromise reached

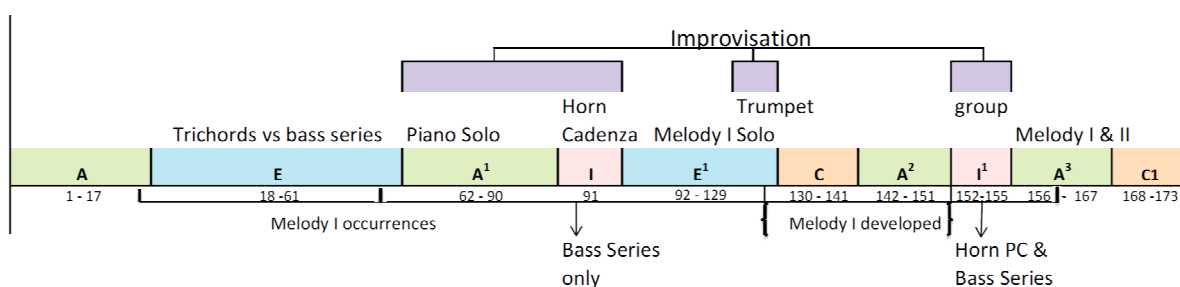**Table 2.1 Description of Sections in *Emission Impossible***

Table 2.2 Structure in *Emission Impossible*

Other Materials and Processes

Melody 1, introduced at bar 12, is scalar, spanning two different modes[22], which are labelled with reference to G and Eb roots. This pitch group is broken into two five-note subsets, separated by a central G (See figure 2.4), thus showing the relationship between melody 1 and melody 2 at figure 2.8.
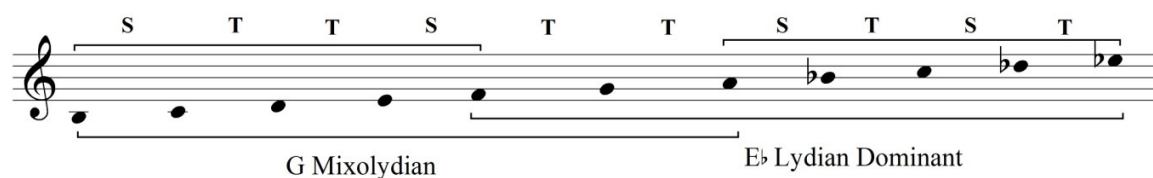

Figure 2.4 Emission Impossible - Melody 1 Pitch Structure

This melody creates more complex vertical relationships, when juxtaposed against the fanfare trichords and bass series. It appears only occasionally, usually to flag the beginnings of new sections, and is not developed in detail until bar 125.

The first episode **E** is constructed on the principles of jazz dialogue, although it is fully notated and in a contemporary classical idiom. The form is roughly *abba*, with the mirrored *ba* being more of a juxtaposition of elements of both sections. The features of each section are as follows:

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[22] See Appendix 1: Intervallic Structure of Modes.

Episode **E** – fractured texture, non-synchronous				
Section	Process	Instruments	Materials	Role
a	Concertato (dialogue)	winds	**sax pc, trp pc, hn pc**	Solo gestures
		piano	**P – U** trichords Fibonacci series	Harmonic/ rhythmic
b	dialogue	bass	bass series	Soloist or accompaniment
		drums	division of 13/8	Soloist or accompaniment

Table 2.3   Processes and Materials used in First Episode

The concertato nature of *a* (bar 18) refers to the soloistic nature of the wind interjections, which are heard against a chordal background provided by the piano. The piano's pitch material in the *a* section is derived from various pairs of trichords, labelled **P** to **U** (refer to figure 2.1). They are reiterated and sustained for varying numbers of quavers, mostly chosen from the Fibonacci sequence (see Figure 2.5).

During the sustained chords between these hammered waves, each wind instrument inserts a solo gesture, almost in the manner of a jazz soloist, with each instrument's material being determined mainly by their pitch material from the fanfare lines in the introduction, labelled **trp pc**, **sax pc**, and **hn pc** (refer to figure 2.1). Maximum rhythmic independence and variety ensures a fractured rhythmic texture starkly contrasting the mechanised propulsion of the beginning.

The bass and drum dialogue in section *b* involves each player alternating roles of time-keeper and soloist. Starting at bar 26, the 'bass-series' is arpeggiated using a combination of open bass strings and harmonics, while a quasi-improvisational drum solo explores aspects of the time signature. The texture of this passage is intended to be bizarre and humorous, with frequent 'cadence' gestures in the bass and awkward drum fills such as the 'William Tell' gesture in bar 35 using the wood of the sticks against the rim of the snare.

The juxtaposition of elements of *a* and *b* begins at bar 39 with the reintroduction of the winds as a background to the continuing bass arpeggiation of its series. From bar 44 the piano recapitulates the chords from section *a* in reverse order, using larger Fibonacci numbers to determine the durations between each series of chords.

Figure 2.5   Fibonacci Durations and Trichord combinations in 'Emission 1'

This piano entry marks the beginning of the winds' return to prominence: as the chordal activity increases, the fibres of melody in the winds start coalescing towards a climax in bars 56–57, at which point the piano hammers out the [**P** + **S**] combination of trichords for a Fibonacci duration of 55 quavers, albeit with gradually lengthening note values.

This climax marks the beginning of section **A¹**, with melody 1 making another appearance in the horn and double bass. This statement heralds the ensuing piano improvisation which assumes its pitch material, accompanied by a fragmented version of the bass and drum groove from letter D. The sporadic bass line is the result of writing an isorhythmic line in which the seven notes of the bass series rotate out of phase with a two-bar rhythmic ostinato. Then various notes were plucked out to avoid monotonous repetition. This is shown in figure 2.6, with the 'silent' notes shown by small note heads.

Figure 2.6 Isorhythmic bass line with 'missing' notes shown in small note heads

Improvisation in Emission Impossible

At this point it is worth examining an actual performance to investigate the contribution of the piano improvisation to the overall structure. The piano material in figure 2.7 is a rough transcription of Tim Fisher's solo in the performance on 10 December 2009. In analysing this solo, attention has been paid to the process of improvisation, as well as the content, or product.

The first gesture in this improvisation takes the last hammered trichord combination in letter C as its point of departure. With the given brief of improvising using the pitch structure of melody 1, Fisher constructs a dialogue between strategically-placed "hammered" chords, melodic phrases, and repeating groups of notes with rhythmic cycles that overlap and counterpoint the 13/8 groove. The prescription in the piano part of pitch alone allows the performer the rhythmic freedom to construct an improvisation based on past material as well as reacting to musical events in the present.

Not to be overlooked in this developing narrative is the role of the drum set, which is liberated at this point from conforming to an exact part. Drummer Philip South interacts very closely with the piano rhythmic cycles, often obscuring the underlying time signature, which is being anchored by the bass line. An indication of the reactive nature of the piano improvisation can be detected at bar 73: here the piano line changes course markedly in response to the wind entry at bar 72: Fisher's next gesture is a quieter, lower register flourish with a pitch content more closely resembling the wind's tonal material. From this point, many gestures in the piano solo actively engage with or answer the written material in the winds. From bar 77, Fisher either pre-empts the fanfare trichords in the winds, or answers with chords of complementary tonality, at differing rhythmic intervals. Not only does this have the effect of a playfully-unpredictable shadowing of the written material, but serves to animate the rhythmic space, creating a complex rhythmic dialogue. These piano chords also recall the hammered chords from the first part of the improvisation, creating a sense of balance and cohesion within this section.

Overall the piano improvisation is both a development of and reflection on earlier material. Considered without the solo, letter D is a fairly sparsely-scored stretch of music, with a gradual increase in density as the winds develop the trichord material. The significance of the improvisation is twofold:

a) that of immediate reaction and engagement in the heat of the moment of performance, resulting in a contribution that adds a spontaneous creativity amid the mechanical processes at work in the composition;

b) the contribution of an additional creative perspective of the given material and processes used in the composition to this point.

Figure 2.7 Piano Solo at letter D   **1/3**

Figure 2.7   Piano Solo at letter D   **2/3**

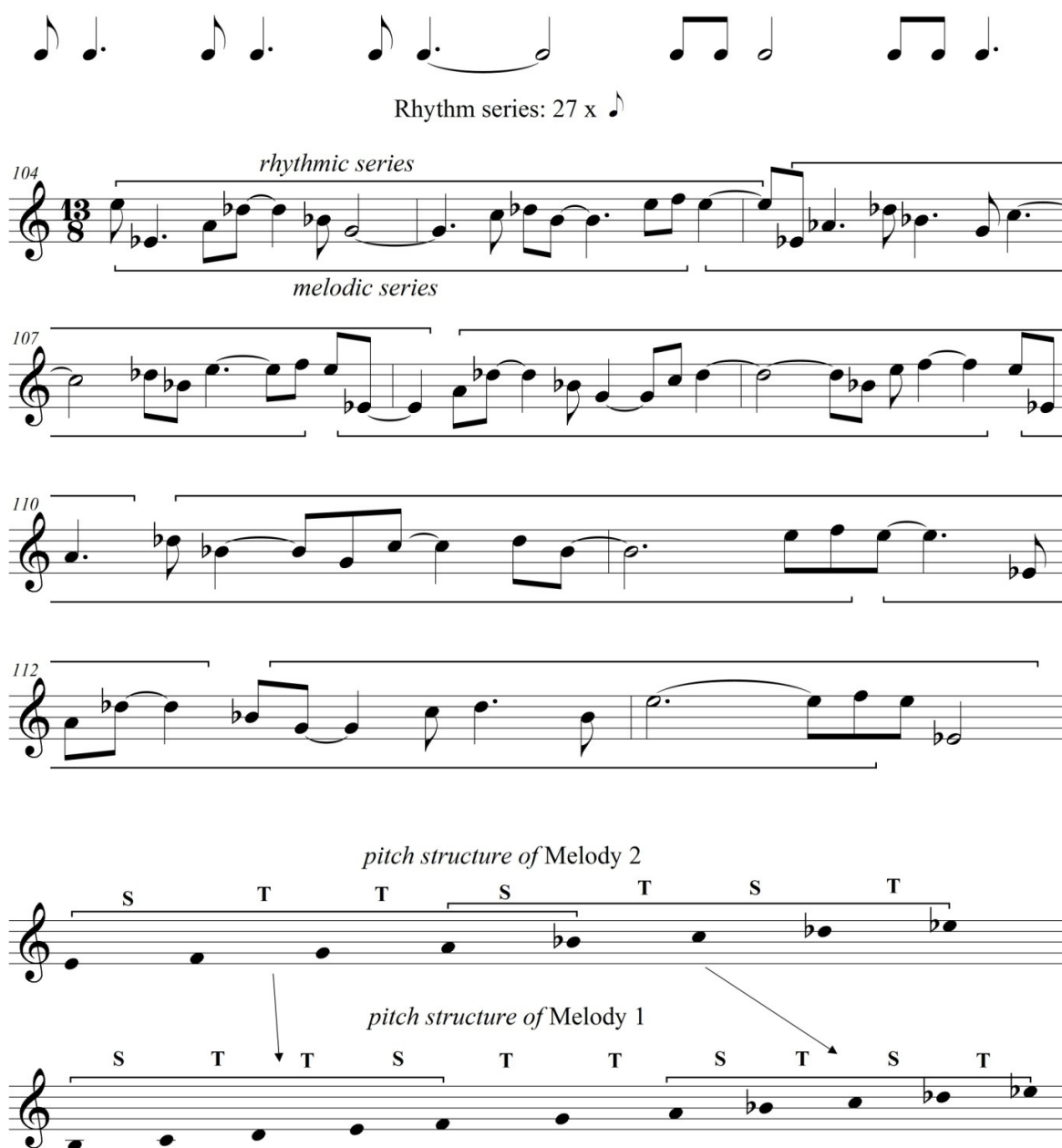**Figure 2.7   Piano Solo at letter D**   **3/3**

At this mid point in the work, the tempo is halted altogether for a horn cadenza which responds to the motion, atmosphere and drama of the work thus far. The material given for the horn to explore is derived exclusively from the 'bass-series' of seven notes. The role of the cadenza is to provide a contrast to the inexorable progression of the 13/8 rhythms, and to showcase both the range and tonal potential of the French Horn. The parameters of this improvisation employ two separate groups of pitches, with the aim of an internal dialogue being developed by the player, with pedal notes being interpolated at will.

The next section of development (**E**[1]) starts with a dialogue of the opening fanfare material between the sax and trumpet, punctuated by trichord combinations against a continuing horn melody based on the bass series. The main new element of this section however is a melody introduced gradually by piano from bar 97. The whole theme or "melody 2" is stated at bars 100–101, and begins an isorhythmic rotation at bar 104, similar to the bass line behind the piano solo at letter D. In this instance, the eleven melodic notes rotate around a rhythm which contains twelve notes, and lasts 27 quavers (see figure 2.8). When rearranged, melody 2's eight different pitches have an intervallic structure which looks like a collapsed version of Melody 1. Their relationship is shown at the bottom of figure 2.8.

In contrast to this mechanical process, the harmonic background proceeds to recognisable tonal triads in a freeing up of the pitch system used to this point. This loosening could be interpreted as a yearning to escape the indefatigable processes expressed by the music.

Rhythm series: 27 x ♪

Figure 2.8 Melody 2 isorhythm, showing rhythmic series (top brackets) and melodic series (bottom brackets) and pitch structure related to Melody 1

Such an escape is perhaps realised in a return of the first melody in augmentation at bar 125. At this point this melody is invested with the task of bringing together the trichordal elements in a moment of agreement, offering a possible 'solution' in the scheme of the piece's struggle. This unity occurs in the chorale section **C**, which recapitulates melody 1 in augmentation, harmonised with trichord material. The trichord labels used here are those from figure 2.1.

Figure 2.9 Trichord harmonisation of Melody 1

At letter G, this recapitulation of the fanfare trichords continues with the drum groove and bass-series, melody I being developed as a type of obbligato in the piano, climbing higher in range. At letter H, a moment of repose and serenity is reached, with a relaxing of the tempo. The material used is mostly from the horn pitch collection, gently chimed by the piano in a high register. Against this the horn is at liberty to sound soft, sustained notes, with occasional pedal notes from the bass using four of its series. This section is intended to depict the serenity of the stratosphere, far from humankind's activities.

A recapitulation of the trichord fanfare, bass-series and melody 1 follows at bar 156, with melody 2 joining at bar 162. A second chorale **C**[1] follows as a sort of postlude. The inspiration for this section comes from Stravinsky's own use of slow moving chorales to close works such as the *Symphonies of Wind Instruments* and *Requiem Canticles*. In *Emission Impossible*, the chords in this chorale are aggregates of two or three trichords, ending on a chord of white notes, a symbol of 'hope' for the future.

Reflecting on Issues of Form and Technique

This work is one of the first in this composer's output to employ a synthetic tonal system using techniques inspired by some aspects of atonal and twelve tone writing. These techniques, combined with the author's choice of tonal materials resulted in sonorities which could belong to modern jazz, as much as serial music. Although it has specific themes such as the fanfare trichords and melodies 1 and 2, much of the passage work is written in a quasi-improvisational style, so that many of the motifs and gestures appear once and disappear—their main unifying aspect being the shared tonal material, gleaned horizontally and vertically from the trichords, the bass series or either of the two melodies.

Overall, *Emission Impossible* moves from the use of fairly rigorous tonal and rhythmic processes, to a more organic construction, accommodating improvised input and intuitively conceived harmony. The emerging characteristic in the compositional style is one that sees the combination of contemporary art music textures and processes with a more intuitive, improvisatory perspective, creating an environment which is receptive to the improvised contributions of others.

Chapter Three   Deconstructing Jazz Rhythm: Back to the Ranch –

G.W. Bush's Farewell Dance

Back to the Ranch: G. W. Bush's Farewell Dance, written for saxophone quartet in 2009 and lasting about 8 minutes, 30 seconds, was recorded on 7 December 2011 with the composer on soprano saxophone, Richard Maegraith on alto, Tim Clarkson on tenor and Nick Bowd on baritone.

Genesis of Title

The work resulted from a desire to experiment with odd time signatures within a jazz-swing idiom. The results had an awkward, jolting effect which could be exploited to suggest humour and confusion. The first idea to receive this treatment was an archetypical "cowboy" bass-riff. Its stumbling rhythms and a disorienting texture resulting from phased rhythms suggested parallels with the perceived characteristics of past U.S. president George W. Bush. The composition developed into the idea of a parody country blues, with variations representing various character traits, figures of speech and movements of the president in a light-hearted satire.

The political theme is developed further with the eventual introduction of a contrasting melody evoking the optimism inspired by the incoming president, Barak Obama. This is given a different archetypical treatment—that of a gospel-choir setting. This theme is derived from the same material as the country blues, pointing perhaps to a certain irony inherent in the political process (see figure 3.3 below).

Techniques and Influences

The principal areas of exploration relate to style, texture and rhythm as follows:

- The styles or techniques referenced in *Back to the Ranch* include jazz, cowboy music, gospel, and an acoustical imitation of sampling or looping.
- Texturally the piece explores the technique of rhythmic clustering: simultaneous statements of the same material out of phase, as well as augmentation, diminution and distortion of the same material.
- Rhythmic techniques involve the distortion of jazz swing rhythms, through truncation or elongation of the pulse, as well as displacement of archetypal swing rhythms. This is achieved via the notation of 4/4 swing time in 12/8, with different

rhythmic values cut off from time to time, giving the impression initially of accented anticipation, and ultimately leading to a feeling of 'tripping up' as the new pulse is established.

Stylistically, *Back to the Ranch* is a dialogue between the standard jazz form of melody/ improvised solo/ melody reprise, and other idioms such as gospel and contemporary classical. The jazz form becomes subsumed within the larger scale structure which provides a different perspective on the material, as well as introducing contrasting stylistic and textural elements. The improvised elements are in a jazz idiom, and offer an opportunity for the soloists to engage with the rhythmic techniques of deconstruction.

Background study at the time of writing the piece includes examination of a number of Ligeti's compositions and a large back catalogue of Anthony Braxton's work. An interest in Ligeti's construction of textures out of layered statements of multiple variants of a musical line, as well as his obsession with clocks ticking at different speeds informs several sections of *Back to the Ranch*. Braxton's use of humour, parody and deconstruction of familiar styles were also influences.

The piece is an exploration of deconstruction and distortion of jazz swing rhythms. Swing denotes a method of rhythmic propulsion of the beat as well as the uneven subdivision of the beat, in jazz and blues music. Like many other aspects of jazz, swing is a combination of African and Western musical influences. Although its exact rhythmic proportions are hard to define[23], the first part of the beat is generally longer than the second. If one had to quantize a bar of quavers in 4/4 swing, it could be notated as:

Figure 3.1 Swing rhythm expressed in triplets

Back to the Ranch plays with the listener's expectation of perceived accented antici-pations and syncopations within the conventions of jazz swing phrasing. A common

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[23] For a scientific examination of swing rhythms, see Kenneth A. Lindsay and Peter R. Nordquist, *A technical look at swing rhythm in music*, http://www.tlafx.com/jasa06_1g.pdf (accessed 3 June 2012).

device is the conversion of expected off beats into on beats in the manner of *L'Histoire du Soldat*:

Figure 3.2 Shifting of barlines to change rhythmic emphasis in *Back to the Ranch*

Pitch Content

Three closely related melodic cells form the basis of most of the material in *Back to the Ranch*:

- A downward moving pentatonic gesture, representing the "G.W. Bush" theme
- An upward moving cell derived from the retrograde of the first four notes of the "Bush" theme, with the last minor third diad from that theme added to form the outline of a dominant 7th chord ("Obama" theme)
- A country swing bass-riff also outlining a dominant 7th chord

Figure 3.3   Pitch Relationships of main themes in *Back to the Ranch*

The circled part of the bass-riff bears a close intervallic resemblance to the first part of the Obama theme, differing only in its minor third interval. These notes are derived from a tone/semitone set which forms the basis of much of the rhythmic cluster material and the pitch structure of the interlude, discussed below.

Role of Improvisation

As in *Emission Impossible*, the main role of improvisation in *Back to the Ranch* is to provide an opportunity for spontaneous personal reaction to events in the written sections. Improvising musicians are generally interested to find new ways to engage and stimulate their creativity. The tenor saxophonist is given three cycles of the harmonic progression from the main theme in which to construct an improvisation. Although this follows the convention of a traditional jazz solo, it is distorted by the frequently moving ground of changing time signatures. The sixteen bar harmonic progression bears similarity to the twelve bar blues in its use of dominant seventh harmonies, four bar phrases and its gravitation to chord IV^7. The twelfth bar (Ab7 Db7) can be interpreted as a substitute for the role of the V^7 chord (C7) in bar nine of a traditional blues.

It was anticipated that the constantly changing time signatures during the tenor saxophone solo might trip the performer up, resulting in some interesting, inadvertent cross – bar phrasing: in the instance of this recording however, the player had studied the rhythmic structure so well that his melodic and rhythmic course followed the progression faultlessly. This admirable performance is not a fault, but it does demonstrate the impossibility of predicting an improviser's response to a set challenge.

The soprano saxophone improvisation from letter G is intended to have more of a theatrical component, expressed in the score with directions such as "look annoyed", "push on" , "express frustration", and "go haywire …". These instructions indicate that the role of improvisation at this point is to push the emotional climate of the piece to a level of intolerance of the status quo, symbolized by the senselessly repetitive accompaniment. An excerpt from this improvisation demonstrates the performer's reaction to the mechanical repetition of the accompaniment.

Figure 3.4 *Back to the Ranch* **– soprano sax solo (excerpt)**

The insistent arpeggios phase across the changing time signatures, resulting in the same accented top notes appearing in different parts of the beat. As the accompaniment continues, the improvisation becomes more rhythmically erratic as it heads towards total dissolution (see figure 3.4).

Whilst neither improvisation has any significant affect on the structure of the piece, both provide an engaging and spontaneous reaction to the rhythmic environment, as well as reinforcing the dramatic concepts being explored in the written composition.

Structural Plan/Techniques

Table 3.1 lays out the structure of *Back to the Ranch*, including a summary of the rhythmic techniques employed, dominant themes and key areas.

Rhythm: phased	Additive/subtractive					Phased/ Aug/dimin.
Intro: rhythmic cluster	'Bush' theme + cowboy bass line	Repeat 'Bush' + bass line	Tenor sax solo – chorus I (walking bass line)	Solo chorus II (sparse accomp)	Solo chorus III (6/4)	Interlude: rhythmic cluster
Db	F	F	F	F	F	Db cluster
Bar 1–4	5–20	21–35	36–51	52–67	68–83	84–95

Subtractive/ additive Fractured (stuck)	Metric modulation	stable	subtrac-tive	dislocated	dislocated	subtractive
Sop sax solo: form dissolution	'Bush' + 'Obama' themes	'Obama' gospel section	Bass line return	'Obama' theme on bass line	Repeat with polytonal harmonis-ation	Anticlimax – both themes 'agree to disagree'
F - Db (octatonic)	Db octatonic – Ab/E	Ab D, B, F	F	polytonal	polytonal	C and F/ Ab
96–130	131 –147	148–176	177–182	183 – 194	195 – 210	211 – 223

Table 3.1   Formal Layout in *Back to the Ranch*

Multiple Speeds: The Rhythmic Cluster

The presentation of the 'Bush' theme and the subsequent tenor sax solo are framed by sections using a form of rhythmic cluster. Created from displaced forms of the basic crotchet/quaver swing rhythm, the rhythmic cluster represents the concept of confusion, analogous to standing in a hall of distorting mirrors. This texture could be interpreted as a depiction of G. W. Bush's state of indecision, when faced with critical issues. In the second of these sections, the analogy is carried further, with each instrument presenting the material at a different speed. (See figure 3.5)

Figure 3.5 Multiple speed rhythms in Back to the Ranch

The pitch material of these sections is derived from a cluster of several three note groups, each with the tone/semitone subset of the bass-riff. In the interlude at bar 84, these tone/semitone clusters gradually separate from each other, making way for a return to tonality (see figure 3.6).

The resolution of the cluster texture heralds what looks like a return to the Bush melody accompaniment for the soprano saxophone improvisation. What transpires, however, is a section of unpredictable truncations, elongations and repetitions of the accompaniment pattern, intended to mimic the sound of a record stuck in a groove or a CD getting stuck (see Figure 3.4).

Figure 3.6 Rhythmic and pitch cluster textures in _Back to the Ranch_   1/2

Figure 3.6 Rhythmic and pitch cluster textures in *Back to the Ranch*   2/2

The scherzando interlude which follows serves the function of metrical modulation to the new gospel tempo and of introducing the new 'Obama' theme. Metrical modulation is achieved via the regrouping of quavers within 12/8 to give a slower 3/2 pulse – a technique explored in more detail in the *Terrain Suite* (see chapter 4). Superimpositions of 12/8 and 3/2 occur in bars 135, 139 and 142. In terms of pitch

content, the interlude commences with an octatonic[24] tonality derived from the preceding six bars of bass line which is itself based on the tone/semitone feature of the bass-riff. From bar 136, the tone/semitone shape opens out to tone/tone, and the new 'Obama' theme grows out of this new A♭ tonality, against iterations of the Bush theme in E.

When the Obama theme asserts its dominance in the gospel section at letter I, A♭ is established as the new key, rapidly embracing D and B as the theme ascends in register, symbolizing an atmosphere of optimism and willingness for change. The gospel archetype is reinforced by the frequent use of plagal cadences and melodic ornamentation. The peak of the gospel section's cadential gestures from 167–175 sees a shift to a final cadence in F major, heralding in the irony of the original bass-riff.

The following section (letter K) is a recapitulation of the original 'cowboy music' bass progression in F, but it accompanies the Obama theme (in A♭) in place of the original Bush theme. Both elements are alternately rhythmically displaced, undermining any sense of regular pulse. In the second half of this section, parallel harmonies extend the polytonality of the texture, in a parody of the gospel setting. A possible programmatic interpretation of this section may relate to the political process of compromise, deal making, as well as public spin campaigns, and propaganda. It is worth noting that all of the themes stated retain their original shape: their main transformation occurs in their juxtaposition into new settings and stylistic surroundings.

The coda at letter M is a sudden anticlimax, summing up the similarities of the themes, pointing perhaps to the irony of the seeming fruitlessness of the political process. The two themes join in a weak and uneasy coexistence.

Closing Thoughts

Back to the Ranch continues and extends the study of rhythmic concepts initiated in *Emission Impossible.* Specifically it examines jazz rhythm through the use of parody and distortion. Another technique developed in this piece is the concept of 'rhythmic clustering', whereby material is presented simultaneously at multiple metrically-related speeds.

The eclectic use of style and genre are a means of producing a dramatic narrative, whilst also providing different techniques of thematic treatment. Some of the processes

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[24] See Appendix I – Intervallic Construction of Modes.

of jazz are highlighted by positioning them within a broader stylistic context and by using methods of deconstruction. The contribution of jazz-improvisation also helps to illuminate the rhythmic concepts, in the improvisers' reactions to the techniques of distortion in real time. They also contribute a level of complexity that would be difficult to notate.

Chapter Four   Layering, Cross-Referencing and Cyclic Form:

Across the Top

The major work in this portfolio is a suite in three movements for bass clarinet (doubling soprano saxophone), string quartet and double bass, with an approximate duration of twenty five minutes. The wind and double bass parts call for improvising musicians, while the string quartet parts can be played by non-improvisers, but they also have scope for improvisation. The inspiration to write for this combination came from the John Surman album *Coruscating*, for the same forces. As Surman himself notes, "the double-bass would operate both as part of the string group and as an independent improvising voice".[25] One aim in writing the present work was to expand on the format used by Surman by increasing the structural and developmental significance of the material given to the string quartet.

The main themes were conceived over four years before the main suite was written, the initial ideas coming during a seven week tour with the MARA! ensemble for Musica Viva, labelled *Across the Top.* This tour took the group from Perth, West Australia, north through the Pilbara and Kimberley regions, into the Northern Territory, then over to Cairns and down the East Coast of Australia.

The initial *Gibb River Road* theme was notated first: its wandering chromatic 12/8 melody seemed evocative of the land in North West Australia and its name was inspired by a journey to perform for a remote community some hundreds of kilometres along the dirt Gibb River Road. The imposing cliffs, ancient ranges, wide plains and lush gorges served as memorable images when it came to finally developing the ideas which were composed at this time. The theme, in figure 4.1 reveals its interrelationships, and its modal inferences.

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[25] liner notes to John Surman, *Coruscating*, (ECM 1702, 2000).

Figure 4.1 Gibb River Road Theme and Motivic Breakdown

The next compositional idea involved writing two counter melodies to the *Gibb River Road* theme. The purpose of this counterpoint was to establish a polymeter by dividing the 12/8 into different rhythmic groupings to achieve 6/4 and 3/2. This technique is briefly explored in the rhythmic modulation of *Back to the Ranch* and can first be

detected in the 1984 *Oboe quartet* (see appendix II). It can be seen from figure 4.2 that all three themes are essentially cut from the same cloth, while retaining some individual characteristics of style, rhythm and intervallic progression.

Figure 4.2 *Across the Top* **main themes** 1/2

Figure 4.2 *Across the Top* main themes   2/2

Faced with the challenge of exploring the motivic structure and interrelationships of the three themes, a decision was made to attempt a work on a scale large enough to accommodate their development. The ultimate goal of this work would be the simultaneous presentation of all three themes. An early incarnation of this work was written for the improvisers' ensemble GEST8, followed by sketches for a bass clarinet

concerto employing the same themes. Four years later, the decision was made to settle on a suite for the ensemble described above.

The three movements of *Across the Top* each feature one theme as its main material for development. As the suite progresses however, these themes are juxtaposed or interpolated, with a complete simultaneous presentation of all three achieved towards the end of the third movement. Table 4.1 shows the basic scheme of the suite in terms of its focus on each theme.

I Gibb River Road			II Lost Souls			III Reconcile			
A C A			B [C B] {A C B} (veiled)		C {A B C} (veiled)	A C {A B C} (complete)			C

Theme Labels:	A	Gibb River Road	12/8
	B	Lost Souls	6/4
	C	Reconcile	3/2

Table 4.1 *Across the Top* **Suite Overview**

Performance Practice, Collaboration and Writing for Strings

A major focus in the composition of the suite was the assimilation of idiomatic string writing techniques, in particular an increased awareness of fingering systems and string usage on each instrument. The rehearsal process proved extremely productive, with members of the ensemble contributing valuable suggestions to help with practicalities of ensemble, multiple stopping, and other performance practice issues. The string quartet *The NOISE* has the distinction among Australian string quartets of specialising in improvisation. To this end, the players approached the performance from an engaged and collaborative stance, leading to some organic and integrated improvisation sections not planned during the composition process. The success of these sections was in no small measure due to the degree of familiarity the group had with various elements of the written composition, following several rehearsals. This willingness to expand the written movements with improvised sections encouraged the scheduling of a concert for the New Music Network, in which the three movements were interspersed with improvised interludes focusing on different facets of the style and material of the work.

What follows is a brief description of the style, techniques of development and form, and use of improvisation in each movement.

Gibb River Road

The melody for the *Gibb River Road* movement is seventeen bars long and contains a myriad of intervals, rhythms and motivic shapes ripe for development. Figure 4.1 (above) identifies a number of frequently occurring intervallic cells in the theme. It also shows a number of modes referenced by the melody, which serve as points of departure for the bass clarinet improvisation and string backgrounds at letter B and C. In the second part of the melody these modal references give way to a fluid chromatic motion, featuring expanding intervals, before reaching the E tonal goal hinted at throughout the first part of the melody[26]. One parameter observed when writing this melody was to remain within the almost two octave chalumeau register of the bass clarinet.

Of the modal implications in the melody, the hijaz scale[27] is perhaps the most evocative of the idea of travelling in the Australian outback: this mode has strong associations with Middle Eastern music, conjuring up images of the desert and wandering. As already noted, the modal flavour changes frequently as the melody progresses, suggesting an analogy with the variety of colours of the landscape. The fact that this often takes place against a static E tonality could reflect many things: the constant redness of the soil, a sense of timelessness of a land which has slowly eroded from ancient mountain ranges, and an association with Indigenous music traditions.

The 12/8 theme of this movement features a number of rhythmic motifs in addition to the pitch cells already identified (see figure 4.3). Among the rhythmic motifs identified, *a* and *c* are related by retrograde. Another feature is the variable length of the sustained notes – an element which adds to the intensity and unpredictability of the motion in the melody. It can be seen that the rhythmic motion in the melody increases towards its climax. Both the intervallic and rhythmic elements are gradually explored in the course of the piece.

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[26] This type of chromatically melodic writing can be traced back to works such as the Bassoon Concerto, 1987 (See Appendix II).

[27] See Appendix I: Intervallic Construction of Modes.

Figure 4.3 Rhythmic cells in Gibb River Road

The propulsive nature and cross-beat features of these rhythms suggested an accompaniment which complemented and reinforced this vitality. The stylistic features of the South American 'Bembe' rhythm, with its own use of cross rhythms proved a natural rhythmic counterpoint, suggestive of the motion of the four-wheel drive journey up the Gibb River Road (see figure 4.4).

Figure 4.4 Bembe rhythm

This rhythm is given to the double bass, which shoulders much of the responsibility for propelling the groove of the piece. The rhythmic cells identified in figure 4.3 are as important as the pitch cells in the development of several aspects of *Gibb River Road*:

- Accompaniment patterns of repeated chord accompaniment, e.g. at letter A, H and K;

- Textural driving rhythms in sections such as letter E and I;

- Motivic development throughout.

The melody was conceived in an intuitive, improvisational style and is quite long. As a result, systematic motivic development seemed to be an impractical way to construct the piece. The final structure was formed by alternating sections featuring improvisation with written sections which focus on different parts of the melody itself. The improvisational sections parallel the tradition of a jazz solo, where an individual is given an opportunity to contribute a personal response to the material just played. The written sections gradually recapitulate the melody, lingering at various points to focus on or develop key motifs.

Broadly speaking, the development of the *Gibb River Road* theme is broken into two parts: the first part from letter D to E addresses Section 1 of the melody; letter H and I focus on the second section. The first part continues to reference an E tonality, whereas the second part of the development starts from a subdominant position of A, and freely moves about chromatically.

Separating these two sections of development is an interlude at letter F, presenting a contrasting, slow, sustained melody. This is the first appearance of the melody which eventually features in the third movement of the suite *Reconcile*. Bridging this section and the continuing development is a rhapsodic solo 'cello statement of *Gibb River Road* section 1, functioning as a reminder of the material covered thus far.

The main difference between the first statement of the melody and its recapitulation at J concerns the dissonance of its setting: while the initial exposition is accompanied by tense clusters, glissandi and col legno bass figures, the reprise at J has a much more harmonically based accompaniment which reflects the various modes alluded to by the melody.

In addition to motivic recurrence and development, two other elements help articulate the structure of the piece: the propulsive bass line based on the *Bembe* rhythm, and a chordal tremolo texture among the string quartet. The distribution of these various elements noted are charted in table 4.2
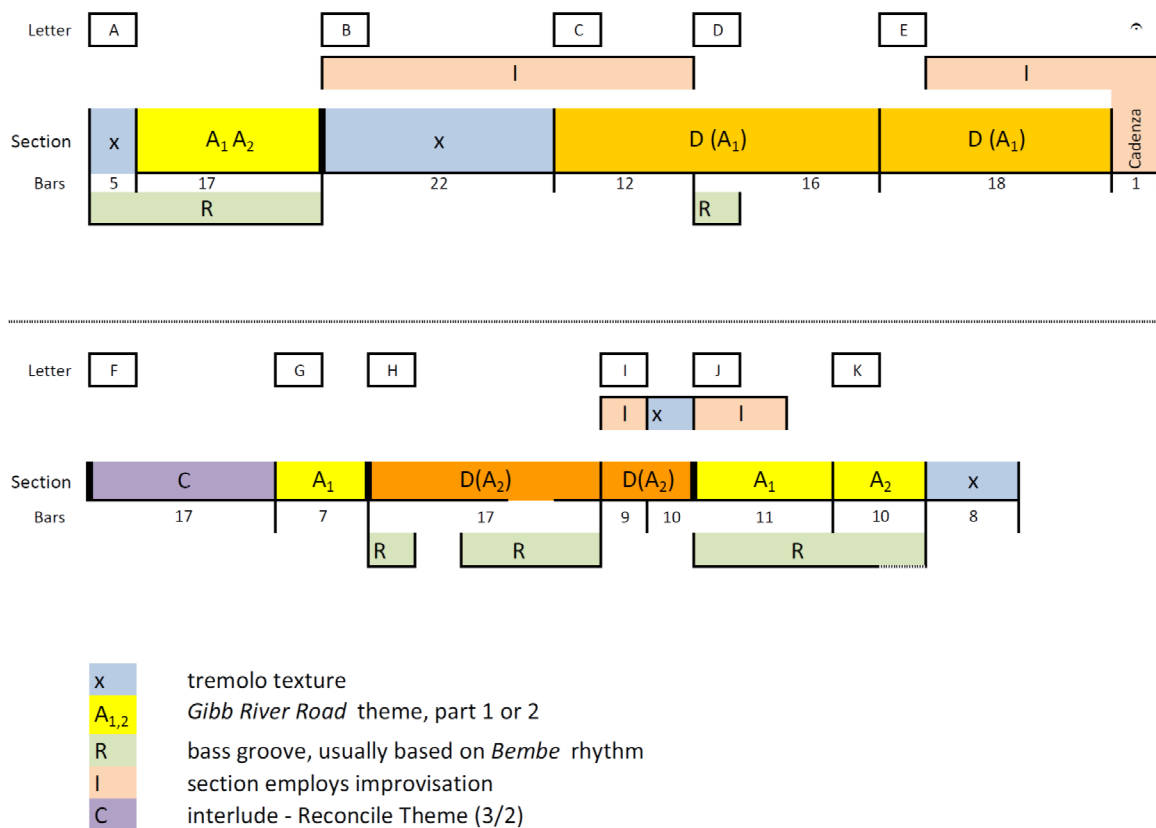
Letter: A · B · C · D · E · ⌒

Section: x | A₁ A₂ | x | D (A₁) | D (A₁) | Cadenza

I (improvisation span over B–D), I (improvisation span over E)

Bars: 5 | 17 | 22 | 12 | 16 | 18 | 1

R (bass groove under A₁ A₂), R (under D(A₁))

Letter: F · G · H · I · J · K

I | x | I

Section: C | A₁ | D(A₂) | D(A₂) | A₁ | A₂ | x

Bars: 17 | 7 | 17 | 9 | 10 | 11 | 10 | 8

R, R, R

x	tremolo texture
A₁,₂	*Gibb River Road* theme, part 1 or 2
R	bass groove, usually based on *Bembe* rhythm
I	section employs improvisation
C	interlude - Reconcile Theme (3/2)

Table 4.2 Formal overview of Gibb River Road

Role of Improvisation

The bass clarinet is mainly used in this piece as a melodic instrument, or a free agent, ornamenting the musical development with periods of improvisation. Its main episode of improvisation occurs against a texture of string tremolos at letter B, which outline various modal colours, all heard against an E root. The focus of this passage is to explore the changing modality of the main theme itself.[28] Figure 4.5 is a transcribed excerpt from the bass clarinet solo at letter B, showing its reference to the modal context, thematic references and relationship to events happening around it.

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[28] Modal improvisation is one of the principal techniques used in contemporary jazz: it involves the improviser creating a melody which is informed by a mode which reflects the prevailing harmonic and melodic environment at any moment: as the harmony changes, so does the mode. Naturally the improviser can choose to play notes outside of a given mode, but this is generally done with an awareness of what the 'home scale' is – chromatic embellishment and deliberate superimposition of dissonance are valid choices.

Figure 4.5   Gibb River Road - bass clarinet solo   **1/4**

Gibb River Road

Figure 4.5   Gibb River Road - bass clarinet solo   **2/4**

Figure 4.5   Gibb River Road - bass clarinet solo   **3/4**

Gibb River Road

Figure 4.5   Gibb River Road - bass clarinet solo   **4/4**

From letter C, the material of the string quartet is transformed from the tremolo accompaniment texture shown above, to a series of solo melodic statements derived from similar modal groups of notes as those textures, while the bass clarinet continues to

improvise. This is a period of transition which results in the string quartet assuming material of thematic prominence and motivic development at letter C, as the bass clarinet solo ends. That point also marks the bass' return to the *Bembe* groove. In this way, the use of instrumental roles and styles in *Gibb River Road* and the remainder of the suite represents perhaps the most organic integration of written and improvised music in the portfolio.

Cross – Sectional Analysis

An example of the use of the various elements described above can be seen in an extract taken from several pages of the score, towards the end of the development of A_2. As noted above, the seventeen-bar melody was conceived in an intuitive, improvisational style at odds with tight motivic construction and development, although several recurring melodic and rhythmic cells have been identified. As a result, the development of both A_1 and A_2 takes the form of a spun out recapitulation, with discreet segments being manipulated by canon, transposition, inversion, reharmonisation and juxtaposition with other elements. The current extract being analysed starts with a transposed statement of A_2, proceeding from bar 127 in inverted canon at the diminished fifth, and set against a rising bass line which is related to the *Bembe* rhythm. In bar 129 the expanding intervals of this part of the melody, played by violin 1, are stated in augmentation, while the major sixths at this point prompt a cross-reference back to bar 5 and 6 of the melody, in the bass clarinet and 'cello.

The forward progress of the melody is interrupted at this point by a block texture at letter I, centred on the A tonality with which the development of A_2 began at letter H. Against phased rhythms among the string quartet derived from the *Bembe* rhythm, the bass juxtaposes earlier fragments of A_1 in augmentation. This whole texture enters a dialogue with the expanding interval gesture, presented in a hectic imitation, ultimately halting the forward motion of the development. The bass clarinet entry at 138 is the culmination of these expanding intervals and parallels bars 12–13 of the melody (A_1), leading to a gradual calming as the theme in augmentation reaches its conclusion against the return of the tremolo (trill) textures, eventually reaffirming the tonal centre of E.

Figure 4.6 *Gibb River Road* – **Cross Section**   **1/2**

Figure 4.6 *Gibb River Road* – Cross Section   **2/2**

Lost Souls

The title, as for all works in this folio, was arrived at after completion of the composition. Although the theme was written on the *Across the Top* tour, the title *Lost* Souls does not refer to any people encountered en route, rather the wandering nature of the melody seemed to be a metaphor for the countless explorers and settlers who must have perished in the vast and unforgiving landscape. Some background reading about the history of the Kimberley revealed the story of Jandamarra, a Bunubba warrior who led an armed insurrection against the Europeans settlers in the region during the 1890s[29]. Music does not have to *be* about anything specific, but this story proved a captivating one in light of the MARA band's travels through the region in four-wheel-drives. The image of a people dispossessed of their homeland, wandering in the wilderness resonates with the sorrowful aimlessness of the 6/4 melody, while the stark energy of the 5/16 acts as a metaphor for an armed raid conducted by the Bunubba.

The main theme of this movement is labelled **B** in figure 4.2 (see above). The salient compositional techniques explored in this movement include metric modulation, polymeter, minimalism and transformation of material via parody.

Having identified this link between the music and the environment which inspired it, the other significant influence is the music of Bartók. Specific characteristics include:
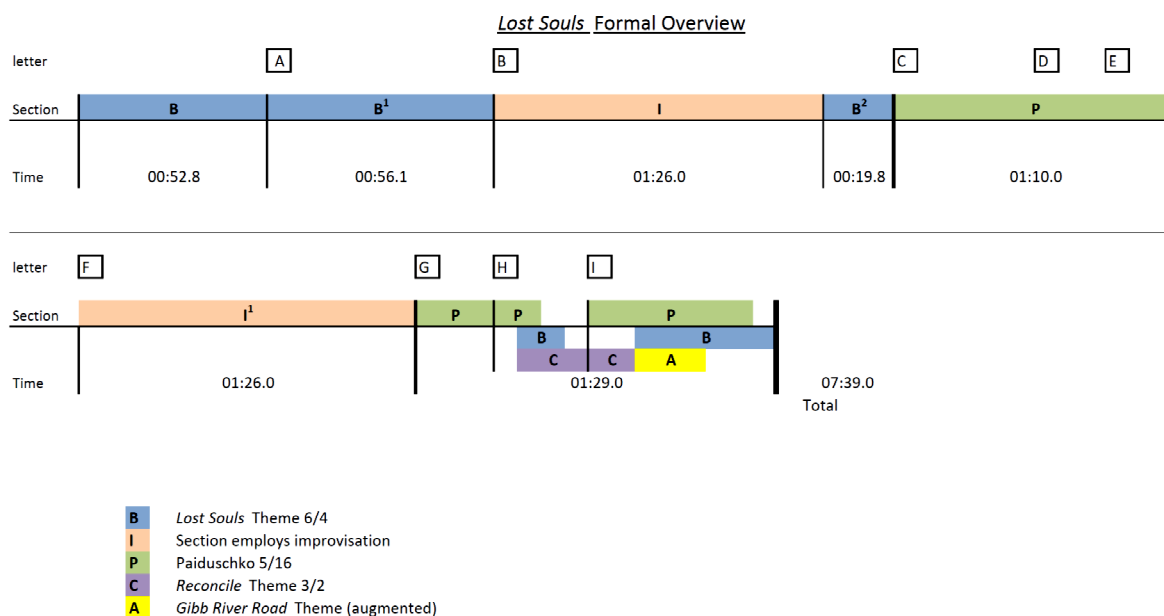
- intervallic construction, including the pitch material *r*, shown in figure 4.7
- The use of the Paiduschko, a Balkan dance rhythm
- The use of parody, similar to Bartók's treatment of themes in the fourth movement of his *Concerto for Orchestra* and the Burletta of his *Sixth String Quartet*.

The tempo plan of this movement was modelled upon the slow movement form used by Bartók in the second movement of his Second Piano Concerto: slow, fast, slow. In *Lost Souls* the low strings are featured in the slow 6/4 section, the viola presenting the main melody **B**. Some rhythms and melodic turns in this melody have characteristics of the Renaissance Galliard dance. The fast section **P** which follows represents a central scherzo section, employing the Bulgarian Paiduschko 5/16 rhythm, and featuring a section

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[29] "Kimberley (Western Australia)", *Wikipedia, the free encyclopedia*, http://en.wikipedia.org/wiki/Kimberley_%28Western_Australia%29 (accessed 10 May 2012).

of improvisation. Unlike the Bartók cited above, this movement avoids a literal return to the slow 6/4, leading instead to a layered, polyrhythmic section combining that theme with continuing elements of the Paiduschko, as well as appearances of the *Reconcile* and *Gibb River Road* themes. These cyclic elements are left unresolved at the end of the movement, positioning it in a transitory role, between the first and final movements (see table 4.3).

Apart from the Balkan dance rhythms and layering elements, *Lost Souls* features a technique of accompaniment for the improvised solo section, in which each player progresses through a series of small repeated fragments at their own pace, much in the manner of Terry Riley's *In C*. This creates a flexible and unpredictable rhythmic and harmonic background for the soloist to interact with.

Lost Souls Formal Overview

letter			A		B				C		D	E
Section	B		B¹		I				B²	P		
Time	00:52.8		00:56.1		01:26.0				00:19.8	01:10.0		

letter	F			G	H		I				
Section	I¹			P	P		P				
					B			B			
					C	C	A				
Time	01:26.0				01:29.0				07:39.0 Total		

B	*Lost Souls* Theme 6/4
I	Section employs improvisation
P	Paiduschko 5/16
C	*Reconcile* Theme 3/2
A	*Gibb River Road* Theme (augmented)

Phrase structure of Paiduschko P

Section	s	p	p	q	p	q	r	p¹	q	r¹	p²	q	s
Bars	4	8	8	4	4	4	4	18	4	3	16	4	4

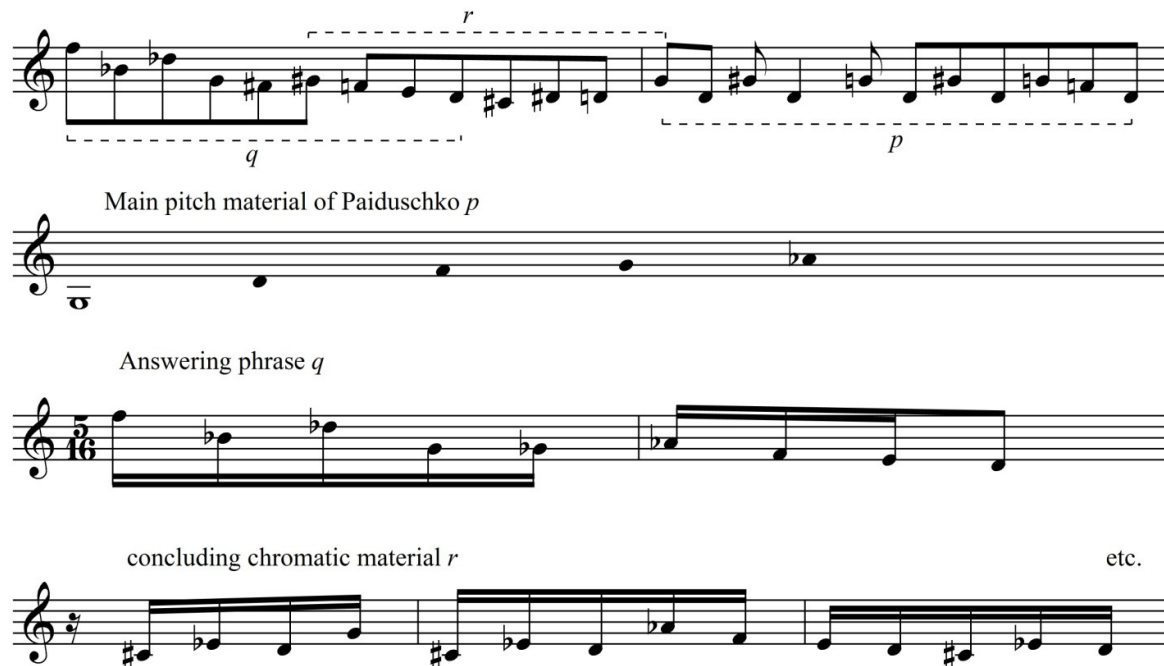|	
s	stamping rhythm
p	main melodic material of Paiduschko melody
q	answering phrase
r	concluding chromatic material

Table 4.3 Structure and sub-sectional breakdown in *Lost Souls*

In broad terms, the tonal structure of *Lost Souls* moves from the same E tonality affirmed in the previous movement, to a G tonal centre for the 5/16 Paiduschko, reaffirming E for the multilayered final section. The central section takes its basic tonal

material from the final bar of the 6/4 theme. This pitch collection (*p*), shown in figure
4.11, equates to the first four notes of a D blues scale[30], but is used here in the context of
a G tonality, with the other notes forming intervals of a perfect fifth, minor seventh,
minor ninth and no third, affording the tonality a stark openness.

      The other pitch elements in this section are also derived from the second last bar
of the 6/4 melody and form two contrasting elements: a descending Bb major/minor
figure (*q*), which serves to interrupt the progress of the main melody, and a chromatically
winding figure (*r*), which ends phrases or bridges new sections.

Figure 4.7 Derivation of *Paiduschko* pitch material from B

      Several motivic cells in *Lost Souls* use a similar intervallic tendency found widely in
Bartók's music (see figure 4.8)

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[30] See Appendix 1: Intervallic Construction of Modes.

Music for String Instruments, Percussion and Celesta [32]

Vla. **I.** Bars 3-4

String Quartet No. 6 [33]

Vc. **I.** Bars 198-200

String Quartet No. 5 [34]

Vc. **I.** Bar 51

un poco piu espress.

Lost Souls, bar 15

Vla.

Lost Souls, bar 187

Vl. 2

leggiero   *crazy exaggerated expression*

Figure 4.8 Influence of Bartók in intervallic construction

The presentation of themes in *Lost Souls* ranges from relatively simple whole statements of the main theme **B**, through the more motivic construction in the *Paiduschko* section **P**, to a complex recapitulation featuring metric modulation, polymeter and layering in the final section. The metric relationship of the various elements is shown in figure 4.9.

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[31] Béla Bartók, *Musik für Saiteninstrumente, Schlagzeug und Celesta* (Wien: Universal Edition, 1937).

[32] Béla Bartók, *String Quartet no. 6* (London: Boosey & Hawkes, 1941).

[33] Béla Bartók, *Streichquartett V* (Wien: Universal Edition, 1936).

Figure 4.9 Metric Modulation and Relationships in _Lost Souls_

The polymeter just mentioned is the result of a confluence of the movement's main themes, with interruptions from the _Reconcile_ main theme **C** and a return of the _Gibb River Road_ theme **A**. From bar 170 the 5/16 _Paiduschko_ pitch cell _p_ acquires an extra note E to provide a tonal background for the recapitulation of the main 6/4 theme **B**. The **C** theme takes precedence from bars 181–184, establishing a calmer, chorale-like texture, until a crude version of the Paiduschko returns in a Bb tonality, a tritone away from the original E, prompting a parodied version of the **C** melody on the soprano saxophone and violin at letter I. By bar 187, the Paiduschko material has assimilated the _c+_ motif common to both _Lost Souls_ and _Gibb River Road_ (refer to figure 4.2), and morphed into the _Gibb River Road_ theme itself. This melody is layered on top of the resumed

recapitulation of the *Lost Souls* theme **B**, both taking over from the **C** theme. Even a fragment of the *Bembe* bass line from *Gibb River Road* punctuates the texture in the final seven bars.

The significance of the chaotic combination and jostling among all these elements is perhaps one of dramatic development—the pacifying intention of the appearance of **C** from bar 177 actually sparks the opposite reaction— that of disturbing a whole hornet's nest of themes and motivic associations. These play out as the main **B** theme continues to be stated by the 'cello, each element fading from the texture as **B** draws to a close.

The final chord of *Lost Souls* becomes a significant signpost at key points of the following movement *Reconcile*. Although its composition can be interpreted in numerous ways, its appearance here is a reference to both the E and G tonalities used during the movement. Other interpretations are shown in figure 4.10.

Figure 4.10 *Lost Souls* – 'Mystery' Chord and interpretations

Reconcile

This same chord, voiced as a cluster, starts the final movement *Reconcile*. Forming a background to an improvised double bass cadenza, the chord is symbolic of an atmosphere of mystery felt by the composer during travels through the Pilbara and Kimberley regions. It also acts as a generative pitch collection for the start of the 3/2 *Reconcile* melody, and appears at key points during the movement to act as a marker or catalyst for some new development. The main melody, marked **C** in figures 4.2 and 4.3, was heard briefly in both of the first two movements, and becomes the dominant theme in this movement.

Key Features

The decision to end the suite with a slow, sustained movement was modelled on the order of tempi in Bartók's Second String Quartet, which also ends with a slow movement. If *Lost Souls* shows characteristics of the Galliard dance, *Reconcile* could be seen as a form of Sarabande: its main theme required a tempo which allowed for sustained mood and reflection. It is the most diatonic of the three main themes in character, making ambiguous allusions to several tonal centres and modes[34] (see figure 4.11).

The main thrust of this movement is the bringing together of all three movements' themes, in a way that highlights both their similarities and differences. A sense of mystery in keeping with the introductory chord pervades the whole movement, while the theme of reconciliation is developed through the tonal realisation of various motifs previously allied to tension, dissonance and forward motion. A sense of Romanticism is explored through the use of chromatic harmony, while an extended passage for the two violins evokes the style of a Bach Partita.

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[34] The number of notes in this melody was deliberately limited to thirteen, in order to be playable on the koto of Satsuki Odamura, member of the contemporary improvisers' ensemble *GEST8*, led by Sandy Evans and Tony Gorman. An earlier composition (*Just Ate*) using all three melodies from this suite was written for this band.

Figure 4.11 Tonal References in Reconcile Melody

Improvisation is used sparingly in this movement as a means to provide moments of reflection, with the use of short cadenzas at key points. Development is less of a process of motivic evolution, than one of cross-referencing similar fragments of each theme, building the sort of connections which serve to resolve the tension between them. To this end, the tonal potential of various motifs is explored, particularly some from the *Gibb River Road* theme **A**.

Formal Overview

The structural shape of *Reconcile* is a combination of rondo and variation forms. Table 4.4 shows how successive settings of the *Reconcile* theme **C** are alternated with two episodes which present all three movements' main themes: in the first instance these themes are only partially revealed, whereas the second layered presentation is complete. The central part of the movement refers back to several key parts of the *Gibb River Road* melody **A**, which are developed in the context of this slow tempo and 3/2 time signature. These transformed elements then form an accompaniment for the next **C** melody appearance.
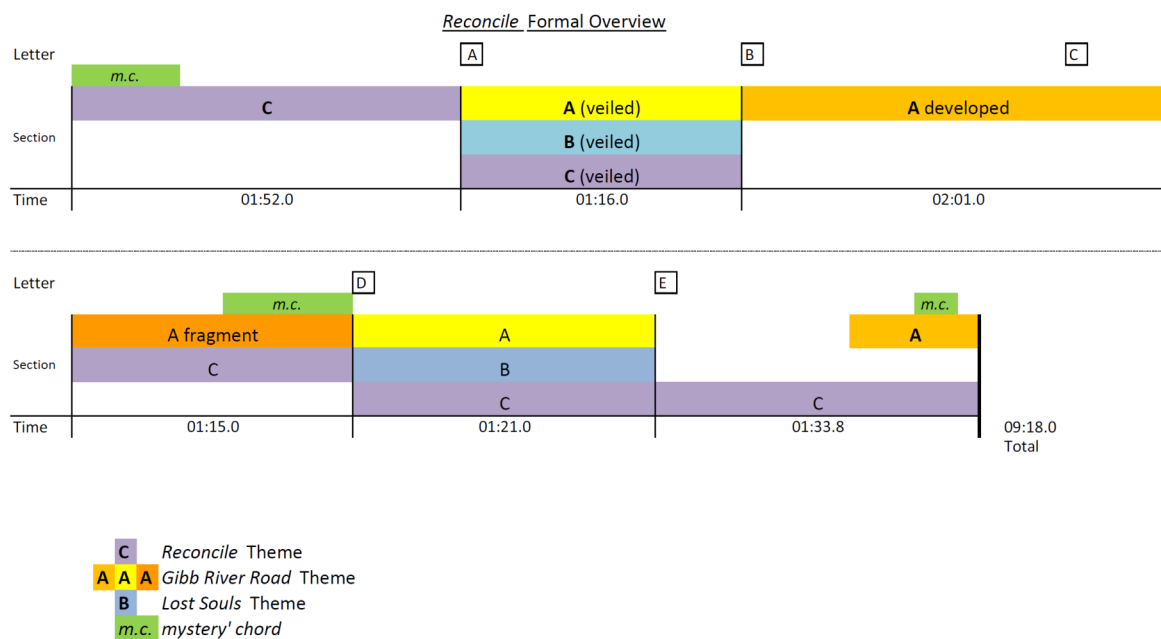
Reconcile Formal Overview

Letter		A	B	C
Section	*m.c.* C	A (veiled) / B (veiled) / C (veiled)		A developed
Time	01:52.0	01:16.0		02:01.0

Letter	D	E		
Section	A fragment / C (*m.c.*)	A / B / C	C	A (*m.c.*)
Time	01:15.0	01:21.0	01:33.8	09:18.0 Total

Legend:
C *Reconcile* Theme
A A A *Gibb River Road* Theme
B *Lost Souls* Theme
m.c. mystery' chord

Table 4.4 *Reconcile* Form

The development of **A** focuses on the second part of that melody, which features a searching chromaticism, culminating in a gesture of expanding intervals. From bar 36 – 44, these elements are layered against each other, with interpolations of earlier parts of the **A** melody, their common factor being the interval of a minor 6th. In this section, the expanding interval gesture mutates from the original melody, to encompass a minor 10th, making possible a series of tonal cadences and modulations (see figure 4.12).

The simultaneous presentation of the **A**, **B**, and **C** melodies at letter D was the intended *raison d'être* for the whole three movement *Across the Top* suite. But rather than representing the high point of the work, this section has an anticlimactic atmosphere, with the pizzicato setting depriving many of the sustained notes of their duration, thereby reducing the effect of both the harmonic and rhythmic tensions inherent in their juxtaposition. All three themes are presented within the context of the prevailing 3/2, with accents serving to affirm each melody's original time signature. The sense of enigma created by this setting is prepared by an appearance at bar 72 of the *mystery chord* which commenced the movement. The pizzicato scale passage which follows in the violins and viola from bar 74 represents a horizontal prolongation of the *mystery chord*, with each line eventually morphing into one of the main themes.

Figure 4.12 Transformation of *Gibb River Road* material in *Reconcile*

The final occurrence of **C** spans three octaves of the bass clarinet's tessitura, in a setting which features imitative writing and a return to the tremolo texture of *Gibb River Road* in the accompaniment. Here, as elsewhere, harmony has been conceived in an intuitive reaction to the melodic shapes of the prevailing theme(s). Its emotional expressiveness is emphasised by use of chromatic voice leading. The last five bars recall

elements of **A**, as well as the *mystery chord*, leading to a final reconciliation of these cyclic elements.

Evaluation of Techniques and Structure in *Across the Top*

Despite the length and wandering, intuitive nature of the three themes explored in *Across the Top*, a sense of cohesion has been demonstrated in their derivation of material from shared pitch and rhythmic motives. Links between the different melodies in the suite are formed through processes of cross-referencing, enabling a free and rhapsodic method of thematic development, more closely allied to the spirit of improvisation.

Harmonic concepts in the suite embrace both the modal associations of the main themes and techniques of chromatic voice-leading, also gleaned from the wandering nature of those melodies. Harmonic progression is intuitively conceived, at times resulting from contrapuntal processes and at others borrowing from jazz harmony.

Across the Top integrates world music influences to allude to ancient civilizations and a primal relationship with the land. Improvisation is harnessed to further explore the modal implications of the themes and to add a fresh reaction to the written structures in performance, ensuring that each performance is unique.

Conclusion

This folio of compositions is the result of a desire to bring together two worlds of music-making within the composer's experience: contemporary art music, with its kaleidoscopic variety of techniques and styles, and improvisation, covering a seemingly inexhaustible range of idioms and approaches. One result of integrating the unique aesthetic and technical potential of improvisation has been to help contribute structural subtlety and detail to compositions with carefully determined form. Another is that the formal and technical concepts explored in each of the pieces inspired improvisers to conceive music that may not have been otherwise imagined.

Primary stylistic characteristics that help define the compositional language include:

- A fascination with a variety of rhythmic techniques, including:
    - odd time signatures derived from dance rhythms of the Balkans;
    - metric modulation and the presentation of material at different related speeds;
    - additive and subtractive rhythms, serving to displace expected accents and downbeats;
- The use of parody or distortion as a dramatic or expressive device;
- Cross-referencing and superimposing different musical materials as a way of developing their associations. This is often used in preference to more traditional techniques of motivic development.

The ways in which improvisation and through-composed music complement each other has been explored in a variety of settings. In *Emission Impossible*, improvisation formed an organic contrast to quite strict compositional processes and techniques. The personal input required of the improvised sections acts as a foil to the highly structured episodes, with these composed sections ultimately acquiring more of an organic character. *Back to the Ranch* explores a deconstruction of jazz techniques, with improvised sections providing an opportunity for personal engagement with the various distortions at play. Its idiom represents the most stylistically conventional use of

improvisation, following the traditional cyclical harmonic form employed in jazz. *Across the Top* represents perhaps the most organic integration of composed and improvised elements: The intuitive construction of its main themes and almost narrative nature of its development accommodate improvisation as a logical extension of the musical argument, helping to convey a dramatic and atmospheric subtext.

The degree to which improvisation permeates the structure of each piece varies only moderately from piece to piece. Although improvisation could have been employed as a more active generator of primary content, it was decided consistently to thoroughly compose the main themes, structure and development. The reasons for this are two-fold:

- A large degree of structural cohesion could be predetermined in each piece
- The role of the improviser(s) was freed from assuming too much responsibility for the overall structure, enabling them to utilise their strengths and personal expression

It is acknowledged that the addition of unknown content to an otherwise carefully planned structure brings with it the risk of unbalancing the form of a piece and introducing unrelated content. However it has been observed that the nature of improvised music requires that it be evaluated using different criteria to that of the written score: such analysis is best achieved by considering the unfolding of the work in the process of performance. With this in mind, the structural layout of each piece makes allowances for additional input, with care being taken not to predetermine too many details.

What these pieces have in common is their reliance on performance to convey their complete meaning. The human engagement required of improvisation is the extra ingredient which helps communicate the musical essence of each piece with each unique audience. The compositional aesthetic employed in these works is one of inclusiveness and collaboration. Personal contribution is invited within these pieces in the anticipation that the creative input of other minds will amplify and enhance the expressive potential of each work, as well as surprise and engage the listener.

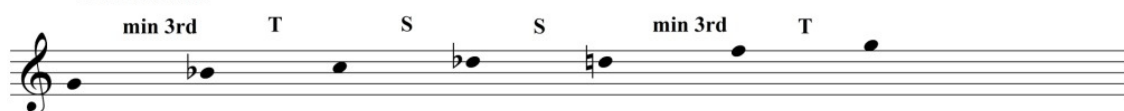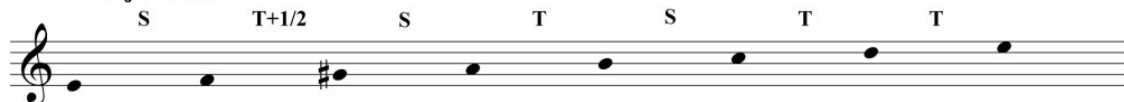# Appendix I Intervallic Structure of Modes
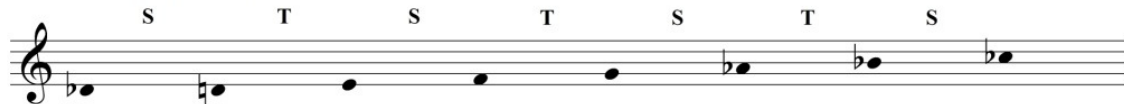
Mixolydian Mode
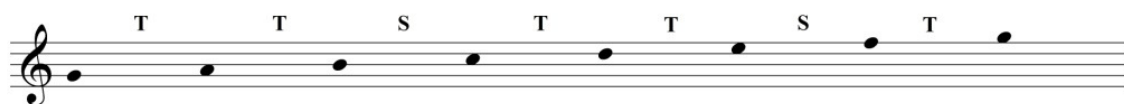
Lydian Dominant

Blues Scale

Hijaz Scale

Lydian Mode

Octatanic Scale

Appendix II Excerpts from Earlier Repertoire

Oboe Quintet **(1984)** Excerpt combining elements of 3/4, 6/8 and 12/8.

Bassoon Concerto (1987) first movement, first theme,

Bibliography

Primary Sources

Banks, Don. *Nexus*. London: Schott & Co, 1971.

Bartók, Béla. *Concerto for Orchestra*. New York: Boosey & Hawkes, 1945.

———. *Musik Für Saiteninstrumente, Schlagzeug Und Celesta*. Wien: Universal Edition, 1937.

———. *Streichquartett V*. Wien: Universal Edition, 1936.

———. *String Quartet No. 6*. London: Boosey & Hawkes, 1941.

Brown, Earle. *From Here*. New York: Universal Edition, 1972.

Secondary Sources

"Kimberley (Western Australia)." *Wikipedia, the free encyclopedia*. http://en.wikipedia.org/wiki/Kimberley_%28Western_Australia%29 (accessed 10 May 2012).

Alegant, Brian. "Cross-Partitions as Harmony and Voice Leading in Twelve-Tone Music." *Music Theory Spectrum* 23, no. 1 (2001): 1–40.

Alperson, Philip. "On Musical Improvisation." *The Journal of Aesthetics and Art Criticism* 43, no. 1 (Autumn 1984): 17–29.

Bailey, Dereck. *Improvisation: Its Nature and Practice in Music*. New York: Da Capo Press Inc., 1993.

Berliner, Paul. *Thinking in Jazz*. Chicago: The University of Chicago Press, 1994.

Brown, Lee B. "Musical Works, Improvisation, and the Principle of Continuity." *The Journal of Aesthetics and Art Criticism* 54, no. 4 (Autumn 1996): 353–69.

Cooke, Nicholas and Pople, Anthony, ed. *The Cambridge History of Twentieth-Century Music*. New York: Cambridge University Press, 2004.

Cope, David. *New Directions in Music*. 4th ed. Dubuque, Iowa: Wm C. Brown, 1984.

Dean, R. T. *Creative Improvisation : Jazz, Contemporary Music, and Beyond*. Milton Keynes, England: Open University Press, 1989.

———. *New Structures in Jazz and Improvised Music since 1960*. Buckingham: Open University Press, 1992.

DeBellis, Mark. "The Paradox of Musical Analysis." *Journal of Music Theory* 43, no. 1

(1999): 83–99.

Denley, Jim. "Improvisation: The Entanglement of Awareness and Physicality." *Sounds Australian* 32 (Summer 1991–92): 25–28.

Frampton, Roger. "Teletopa, Az Music, Free Kata and Free Improvised Music in Australia: An Autobiographical Perspective." *Sounds Australian* 32, no. Summer (1991–92): 21–24.

Frisk, Henrik. "Interactive Systems in Improvisation and Composition: A Work in Progress." *Dutch Journal of Music Theory* 12, no. 1 (2007): 1–12.

Game-Lopata, Jenny. "Sandy Evans: Deep Thoughts About Improvisation." *MCA Music Forum* August – October (2005): 32–34.

Gioia, Ted. *The Imperfect Art: Reflections on Jazz and Modern Culture*. New York: Oxford University Press, 1988.

Gould, Carol S., and Kenneth Keaton. "The Essential Role of Improvisation in Musical Performance." *The Journal of Aesthetics and Art Criticism* 58, no. 2 (Spring 2000): 143–48.

Graham, Phil. "Why the Music Business Matters." *Music Forum* 18, no. 3 (2012): 54–57.

Grout, Donald Jay. *A History of Western Music*. 3rd ed. New York: W.W. Norton & Company, 1980.

Johnston, Peter. "Travelling without Maps: Contemporary Issues and Approaches Related to Composing for Improvising Musicians." M.A. diss., York University, 2005.

Jost, Ekkehard. *Free Jazz*. Graz: Universal Edition, 1994. Reprint, New York: Da Capo Press, 1974.

Kostromin, Marina. "Australian Cross-over Performers of Improvisatory Jazz since the 1950s." M.A. diss., Monash University, 1996.

Moore, Robin. "The Decline of Improvisation in Western Art Music: An Interpretation of Change." *International Review of the Aesthetics and Sociology of Music* 23, no. 1 (June 1992): 61–84.

Nettl, Bruno et al. "Improvisation." *Grove Music Online*. http://www.grovemusic.com (accessed 8 October 2007).

Nettl, Bruno Ed. with Russell, Melinda. *In the Course of Performance: Studies in the World of Musical Improvisation*. Chicago: The University of Chicago Press, 1998.

Nordquist, Kenneth A. Lindsay and Peter R. *A Technical Look at Swing Rhythm in Music.*

http://www.tlafx.com/jasa06_1g.pdf (accessed 3 June 2012).

Ong, Walter J. *Orality and Literacy: The Technologizing of the Word*. London and New York: Methuen & Co. Ltd, 1982. Reprint, Routledge, 1995.

Radano, Ronald Michael. "Anthony Braxton and His Two Musical Traditions, the Meeting of Concert Music and Jazz. (Volumes I and II)(Avant-Garde, Free Jazz)." Ph. D. diss., University of Michigan, 1985.

Reynolds, Roger. "Form and Method: Composing Music." In *The Rothschild Essays*, edited by Stephen McAdams. New York: Routledge, 2002.

Rink, John. "Shenker and Improvisation." *Journal of Music Theory* 37, no. 1 (1993): 1–54.

Sarath, Ed. "A New Look at Improvisation." *Journal of Music Theory* Vol. 40, no. 1 (Spring 1996): 1–38.

Sawyer, R. Keith. "Improvisation and the Creative Process: Dewey, Collingwood, and the Aesthetics of Spontaneity." *The Journal of Aesthetics and Art Criticism,* 58, no. 2 (Spring 2000): 149–61.

Sloboda, John A., ed. *Generative Processes in Music: The Psychology of Performance, Improvisation and Composition.* New York: Oxford University Press, 1988.

Smith, Margery Rainer. "Improvisation as a Catalyst for Collaborative Musical Thinking and Composition." Ph. D. diss., University of Newcastle, 2006.

Sterritt, David. "Revision, Prevision, and the Aura of Improvisatory Art." *The Journal of Aesthetics and Art Criticism* 58, no. 2 (Spring 2000): 163–72.

Straus, Joseph N. "Uniformity, Balance, and Smoothness in Atonal Voice Leading." *Music Theory Spectrum,* 25, no. 2 (2003): 305–52.

Valone, James J. "Musical Improvisation as Interpretative Activity." *The Journal of Aesthetics and Art Criticism* 44, no. 2 (1985): 193–94.

Weick, Karl E. "Introductory Essay: Improvisation as a Mindset for Organizational Analysis." *Organization Science: Special Issue: Jazz Improvisation and Organizing* 9, no. 5 (Sep.–Oct. 1998): 543–55.

White, John Wallace. "Processes of Structuring in Selected Free Improvisations of the Chamber Ensemble 'Oregon'." Ph. D. diss., Indiana University, 1999.

Young, James O., and Carl Matheson. "The Metaphysics of Jazz." *The Journal of Aesthetics and Art Criticism* 58, no. 2 (Spring 2000): 125–33.

Discography

Dolphy, Eric. *Last Date*. PolyGram Records, Inc. 822 226-2, 1964.

MARA! and & Martenitsa Choir. *Tra Parole E Silenzio*. Mara Music MM003, 2011.

Surman, John. *Coruscating*. ECM 1702, 2000.

Sydney Symphony Orchestra, Stuart Challender, and et al. *Nexus Nocturnes*, *Australian compositions, Australian performances*. Vox Australis VAST 006-2, 1992.