Volume 2:
Exegesis of original works
composed 2009-2012

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Declaration

This is to certify that

i. the dissertation comprises only my original work towards the PhD except where indicated in the Preface,

ii. due acknowledgement has been made in the text to all other material used,

iii. the dissertation is 40,000 words as approved by the RHD Committee.

Signed Mark Viggiani
Preface

The photograph of Blind Willie Johnson in Chapter Three was found on the Last FM website.

Editorial assistance was provided by Dr. Neil Levy and Louise Courtney, in addition to my supervisors Dr. Elliott Gyger and Dr. Stuart Greenbaum. Italian translations were undertaken with the help of Linda Massola and Elisabetta Lamanna.

_theme from Perhaps_ was composed as part of a film score at the 2011 AISOI Scoring for Film, TV and E-Media course in Hobart, Tasmania.
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Introduction to folio of original works, 2009-12

This folio comprises original compositions selected from a body of work created between early 2009 and mid-2012. These pieces represent the continuing exploration and refinement of a compositional aesthetic which has evolved slowly over a number of years. Although the most recent works convey this aesthetic most clearly, these pieces are not intended as endpoints in themselves, but as signposts pointing towards future creative endeavours. By definition, the process of artistic growth can never be complete, and this collection should be seen as a substantial fragment of a larger body of ongoing work.

The eight works constituting this collection encompass a broad variety of settings ranging from chamber music and pieces for orchestra to vocal music both accompanied and a cappella. Many of them are of medium length (around ten minutes), though The Actual Petals of a Flower and John the Revelator are much shorter and the song cycle Vorrei... extends to over half an hour. It is impractical to attempt to establish too definitive a chronological ordering of these pieces, as many developed concurrently. Early drafts were periodically set aside to commence new pieces, and this process allowed ideas and techniques to cross-fertilize. Solutions to problems occurring in a current work were sometimes applied retrospectively to previous drafts of other compositions. As an example of this process, Tricks of Light and Prism were originally two of a set of four related works for various combinations of guitars, collectively lasting well over twenty minutes. Two of these were eventually abandoned as being impractical for live performance, but material from them was modified and incorporated into a later work. Additionally, some works were revisited long after their initial completion and subjected to major alterations. The works then, roughly in order of completion, are:
The Actual Petals of a Flower (2009) for SSATB choir
Tricks of Light and Prism (2009) for three guitars
Dark was the night, Cold was the ground (2009) for large ensemble
One Last Tango (2010) for orchestra
Trio (2010) for flute, piano and cello
John the Revelator (2010) for baritone and chamber orchestra
Visionary Songs (2011) for soprano and piano
Vorrei... (2012) for tenor, soprano and ensemble

Four of these works are purely instrumental, and the rest are settings of text, comprising an a cappella motet, a song for baritone and large ensemble, a cycle of five songs for soprano and piano, and a cycle of eight songs in seven movements for tenor, soprano and ensemble. The sources of these texts vary widely, but most share a fascination with science and religion. Firstly, there is a group of texts which derives from European literary traditions, mainly religious or philosophical in nature. The works in this category include the texts used in Visionary Songs, comprising poetry by William Blake and Thomas Hardy and prose excerpts from the works of Charles Darwin and Carl Linnaeus. The entire cycle is also based on a chant by Hildegard of Bingen, which provided musical as well as textual content.

Closely related to these philosophical texts are a group of quotations sourced from the Bible. The Song of Songs (Solomon) is used in conjunction with the same Linnaeus text in the motet setting of The Actual Petals of a Flower; and biblical texts are accessed indirectly through Blind Willie Johnson’s John the Revelator, which is inspired by and based on a 1920s recording in which the lyrics are a collage of biblical references. Standing apart from the other texts is the Italian love poetry used in the cycle Vorrei..., written by my own maternal great-grandfather Ginese Triaca in the early years of the 20th century. All of these texts will be examined in reference to the works in which they are utilized.

In addition to the above works, several others were composed during this period but have been omitted from the folio, for reasons of redundancy and replication of instrumental
forms. There were also pieces composed during this period which explored ideas outside of the scope of those assayed in this submission, and others which were not taken to completion within the duration of candidacy. One of these works is specifically referenced in this dissertation. *Theme from Perhaps*, a cue from a short film score completed in 2011, clearly and simply demonstrates aspects of my harmonic approach and is analysed in the first chapter on harmony.

It is my contention that the folio works demonstrate both the development of a compositional aesthetic and increasingly sophisticated technical facility. In addition, many interrelationships exist between the various works with regard to their musical material, primary influence and compositional methodology. From the outset it is important to establish that I identify my music as belonging firmly within the tradition of Western art music. I recognise that the compositional techniques and the artistic preferences which drive my creative endeavours are inherited from those espoused by and developed within the context of developed world traditions – I am consciously attempting to create art music. However, as a product of the late 20th and early 21st centuries, it is impossible for this work not to also be influenced and informed by the large and diverse body of popular music, jazz and various folk styles which has become increasingly accessible over this period.

Self-identification as a composer of art music implies that acceptance that many of the tenets associated with this label are relevant to my output. The defining features here are (broadly) those which the entertainment, cultural and educational institutions of our time identify as those delimiting the ‘contemporary classical’ label. This implies the European art music tradition, both in terms of direct correspondence of the sound of the music itself through a shared musical vocabulary and the use of the typical instrumental combinations and genres associated with classical music (e.g. chamber music, opera, the symphony orchestra, etc.). Contemporary classical music also usually shares with its parent tradition its various modes of dissemination - via the concert, the recital, sheet music and (for the past century or so) through recordings and video.

1 These include *Three Wire Walks* (2009) for brass ensemble; *Rings of Saturn* (2009) for flute, viola and harp; *Sei Libera* (2011) for trumpet and string quartet and *To the Moon* (2010) for wind octet.

2 These include a dramatic scena for soprano and strings based on Shakespeare’s *Antony and Cleopatra*, an historical/drama based on the Burke and Wills expedition and an electro-acoustic work based on samples of humpback whale songs.
In order to contextualize the inspirational roots of the music in this folio, it is useful to briefly acknowledge some influences on the development of my musical aesthetic. Early experience playing rock music as a self-taught guitarist in late childhood developed into adult fascination and affection for the folk, blues, spirituals and gospel music originating in the southern parts of the United States during the early years of last century. The so-called ‘British Blues Explosion’ of the mid 1960s found players including Eric Clapton, Jimmy Page and Jeff Beck, and bands such as The Yardbirds, Cream, The Rolling Stones, The Who and Led Zeppelin returning to the music of this period for inspiration, “playing covers or adapted versions of blues, rhythm and blues, and rock n’ roll songs, but gradually transform(ing) the music into rock music in successive albums appearing in the mid to late 1960s.”3 This practice sometimes went as far as the outright stealing and re-branding of material as their own – authorship of blues compositions is notoriously difficult to ascribe due to the exploitative practices of the recording industry and the haphazard nature of early documentation. This is changing with the enforcement of stricter copyright control.4 The influence of this music on my own is most overt in the works Dark was the night, Cold was the ground and John the Revelator, both of which are based on songs by Blind Willie Johnson.5

Obviously I am not the first (or only) composer to follow rock musicians back to this era. American composer Martin Bresnick describes the experience of hearing Cream’s version of the Willie Dixon song Spoonful in 1968 as it

...gradually invaded every neuron of my not so slowly blowing mind...a basic blues grew relentlessly from elemental simplicity into melodic improvisations worthy of a south Indian master, and the blues pulse multiplied into an infinity of polyrhythmic patterns, and the individual lines became a counterpoint that extended above and beyond the fifth species, and then, finally, after a shattering climax of impassioned instrumental virtuosity Willie Dixon’s great tune returned, I knew I had heard

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something I would never forget...”.

Bresnick’s fascination with this song resulted in his 2001 work *Fantasia on a Theme by Willie Dixon*.

My own acceptance of this music as being something other than a parallel interest to my main creative aspirations has occurred much more recently. During the initial stages of musical education, studies in classical guitar allowed me (through transcriptions) to access the polyphony of Bach, Dowland and the 16th century Spanish vihuelists\(^7\). It also introduced me indirectly to the formal and aesthetic perfection of Mozart and Haydn through the 19th century guitarist Fernando Sor\(^8\), and also to 20th century guitarist composers such as Heitor Villa-Lobos\(^9\), Leo Brouwer\(^10\) and Nikita Koshkin\(^11\), as well as prominent non-guitarist composers like Benjamin Britten, Toru Takemitsu and Luciano Berio. Early tertiary studies fuelled an infatuation with jazz and contemporary improvisation, at a time when I was influenced by musicians such as Keith Jarrett and trumpeter Miles Davis. Jarrett’s lengthy open-ended solo piano improvisations blend jazz, popular and gospel stylings with impressionistic or modal harmonies and sophisticated contrapuntal textures, and both his eclecticism and his developmental approach to form continue to influence my present work.\(^12\)

The idea that extended improvisation could be used to generate complex structures was also influential on my earliest creative efforts, both as a composer and an improvisor. The influence of Davis is felt most directly in my appropriation of blues material, my use of space and in choices of tone colour, which is discussed in Chapter Three.

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\(^7\) This repertoire survives in a handful of tablature books published in the mid 16th century. Composers of particular interest to me were Luis Milán (ca. 1500-1561, Valencia), Luis de Narváez (ca. 1500, Valladolid) and Alonso de Mudarra (ca. 1520-1570, Seville). Chase, G. *The Music of Spain*. Toronto, Dover Publications, 1959. pp. 55, 58 & 59.

\(^8\) Fernando Sor (1778-1839). Catalan guitarist composer. Acknowledged as being one of the most accomplished of his time, his fantasias, variation sets, sonatas and numerous smaller pieces are modelled on the styles of Mozart and Haydn and show more advanced voice-leading skill, harmonic ingenuity and formal sophistication than those of most of his guitarist/composer contemporaries. Wade, G. *A Concise History of the Classic Guitar*. Pacific, Ma. Mel Bay Publications, 2001. p.77.


\(^12\) Jarrett is known for his multi-record sets of solo concert recordings, with the longest (Sun Bear Concerts) running to ten discs. The most popular and well known of these is *Keith Jarrett - The Köln Concert* (ECM 1064-65), 1975.
The guitar continues to have an effect on both my compositional technique and aesthetic. Although no solo works were composed for the instrument during this period, the guitar appears in many of the chamber pieces, most obviously in the two guitar trios. This form allows the composer to explore sounds and textures unavailable to a soloist, such as cluster harmony. Ideas from these trios are also developed in a larger work for massed guitars. Additionally, the ensemble used for *John the Revelator* prominently features the electric guitar, giving the music a strong resonance with popular music forms. Its use in this work is partly inspired by the instrumentation of ensembles such as New York-based Bang on a Can.

Finally, the guitar holds a central role in the accompaniment to the song cycle *Vorrei*... As the texts for this work come from within my own family they hold great personal significance, and the balance dictated by the use of the guitar allowed for very intimate settings, as well as providing me with an element of purely physical response to these texts.

Absorption and subsequent stylization and complication of popular music forms into art music is not exclusive to the last century, as the profusion of dance movements based on folk music which became the mainstay of instrumental forms of 17th and early centuries attests. Additionally, the various nationalist styles which evolved over the course of the 18th and 19th centuries ensured that many folk forms became standard means of expression for composers. This tradition is referenced in the folio by my use of tango in *One Last Tango* and Italian forms such as the stornello and tarantella in *Vorrei*...

Early classical guitar studies and tertiary improvisation studies came together in the early 1990s with my involvement in founding the ensemble *Sonance*. This was a group of musicians from jazz backgrounds which developed a performance style based on loosely structured collective improvisation. The resulting music was intended to sound somewhere in between the free jazz which evolved during the late 1960s and the sonorities of the ‘new complexity’ composers popular with local Melbourne ensembles such as Elision. At this time, one of the more fashionable styles of composition in Australia was that developed by an Italian circle revolving around a group of composers including Giacinto Scelsi and Salvatore

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13 “...the ineluctable modality of the audible, Open your eyes...” for many guitars, composed November 2012.
Sciarrino\textsuperscript{15} and especially Franco Donatoni.\textsuperscript{16} I was certainly aware of this repertoire, and many prominent Australian composers made the pilgrimage to study in Italy at this time. Although this music only has minor influence on my own, I eventually followed this path briefly myself. In 2007 I undertook several private classes in Torino with the composer Giulio Castagnoli, who is a direct product of this school. His own music combines the extended instrumental technique and busy surface activity typical of Italian ‘new complexity’ with a meditative, almost Eastern minimalist modality. Under his instruction, I started to explore numerical methods of structuring music. Some of these concepts and techniques continue to have relevance in my music, but I have not wholeheartedly embraced the ‘new complexity’ aesthetic.

Dissatisfaction with improvisation alone as a vehicle for creativity led me to a more systematic study of compositional technique, and to fully notated compositions. It also led to exposure to a wider range of 20\textsuperscript{th} century art music, where I have found many sources of inspiration. The following examples may shed light on some aspects of my current aesthetic, at least in terms of its gradual derivation. I have already mentioned Britten, whose music I first encountered learning \textit{Nocturnal} for guitar. The clarity and subtle power of his vocal writing had a direct influence on the cycle \textit{Visionary Songs} in particular. I studied his vocal music in detail during my Honours degree, and acknowledge that my both my approach to word setting and feeling for linguistic rhythm and meaning derive from his example.\textsuperscript{17} His use of polyphony is also important, influencing my own tendency to think in linear fashion, generating harmonic structure through the interplay of voices. I also share his predilection for structures such as the ground bass, an example of which is my setting of \textit{No bird soars} from \textit{Visionary Songs}.

The music of other composers has also been influential during this period. This includes works such as Witold Lutosławski’s \textit{Preludes and Fugue for 13 solo strings}, which provided a model for the use of controlled indeterminacy in \textit{Trio}, as well as ideas about the organisation of pitch into contrasting collections.\textsuperscript{18} For this particular work, I also borrowed from George Crumb’s \textit{Vox Balaenae} the instrumental combination of flute, piano and cello.

\textsuperscript{17}Viggiani, M. \textit{Exploring the influence of Henry Purcell on the music of Benjamin Britten}. Dissertation submitted in 2006.
\textsuperscript{18}The technique of controlled indeterminacy was also used in a post-doctoral work for large guitar ensemble.
Crumb’s influence is also felt strongly in the opening section of this work, which exploits extended instrumental technique on all instruments. Additionally, I am inspired by the economy and intellectual rigour of Anton Webern. Although strict serial techniques are seldom employed in my own works, the clarity and timbral sensitivity shown in his orchestral miniatures Op. 5 and 6, and in vocal works such as Das Augenlicht, were models in my approach to texture, particularly in works such as Heredity from Visionary Songs. Technically my use of mirror form derives initially from Webern, though the music of Henri Dutilleux (especially his first two symphonies) is also relevant in this regard. Another mid 20th century composer to influence my work is Bartók, from whose string quartets I developed an interest in the use of tools of structural proportion such as the golden section, which is used in many of the folio works including One Last Tango, John the Revelator and parts of Visionary Songs.

Finally, my music’s previously mentioned debt to contemporary popular music forms must be acknowledged. It is the gradual acceptance of popular music as a serious art form in its own right, connected to the European classical tradition by its intentional depth and complexity, which allows me to situate my own work in a creative (though not necessarily commercial) space which straddles the borders between these two traditions.

The acceptance of the possibility for complexity and transcendence within popular music styles has opened up other avenues for the contemporary composer. Martin Bresnick’s protégés Michael Gordon, Julia Wolfe and David Lang were instrumental in founding the Bang on a Can movement, which, based in New York, has sought to combine ‘uptown’ i.e. classical, and ‘downtown’ (popular) aesthetics.

...there was a whole generation of composers who didn’t fit in anywhere. We had the simplicity, energy and drive of pop music in our ears. We’d heard it from the cradle. But we also had the idea from our classical training that composing was exalted and pieces could be ordered and structured, that there was a value to writing music down. Too funky for the academy and too structured for the club scene...  

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Bang on a Can is a successful commercial enterprise, commissioning and disseminating a large quantity of significant work through its festivals and record label, but it must be admitted that it does function largely in the ‘uptown’ sphere. Conversely, it is becoming increasingly common for artists from the popular end of town to aspire to contemporary classical seriousness. According to New York Times music critic Alex Ross,

Practitioners of free jazz, underground rock, and avant-garde classical music are, in fact, closer to one another than they are to their less radical colleagues. Listeners too, can make unexpected connections in this territory... it is easy to go from the orchestral hurly-burly of Xenakis and Penderecki to the free-jazz piano of Cecil Taylor and the dissonant rock of Sonic Youth.²⁰

Throughout all of this evolution and maturation of musical taste over time, what remains is a sense of eclecticism. I have always been unwilling to reject previously loved musical styles for newer and more sophisticated tastes, and have found it difficult to define the parameters of my music or place it wholly under the umbrella of any specific genre. I believe that it is this very eclecticism, and the idiosyncratic stylistic juxtapositions which arise as a result, that define and personalise my work. The qualities which I seek to convey artistically are now perceptible across sometimes surprising stylistic divides. At this stage of musical history it seems unnecessarily limiting to identify too strongly with a particular school of composition, and my music is not representative of any specific location or method. There is no attempt to follow a nationalist agenda - my music is not particularly ‘Australian’, and in fact derives from a number of different cultural sources. With the rise of mass global communications it is easier than it has ever been to apprehend and to take part in world-wide movements, and this has facilitated contemporary composers finding sympathetic niche audiences internationally.

The first chapter of this dissertation defines the parameters of pitch organisation in a general overview of the approach to harmony used in the folio works. Choice of harmonic language is one of the most crucial delineators of personal style, and the chapter begins by situating my own approach in terms of those currently available.

The use of traditional functional harmonic structures is examined in *One Last Tango* and followed by an analysis of the extension of this language in *The Actual Petals of a Flower*. Some of my earlier works predating the period of candidature are used as examples of the development of this harmonic language, and examples are also taken from a contemporaneous non-folio work. *Trio* is then discussed as an introduction to the synthetic creation of pitch and harmonic material. Finally, the chapter outlines the process by which harmony is used as a developmental factor in a large scale multi-movement work, using the cycle *Vorrei*... as an example.

The subject of harmony leads naturally to considerations of form and structure. The second chapter examines compositional techniques developed and refined while creating the works in this folio. From the outset it is important to define and distinguish between different layers or aspects of form. As a means of organising musical structure on any scale there exist templates or moulds in which materials can be situated or organised. These basic architectural forms are governed by expectations as to when and how particular events may occur. They are also influenced by harmonic formulae: in terms of functional harmony, drama created by the need for the dominant to resolve to the tonic lies at the heart of sophisticated first movement sonata forms; and most ritornellos contrast a home key with episodes in related keys. Whilst the use of some of these templates will be discussed, I am more interested in the process of generating idiosyncratic structures directly from aspects of the musical materials themselves. In the light of this, the chapter examines methods of numerical pitch organisation and the use of mathematical structural tools such as the Golden Section and Fibonacci series. This is followed by an in-depth analysis of the guitar trio *Tricks of Light*, which illuminates structure on several levels. A general tendency towards tripartite form is also acknowledged, and several examples compared. Rhythm and meter are the focus of the next section, followed by an enquiry into the use of text in the folio works. This includes an examination of the approach to text in the cycle *Vorrei*... The chapter concludes with a comparison of the motet *The Actual Petals of a Flower* with the *Visionary Song* of the same name, two contrasting settings of a text by the Swedish naturalist Linnaeus.

The remaining chapters analyse some of the folio works in more detail. In Chapter Three, two works inspired by Blind Willie Johnson recordings are contrasted, highlighting their differences in approach. Chapter Four looks specifically at *Visionary Songs*, showing the use of various technical devices as they are employed over a medium length multi-movement
form. This chapter also documents the development of this piece using preliminary sketches and diary entries, shedding some light on the compositional process itself. Finally, the concluding chapter summarizes general tendencies within this body of work and point the way forward to possible future creative endeavours.
Chapter One

Harmonic technique – contrasting approaches to tonality

in One Last Tango, The Actual Petals of a Flower, Trio,
Theme from Perhaps and Vorrei...

Now there is no taboo; everything is allowed. But one cannot simply go back to
tonality, it’s not the way. We must find a way of neither going back nor continuing
the avant-garde. I am in a prison: one wall is the avant-garde, the other wall is the
past, and I want to escape.

Gyorgy Ligeti, lecture at New England Conservatory, March 10, 1993¹

The creative predicament in which Ligeti found himself in the last years of the 20th century
still has resonance for today’s composers. As a post-serialist composer he was speaking
specifically about the problem of tonal harmonic language, but in hindsight subsequent
developments suggest that the choices are not so stark, and that there is plenty of grey area
left to explore between these two extremes.

The composers of the Second Viennese School eventually came to the conclusion that it was
no longer necessary, desirable or even possible to compose tonally, a realization which, as
Webern emphasises throughout his lectures from the 1930s, caused much angst.

“We don’t need these relationships any more, our ear is satisfied without tonality
too.” The time was simply ripe for the disappearance of tonality. Naturally this was a

fierce struggle; inhibitions of the most frightful kind had to be overcome, the panic fear, “Is that possible, then?” So it came about that gradually a piece was written, firmly and consciously, that wasn’t in a definite key any more.²

From the viewpoint of early in the 21st century, it seems that the dilemma of tonality versus atonality is no longer a choice that must be made, and that it is possible and common for harmonic languages of both extremes to exist, even within a single work. The roots of this illusory choice are already present in Webern’s own writings. After establishing that the triad is a naturally occurring phenomenon derived from the harmonic series, he then wonders,

What, then, is this triad? The first overtone different from the fundamental, plus the second one - that’s to say a reconstruction of these overtones, and an imitation of nature, of the first primitive relationships that are given as part of the structure of a note...these simple complexes of notes are called consonances, but it was soon found that the more distant overtone relationships, which were considered as dissonances, could be felt as a spice. But we must understand that consonance and dissonance are not necessarily different – that there is no essential difference between them, only one of degree. Dissonance is only another step up the scale, which goes on developing further.³ (Italics mine).

If tonality is viewed as a spectrum, then, ranging from the fundamental and first few partials which comprise the triad, all the way up to the higher, so-called dissonant partials and beyond into sound or noise, I see no conflict in creating works which range freely along this spectrum. A glance through festival programs and the repertoires of contemporary performing arts organisations shows the music of avowedly tonal composers sitting alongside works which profess more abstract modernist leanings, along with music inspired by jazz, popular music and the indigenous musics of a multitude of cultures both Western and non-

Western. In their 2009 Melbourne concert,⁴ the Kronos Quartet presented works such as J. G. Thirlwell’s filmically dramatic and minimalist *Nomataphobis* (2005) alongside a showcase of arrangements of Middle Eastern music for quartet and pre-recorded tape, including a piece of contemporary Palestinian underground pop music and an example of Iraqi 1980s Choubi.⁵ Whilst all of these pieces are firmly tonal (or modal) in their harmonic contexts and are dominated by rhythmic grooves, the concert also included a performance of Jon Rose’s *Music for Four Fences*, a work performed on heavily amplified industrial strength wire which bypasses harmony altogether in its noise-driven soundworld. Significantly, this work is also heavily dependent on driving rhythm, suggesting influences from popular music and the street rather than the European concert hall.

Similarly, catalogues of companies selling recorded contemporary music show a similar harmonic eclecticism, though the dominance of tonal music in various fora suggests that despite Ligeti’s claim that “one cannot simply go back to tonality”, this *is*, in fact, the way, or at least, one of many possible directions forward. Creative musicians such as Keith Jarrett, Ralph Towner, The Art Ensemble of Chicago, Arvo Pärt, Jan Garbarek, Steve Tibbetts, Pat Metheny and Steve Reich occur frequently in lists such as *Your favourite ECM album* on Last.fm’s website.⁶ All of these artists are predominantly tonal or modal in their output, but have also been known to use more adventurous harmonic language. The Art Ensemble of Chicago in particular is a pioneering free jazz and improvisation ensemble, though their music often springs from tonal sources.⁷

Whilst in no way exhaustive, these examples were chosen to give some idea of the bewilderingly broad choices of harmonic language and genre accepted as being currently available to contemporary composers. This is not the place to discuss the relative merits of various styles and approaches; rather, this discussion is included to form the backdrop against

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⁴ *The Kronos Quartet - Classic Kronos* Saturday 6 June 2009, Elizabeth Murdoch Hall, Melbourne Recital Centre. Melbourne, Vic. I was present at the concert, which I subsequently reviewed for *Resonate* magazine. The review can be found online at http://www.australianmusiccentre.com.au/article/classic-kronos.

⁵ Respectively *Tashweesh* by the Palestinian collective Ramallah Underground (arr. Kronos & J. Garchik) and *Oh Mother, the Handsome Man Tortures Me* (Unknown, arr. Ljova & Kronos). Both works appear on the commercial release *Kronos Quartet Floodplain*. (Nonesuch 51839-2, 2009).

⁶ http://www.last.fm/group/ECM+Records/forum/33932/_/411347. Last accessed 1:25 pm 24 October 2011. Prizewinning ECM Records was founded in 1969 by producer Manfred Eicher, and has released over a thousand albums in a wide variety of genres. Initially concentrating on jazz artists such as Keith Jarrett, Chick Corea and the Art Ensemble of Chicago, the label diversified into contemporary composition with the release of important recordings of music by composers such as Arvo Pärt, Giya Kancheli and György Kurtag. (http://www.ecmrecords.com/About_ECM/. Last accessed 1:36 pm 24 October 2011).

which I will elaborate on my own choices made towards the development of an idiosyncratic musical language. Unlike previous centuries, during which harmony was strictly defined and extension could only take place within narrow parameters, in this age of stylistic freedom ‘everything is allowed’, and the composer is compelled to consciously define their own signature soundworld. In my music, pitch choice matters, both to the sound of the music itself and as an important structural design principle. The music in this folio straddles many of the traditions of Western harmony, utilising a blend of the functional tonal system developed over the last few centuries, modality, serialism and harmonic structures influenced by jazz and popular music. Whilst I am usually careful not to be too literal in my use of the harmonic formulae, key structures and cadential relationships of earlier periods, my music is often grounded harmonically by a sense of key or home pitch. This allows the freedom to work chromatically and obliquely within tonal areas and to create centres of harmonic gravity with which other key centres can be contrasted. Consonant triads do exist in my music, often with added chromatic pitches or in unusual registral spacings.

By way of definition, the word ‘tonal’ is used in this dissertation to designate music which is bound to a key centre or centres. This is sometimes qualified with the term ‘functional’, when referring to harmony built on tonic-dominant relationships. The term ‘modal’ is used to describe harmony derived from scales other than traditional diatonic major and minor ones. In the folio works ‘modal’ harmony is also ‘tonal’, especially when based on diatonic structures, but not ‘functional’.

**Harmonic progression in One Last Tango and Theme from Perhaps**

In some ways *One Last Tango* (2010) for orchestra is a backward-looking and nostalgic piece due to its initial reliance on 19th-century harmonic formulae, in this case used in the service of a very specific artistic intention. The work was composed in order to celebrate the memory of Antonietta Massola, my maternal grandmother. Antonietta passed away early in 2010, and as *One Last Tango* is a musical representation of my emotional response to her passing, there was accordingly less emphasis on technical devices and pre-planning than is normally the case in my work. Many of the artistic decisions involved in its composition were governed by intuition and feeling rather than adherence to structural preconceptions. The tango is a nostalgic form, and one that my grandmother adored.
The choice of harmonic language was partly taken in order to evoke this quality of nostalgia. I had experimented with tango style in earlier compositions. *Black Cat Tango*, a piece originally composed during the late 1980s, has been arranged for and performed by a range of instrumental combinations, as has the more recent *Cabaret: Closed (A.F. Tango)*. Both works are strongly tonal, featuring chromatically twisting melodies which in turn generate chromatic modulations. The examples below show the way in which, coincidentally, the target tone in both melodies on the first beat of every second bar moves downwards, by varying degrees in *Black Cat* and consistently by semitone in *Cabaret*. The harmony in both cases resolves cadentially using dominant-tonic relationships, and the overall harmonic direction also trends downwards. As *Black Cat* exists in a variety of instrumental settings it is here shown as a basic lead sheet containing melody and chord symbols, elements common to all of the existing arrangements of the work. *Cabaret* is shown in its solo guitar form.

Ex. 1.1 Harmonic and melodic comparison of *Black Cat Tango* (1998) and *Cabaret: Closed (A. F. Tango)* (2002)

1. Black Cat Tango
2. Cabaret: Closed (A. F. Tango)

Note also the antecedent phrases to these high points. Both employ upbeat quavers, but whereas in *Black Cat* the contour is jagged with sixths, in *Cabaret* strongly directional chromatic scales serve the same purpose. In terms of modulation, the earlier example is based on downwards stepwise progression, whereas the latter favours tonal relationships based on key centres a third apart. This approach to harmony has also led to my abandonment of key signatures, signalling a move towards greater chromatic freedom.

Whilst these relationships by thirds initially occurred intuitively, they have become a more conscious element of my harmonic language and remain present in current works. Tonal centres a tritone apart are treated as tonic equivalents, as occurs in the music of early 20th-century composers such as Bartók. In his analysis, Ernő Lendvai proposes that Bartók's music is tonally organised around the principle of axes of tonal relationships deriving from the cycle of fifths.  

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third apart, corresponding to tonic, dominant and subdominant. A visual representation of the tonic axis is shown below in which diametrically opposite key centres are tritones apart – according to Lendvai “...a much more sensitive relationship exists between the opposite poles of the axis-the “counterpoles”, e.g. C and F♯ – than those situated next to each other, e.g. C and A.”.⁹

Fig. 1.1 Tonic axis in Bartók according to Lendvai

Lendvai allocates the tonic to the axis built around C, the subdominant to the axis around F and dominant to that around G. Whilst this may seem arbitrary, the important thing is to recognise tonal equivalence accorded to pitches a tritone apart, as “A pole is always interchangeable with its counterpole without any change in its function.”¹⁰. One of the features of this model is that symmetrical qualities allow smooth modulation via common tones.

Ex. 1.2 Modulation through common tones

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⁹ Lendvai, Ibid., p. 4.
¹⁰ Ibid.
The principles of tritone equivalence and harmonic relationship by thirds are both important features of my harmonic language, and are also factors in the development of overall musical structures. The harmonic style used in the first part of *One Last Tango* is a continuation of that used in the earlier tango-inspired pieces. In the creation of a work dedicated to memory, it suited my purpose to model the harmony consciously on the previous tango pieces, and there was also the desire to explore the possibilities which this mode of expression offers, utilizing the expanded timbral palette available to the full orchestra. Example 1.3 below is a harmonic reduction of the opening of *One Last Tango*. Harmonies are both functionally defined (Roman numerals) and named with chord symbols, as these emphasise the derivation of these harmonies from jazz formulae.

Ex. 1.3 Harmonic reduction and analysis of *One Last Tango*, opening section

Harmonic analysis shows that the key areas move mainly by third, from the beginning in F major to A minor, then F♯ minor, B♭ major, D major, G major and finally back to B♭ major. Each of these functions briefly as a localized tonic, usually approached by its dominant. Most of the chord voicings feature added notes typical of the jazz vocabulary – chords are built on seventh sonorities, and there are many added minor and major ninths and chromatically altered tones. Initial sketches consisted simply of the melody supported by occasional bass
notes, and this became the framework for the overall harmonic structure. Exact voicings were filled in at a later stage.

The melody (not shown) is chromatic in much the same way as the melodies of the earlier tangos, but there is more range and variation. There is also considerably more variety of phrase length than in the earlier works. The altered bass-note chords in the last five bars of the previous example are atypical of this section, and point forward to harmonies used later in the work. Bitonality achieved by the superimposition of different triads is another key feature of my harmonic language, and it tends to occur in more tonally-oriented works. Ex. 1.4 highlights instances of bitonality as they occur in *One Last Tango*.

Ex. 1.4 Bitonal harmonic construction in *One Last Tango*

![Superimposition of triads](image)

Sometimes the relationship between the superimposed triads remains diatonic, as is the case of (a), where B♭maj9 sonority is achieved via the superimposition of F and B♭ major triads. Here, the sonority can be unambiguously labelled as chord IV (in F major) with added major 7th and 9th. In (b), (c) and (d) the voice-leading of the triads against the bass line suggest a more truly bitonal interpretation of these sonorities. The more distant the relationship between the juxtaposed triads, the more difficult it becomes to assign a root to the resulting sonority.

As a way of summarizing the use of functional tonality in the folio pieces, the piano miniature *Theme from Perhaps* serves as a clear example of many of the harmonic techniques discussed so far. This work was composed in late 2011 as part of a film score and as such, factors contributing to the aesthetic choices made during its composition ensure that it falls outside the parameters of this folio. However, as it presents distilled examples of aspects of my harmonic language it is appropriate to briefly examine this piece. Below is the entire score, presented as a lead sheet with accompanying harmonic analysis.
Ex. 1.5 Harmonic analysis of Theme from *Perhaps*

Theme from "*Perhaps*"
(film score)

Mark Viggiani

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The piece is scored for solo piano and the chord symbols reflect the harmony as it should be interpreted by an arranger or jazz performer. Thus, bar 16 and the corresponding final section are marked as G phrygian though the written notes do not obviously suggest this. The piece falls into two clear sections, the second being a slight extension and variation of the first. Beginning in C major the harmony moves from the tonic to the subdominant at bar 14, before arriving at a phrygian-inflected dominant at bar at 16, a pattern which repeats in the second half. The chord voicings are typical of modern jazz, utilizing mostly diatonic extensions stacked in thirds, fourths and fifths, stylistically related to the opening section harmonies of *One Last Tango*. Note also the cross-relation caused by B sounding momentarily against the B♭maj7 chord in bars 3-5 and similar places. This sonority is also used in the opening of *One Last Tango*, where the descending semitone melody also features this passing dissonance, as shown below.
Superimposed triads also feature in example 1.5. In bars 29-31 major triads descend in the right hand from C through B♭ to A, the last grounded by F in the bass. This particular sonority, two superimposed major triads a major third apart, occurs frequently in my music, usually for important structural reasons. The voicing is ambiguous - able to function both as a bitonal structure and as an extension-laden stable sonority in its own right. In Theme from Perhaps, it acts as a colourful variation of subdominant harmony. The chord is unusual in that it has some of the stability of a major seventh voicing, yet also a degree of tension due to the presence of the raised fifth. The tension of this sonority can also be increased with the inclusion of the natural fifth in relation to the bass. It is not as decisive as an ordinary triad, yet due to the absence of a tritone, it does not drive strongly towards resolution. Accordingly, in my music it tends to appear at moments when there are brief pauses, or endings which do not resolve completely. In Theme from Perhaps, it is used to underpin a poignant moment in the film which demanded an ambiguous response from the composer which left the meaning of the narrative open to interpretation. Ex 1.7 shows the basic derivation of this harmony.

Ex 1.7 Derivation of maj7#5 harmony
To return to *One Last Tango*, the opening section is an example of functional harmony as used in the works in this folio at its most obvious. The expressive qualities of this piece are intensified by the initial expansive tempo and lush string-dominated scoring, partly inspired by the opening of Mahler’s Ninth Symphony.

Figure 1.2 outlines the three main sections of *One Last Tango* as they are defined by variations in tempo and orchestration. The slow opening section leads directly into a more energetic central section, and the work concludes with a return to a slow tempo similar to that used at the outset. On one level, this is a simple A-B-C structure, though the ending section contains elements of recapitulation. However, since tempo, key and orchestration are so different, and melodically the first theme only appears in fragments, the section cannot be regarded as a true return to A. Moreover, this last section differs drastically from what has gone before, principally due to the contrastingly static nature of the harmony.

Fig. 1.2 Harmonic, tempo and orchestration style structures of *One Last Tango*

<table>
<thead>
<tr>
<th>Section</th>
<th>Bar No.</th>
<th>Tempo</th>
<th>Harmonic Base</th>
<th>Instrumental Texture</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>1 – 33</td>
<td>(\text{\underline{\text{\textbullet}}} = 80)</td>
<td>F major</td>
<td>string-dominated</td>
</tr>
<tr>
<td>2. Middle Section</td>
<td>34 – 141</td>
<td>(\text{\underline{\text{\textbullet}}} = 132)</td>
<td>F minor also D(\text{\flat}) major, A minor climax E Major</td>
<td>orchestral tutti</td>
</tr>
<tr>
<td>3. Coda</td>
<td>142 – 186</td>
<td>(\text{\underline{\text{\textbullet}}} = 88)</td>
<td>pitch-class set B C D(\text{\flat}) E(\flat) E F end B F(\sharp)</td>
<td>chamber – vib, celeste, harp (+solos)</td>
</tr>
</tbody>
</table>

In the central section modulations through D\(\text{\flat}\) major and A minor continue the established pattern of movement by thirds, though the ambit has been extended to include relationships a major third apart as well. This implies a different symmetry to that proposed in Lendvai’s model, allowing for a greater range of harmonic possibilities. Consequently the arrival in E is
effective in this context, as in the middle section, access to D♭ and A comes about through major third relationships with the central F.\textsuperscript{11} E major provides variation as a strong semitonal step from F minor (via common-tone modulation) and reasserts the minor third pattern via its relationship to D♭. This is shown below in Ex. 1.8.

Ex. 1.8 Modulation technique in One Last Tango

The coda of the piece maintains a static atmosphere through the exclusive use of a six-note scale. This scale is not diatonic, but derives directly from the melodic material itself. This is an example of the way in which harmony can be used to generate structure on a more organic level, which will be explained later in the chapter.

\textbf{Triadic emancipation in The Actual Petals of a Flower}

Triadic harmony appears in different guises elsewhere in the folio, particularly in the vocal works. The motet \textit{The Actual Petals of a Flower} (2009) is scored for five-part choir and consequently much of the harmony is based on five-note sonorities. Vertical relationships are derived from the contrapuntal interplay of the five parts, and whilst consonant sonorities occur regularly, these are based on localized intervallic structures and not functional harmonic principles. Basic triadic moments do occur as brief resting points unrelated to any planned harmonic scheme. These tend to coalesce and clarify out of ambiguous harmonic areas, an example of which is shown in Ex. 1.9.

\textsuperscript{11} This is also a horizontal expression of maj7♯11 harmony.
Ex. 1.9 Coalescence of harmonic structure in *The Actual Petals*, bars 18-23

The accidentals in this section suggest A♭ major or F minor, but the vertical realization of these pitches, due to the contrapuntal movement of the voices, combines with frequent dissonant clusters on strong beats to negate harmonic stability. The F♯ in bar 20 of the alto stands out chromatically, creating a tritone with the second soprano which resolves to the dominant of C in its third inversion. The harmonic structure further clarifies with the resolution to a C minor triad laden with diatonic upper extensions. Leaving these aside, the voice leading in the tenor suggests typical resolution of a third inversion dominant 7th to a first inversion of the tonic. This moment of harmonic stability is emphasised by the relative duration of the achieved sonority, in contrast to the earlier faster rate of change, and rhythmic unison between the parts. Furthermore, the bass entry on low C is unambiguous. This moment has been partially prepared by the absence of the bass voice for the previous eleven bars, and the re-introduction of this register signifies the beginning of a new section. The extensions to the C minor triad are diatonic and typical of voicings found in jazz harmony (C minor/maj9). Similar harmonic convergences occur in other places, including bar 9 (C♯
minor), bar 29 (B minor) and around bar 40 (D major). This last instance is also an example of modal inflection. The resulting sonority in bar 42 should not be considered a dominant of D major as the tritone D-G♯ does not resolve to A, but functions as a colour chord highlighting the lydian raised fourth. In this case, resolution in D major has occurred through a combination of the falling semitone in the bass and the raising of E♯ to F♯ in the alto.

Ex. 1.10 Lydian voicings in The Actual Petals, bars 39-44

Modal inflection occurs often in this work. These harmonic resolutions function as structural markers within the piece, with free modulation creating a patchwork of shifting tonal centres. The modal derivation and diatonic nature of these added-note chords is shown by the examples given in Ex. 1.11. Most are voiced in closed position, especially between the top voices.
Ex. 1.11 Modal derivation of convergent harmonic structures in *The Actual Petals*

Whilst the first three chords are self explanatory, (d) needs clarification. This is the final sonority of the piece, and appears to be an aeolian-inflected A minor chord. However, in this context it functions as the conclusion of a relatively long and tonally stable section in F major. In this last chord the root is in the top voice and the chord appears in first inversion. Since the work also begins in F major, the harmonic structure can be described as a subtle arc moving freely away from and eventually returning to this key centre. The final chord follows strong melodic statements in F major, and this final sonority manages to provide a point of resolution which remains gently ambiguous due to the added-notes stacked above the third of the chord in the bass.

Another way to approach these polyphonically-derived sonorities is to look more closely at harmonic implication through intervallic content. The excerpt below shows a texturally complex passage in which two independent strands combine to create a feeling of harmony in suspension.
Ex. 1.12 Harmonic / Intervallic analysis, *The Actual Petals*, bars 47-58
Intervallically, between the tenor and bass there are roughly the same amount of consonances and dissonances, including a couple of tritones. The two layers are set to different texts in different languages, and are further differentiated by dynamic level. In the first four bars all parts share an aggregate pitch-class set comprising the notes of $D\#$ major.\textsuperscript{12} Despite the strong root in the second bar, this key is only suggested, due to the ambiguity of the chord voicings. Whilst there are a few instances of basic triadic harmony, most sonorities are based on collections built on seconds and fourths. These unresolved suspensions, along with a rarity of leading notes, create a passage of obscured tonality. When the leading note does eventually appear in bar 50, it is harmonised by a $C$ major triad in the upper voices. However, any suggestion of $C$ major is immediately contradicted by the $E\#$ in the bass which follows. In bar 56 there is a brief moment of relative repose when the parts coalesce into a triadic $G$ minor sonority (tritonally polar relationship with $D\#$). This chord is followed by its dominant, but since the approach is not strongly cadential any sense of arrival remains veiled. This harmony continues after the excerpted selection, but does not resolve conventionally to $G$ minor. The effect of these momentary targets is to provide fleeting pockets of triadic harmony without strong functional relationships. This harmonic style can be traced back to post-1960s modern jazz, in which quartal structures are the standard voicings characteristic of pianists like McCoy Tyner, Chick Corea and Herbie Hancock.\textsuperscript{13} Unlike the block-chord approach to harmony which characterises jazz comping, however, the harmonic sonorities in The Actual Petals were arrived at as a result of the contrapuntal interplay of the melodic strands, governed mainly by considerations of vertical intervallic construction.

A harmony of physicality - extended technique and pitch collection in Trio

The above works show varying degrees of engagement with systems of pitch organisation based on tonality, ranging from the use of functional triadic cadential formulae in One Last Tango to more subtle modal sidesteps and quartal structures in The Actual Petals. Trio (2010) employs a different method of harmonic organisation again. In this work, pitch collections are initially isolated, and then expanded and manipulated in relation to their transposed forms

\textsuperscript{12} This is another harmonic relationship via major third with the initial F major.

\textsuperscript{13} In particular, Tyner evolved an accompaniment style based on modal quartal voicings whilst a member of the John Coltrane quartet in the early 1960s.
and complements during the course of the work. The collection that the work is based on is organically derived from physical characteristics of the instruments themselves, in that the pitches are initially produced using extended techniques. A diatonic four-note pattern is created with flute harmonics, where standard fingerings allow the pitches C♯, B and A♯ to sound. The pitch F♯ sounds easily and naturally when B is overblown. To these notes is added the pitch C, initially as an open-string cello harmonic.

Ex. 1.13 Derivation of pitch collection of Trio from flute and cello extended techniques

This collection is used in the work’s opening, presented primarily in the form of a rapidly cycling scorrevole flute texture. There are obvious harmonic possibilities inherent in this pitch collection, which can be rationalized into F♯ major with the addition of the diminished fifth (C), which adds a lydian flavour. This non-diatonic note is also instrumentally isolated, initially sounding only in the cello part. There is no real melodic or functionally harmonic aspect to this part of the work. Rhythmically there is no pulse and the focus on the sonority of the music is accentuated by the use of extended techniques, resulting in extreme tone colours. The cello is restricted to harmonics and slap pizzicato and the piano also contributes noise in the form of violent low register chromatic clusters and glissandi performed inside the instrument. The flute supplies harmonics and multiphonics derived from alternate fingerings,
often microtonally inflected. Thus any possible relationship to F# tonality is distorted by elements of pure noise. Nevertheless, in this work pitch choice remains one of the key structural building blocks. At bar 25 a motif is introduced by the hand-muted piano, and this motif introduces a second pitch-class set.

Ex 1.14 Motif from *Trio* showing transposition and variation of initial pitch-class set

[Diagram]

Intervallic relationships with the original set are clear – consecutive semitones and perfect fifths are present in both ideas, but the presentation is radically different. The harmonic centre is even more obscure, with E acting as a point of gravity. At the end of this introductory section some of this pitch material is presented differently again. In Ex. 1.15 the flute supports the piano’s widely spread compound semitones and sevenths with a microtonally inflected second, achieved by humming through the instrument and playing a different pitch simultaneously. The pitch E is provided by the cello’s slap pizzicato.
Ex. 1.15 conclusion of opening section of *Trio*

In the slow middle section of the work the piano presents a series of slow moving chords which are decorated and extended by the other instruments. These chords are all derived entirely from a direct transposition down a diminished sixth (enharmonically up a tone) of the original pitch collection. Example 1.16 shows this transposition and harmonic implications suggested by the potentially available triadic units.

Ex. 1.16 Transposition of initial pitch collection (*Trio*) and resulting tonal possibilities
The presence of all three chord tones most strongly suggests the tonality of A♭ major, with a crucial tritone suggesting the dominant of the dominant seventh. At least the shells of chords IV and III are available, through harmonies built on D♭ and C respectively. The tritone built on D could suggest a dominant seventh of E♭, but there are no other pitches from which to construct this triad. Rather than restrict the harmonic content of this section to these very limited choices, I chose to exploit the ambiguity suggested by constructing sonorities which highlighted semitonal clashes within the collection. The resulting harmonic palette is surprisingly rich in possibilities which include subtle shadings of tension and more variation of colour than an orthodox approach to tonality might have allowed.

In this set, all notes are not created equal, as the presence of a complete A♭ triad ensures that the other pitches will be heard primarily in this context. This chord never occurs in its purely triadic form, and A♭ appears only once as the bottom note, as the lower part of a harmonically neutral tritone. The limited choice of pitches ensures its frequent use in the melody. A♭ is such a strong centre of gravity that it is discernible as the tonic even in the numerous five-note sonorities which utilize the entire collection, regardless of this chord’s registration. The D and D♭ which complete the collection function as exotic colours, though the tritone between A♭ and D gives this chord an internal tension, denying resolution and propelling the music onwards.

Whilst a complete harmonic analysis is unnecessary, one other sonority is important. The juxtaposition of the D♭, D and E♭ provides a number of tense cross-relations which fulfil a dominant harmonic function, especially the pungent dissonance between D♭ and D. This set contains the dyad D♭ – E♭, suggestive of V7 in A♭. In Ex. 1.17, these are labelled as ‘dominant’ clusters. The tensions developed between this note grouping and the tonic variations energize the harmonic motion of this section.
Ex. 1.17 Harmonic analysis of *Trio*, middle section
Interestingly, this cluster loses some of its piquancy when embedded in the complete five-note sonority, and carries a tonic function of resolution. C is also an important pitch here – of the four-note chords, those which omit this note lean towards the dominant cluster, despite containing A♭. This is partly explained by the tendency of the D♭ to resolve down by semitone to C, a classic 4-3 suspension. In the example the chords are colour-coded into two main types – variations of tonic sonority and ‘dominant’ clusters; this is intended to show the relative prevalence of each type of sonority and to outline the harmonic ebb and flow more clearly than attempting to define the individual harmonies could. In the first line there are also other sonorities - some dyads, which are too ambiguous to define clearly and should be seen as prolongations of tonic harmony, and a pair of unrelated chords in bars 138 and 139 which reprise the end of the previous section.

The tonic variations often contain fourth colourings, both natural and raised. As the section progresses these two extensions are increasingly used concurrently, thereby increasing the amount of harmonic tension generated. They never appear in root position, denying full resolution, and the ‘dominant’ clusters also appear only in inverted forms.

Color-coding shows that most of the melodic activity occurs on tonic voicings, with the dominant harmonies acting as punctuations or interruptions. This gives the section a sense of stability and tranquility, as the tonic is not treated as a goal of motion, but is slowly explored using different instrumental timbres, registers and dynamics. A♭ major is established and persists into the following section (not shown) where the pitch collection is expanded to include all twelve tones of the chromatic scale. The work concludes with a three-part dialogue encompassing a much broader chromatic spectrum in which the circular figuration of the opening blossoms into linear melodic shapes. As the tonal field here is much larger, it is impossible to identify key centres. The melodic lines are not developed serially, but the music is unified rhythmically and by gestural means with the repetition of a cascading chromatic phrase in the piano part. Gesture and energy are more important in this concluding section than pitch organisation, and thus the work progresses towards free atonality.

Harmonic techniques used in Trio show that despite the use of pitch-class set manipulation this work remains engaged with the tonal system. Principles of harmonic tension and release are still relevant despite the replacement of traditional chord forms with synthetically-derived
structures. The opening section also shows how harmonic organisation can derive from the physicality of the instruments themselves. Furthermore, the actual raw material of the composition is developed to link together harmony and form.

**Development of form through harmony in *One Last Tango* and *Vorrei*...**

Connections between harmony, form and musical idea can also be demonstrated in the following examples from *One Last Tango*. As previously stated, the last section of this work uses a different harmonic language to that used in the preceding sections. One of the defining elements of the first theme is the three-note descending semitone motif which completes the first phrase. The initial harmonisation of this motif has been shown in Ex. 1.6, falling from the flat ninth through the tonic to the major seventh. This motif is repeated many times throughout the work in a variety of keys, climaxing in a set of sequences which eventually achieve the pitch goal of E at bar 117. At this point, the motif is rhythmically augmented and harmonised in thirds. This version of the motif is based on the pitch collection F, E, Eb (D♭), Db (C♯) and B, and is first used in conjunction with an E pedal tone in the bass. This is shown in Ex.1.18, along with the resulting pitch-class set.

Ex. 1.18 Climax at bar 117 of *One Last Tango* and resulting pitch-class set
As the section progresses, this pitch-class set is used to generate the background accompaniment texture shown in Ex. 1.19.

Ex. 1.19 Generation of accompaniment texture from pitch collection based on three-note motif in *One Last Tango* from bar 142
Note the presence of the additional pitch of D in the vibraphone part, which consists exclusively of perfect fourths, major seconds and minor sevenths. This note also appears in the glissandi violin cluster which introduces this section in bar 143. The harp’s initial glissando outlines the outer limits of the collection. This example is included to illuminate the process whereby a melodic idea can be verticalized and used to generate a harmonic background. In this unifying role it acts as an aspect of form, as changes of harmonic style become delineators of structure.

Another example comes from the most substantial of the folio works, the song cycle Vorrei.... Looking at the entire cycle first, the harmonic language is tonal, often functionally so. There are also instances of modality and polymodality, as well as areas of tonal instability due to the use of serial processes. As the ordering of the movements was not clearly established until towards the end of the work’s period of composition, there was never any attempt to design the cycle in terms of set harmonic goals. The first song begins and the final song begins and concludes in E major, but the intervening songs range freely in terms of key centre. However, this was not an entirely random process, as there are two general principles of structural harmonic relationship at work here. Many songs contain within them shifts of tonal centre up or down a semitone, and movement between songs is usually by third. Only the final song concludes in the same key in which it begins, in this case emphasising the cycle’s base tonality of E. Beginnings of songs usually relate to one another by third, but the harmonic relationship between the first and second songs is an example of tritone equivalence. In this instance, B♭ in song II. stands in for E, and the song concludes a semitone higher in F. Note that the first song also uses the texts of two separate poems and differentiates them by the use of modulation down a semitone within the movement, whilst the fourth and sixth songs conclude a semitone higher than their starting point. Mattinata is a special case, as though it begins and ends nominally in B♭ it shifts frequently, according to principles which will be examined below. The final song modulates to the subdominant before returning to the ‘home’ key of E. Figure 1.3 sets out the progressive key relationships within and between the songs.
These principles of relationship by third and semitone can also be found within individual movements. Situated at the heart of the cycle, the fourth song *Carina!*... is based on a chord progression which both encapsulates these principles and provides the material from which harmony elsewhere in the cycle is developed. Its chord sequence features both movement by third and by semitone, and is used in several different ways. Example 1.20 shows a melodic and harmonic reduction of the setting of the second stanza of the poem, as it appears scored for tenor and guitar. Slurs in the bass designate the root movement by third which characterises this setting.
When presented without the harmony, the melody itself is extremely simple. The first 4 bars outline a sequence in G major, and in bars 30-31 the melody can be heard as being in G♭ major, an example of the cycle’s descending semitone principle at work. The actual harmonies, however, tell a more complex tonal story, as successive movements by third obliterate obvious connections to G major. The melodic sequence \(x\) is harmonized with a correspondingly sequential series of chords, beginning on chord II (Am9). Note that the link between the first two phrases is by tritone (Eb/A minor). The harmonization of the fourth phrase \(y\) highlights semitonal relationships, with harmonies a half-step either side of F. The comparatively long duration of this suspended harmony suggests some sort of dominant, but the Ab which follows relates again by third. From this point, the entire melodic and harmonic sequence is repeated as the setting for the second stanza, but in Ab major, another upward semitonal relationship. At the end of this stanza (bar 39), the harmony is altered to take on a
more decisively dominant role, with the bitonal juxtaposition of $A_b$ and D major triads acting as an altered dominant seventh of G (i.e. $D7b9$). Here, the larger scale harmonic form is revealed, as the settings of the concluding two stanzas repeat this two-verse structure. This cadence in G is the only harmonic progression of its kind in the movement, and its strategic positioning, at the end of the third and fifth stanzas, gives the piece a subtle bias towards G major, despite the strong chromaticism.

Occupying a central position in the cycle, *Carina!*... is an important source of material for other songs. The melody itself is too distinctive to be repeated vocally, but returns in the final song as an instrumental interlude, harmonised simply over a tonic pedal. The chord progression, in addition to embodying the general principles of movement by third and semitone, is used specifically in two other songs. Firstly, in *Mattinata* the basic progression is transposed down a major third, and six of its chords used to form a harmonic background for the settings of the couplets in the first stanza of text. Here, each chord is treated as a general harmonic area to be slowly explored, as opposed to the previous fleeting moments in a quickly modulating progression. Ex. 1.21 shows the derivation of *Mattinata*’s harmonic structure from the progression in *Carina!*....

Ex. 1.21 Derivation of harmonic structure of *Mattinata* from *Carina!*... progression

The original vertical harmonies have now become distinct tonal centres in their own right, and the implied suspensions are exploited to create modal inflections, usually lydian. The placement of key changes is dictated by text, and there is no attempt to regulate these temporally. The setting of the second stanza is based on a retrograde version of the same harmonic progression. The sixth chord here acts as a pivot, both completing the harmonic
cycle of the first stanza and providing a starting point for the second. The melody of this section is also a retrograde setting of the first stanza melody. This mirror technique occurs in other folio works and will be re-examined in following chapters, but in this context, after the pivotal C minor section, the harmonic areas from the first stanza occur (in transposed form) in reverse order. Ex. 1.22 sets out the basic harmonic structure of the song.

Ex. 1.22 Harmonic structure of Mattinata

The tonality of C forms the point at which the mirror occurs. The initial C minor section is reflected back as major at beginning of the second stanza, and modulation ensures that most of the harmonic areas are presented a tritone away from their original position, with A being the equivalent pole to the initial E\(_\flat\). In the final bar the melody arrives at the pitch-goal of B\(_\flat\), providing a link with the opening of the movement.

One final example from Vorrei... demonstrates the use of abstract techniques of harmonic manipulation. The sixth song Sei Libera!... is set as a stornello, an Italian folk form characterized by the alternation of tonic and dominant harmonies in compound time. It would have been inappropriate to follow so obvious a pattern, but I still considered it important that the setting reflected a sense of alternation and contrast between two harmonic poles. To this end, the existing tonic-dominant relationship between F and C is augmented by harmonies based on the semitonally-distant F\(#\) and C\(#\). This creates a sequence of four key areas which are cycled through against the form suggested by the text structure. The type of harmony is also influenced by the text, with free use of minor, major and seventh sonorities over most
bass notes. Whilst the melody reflects these key centres diatonically, the accompaniment utilizes the full set of 12 chromatic tones, creating a tonally colourful backdrop behind the basic harmonic structure. The chord changes occur at irregular intervals, and dominants never resolve to the tonic.

After a short introductory line, the text itself consists of six four-line stanzas, where the even-numbered verses all begin with the words Sei Libera, suggesting an alternating verse-chorus structure. This forms the basis of the setting, in which soprano and tenor alternate lines, occasionally presenting choruses together. Whilst the verse and chorus structures each have their distinctive melodic features, the harmonic form is more continuous, suggestive of a larger scale than that of the short stanzas of text.

*The Actual Petals, One Last Tango, Trio, Theme from Perhaps* and songs from the cycle *Vorre...* show different approaches to tonality ranging from use of tonic-dominant structures through ambiguous quartal constructions to carefully controlled non-tonal settings. Though *The Actual Petals* and *Theme from Perhaps* are harmonically consistent throughout, in the other works development of harmonic language occurs within single movement forms. Whilst *Tango* moves further away from functional tonality as the piece develops, *Trio* wavers between pure sound as generated by extended instrumental technique, veiled tonality and still more abstract forms of tonal organisation in the final section.

Pan-tonality and other complex forms of pitch relationship also exist in other folio works. The technique of manipulating notes from contrasting pitch collections has been demonstrated briefly, and other instances will be described in chapters on the Blind Willie Johnson works and *Visionary Songs*. Whilst strict adherence to serial principles of note organisation is rare in these works, there is occasional use made of manipulative techniques such as retrograde and inversion forms. Tone rows exist as organisational forces, but are seldom used to generate linear structures. Rather, fragments of these function as pitch collections which may be transposed and developed as structural harmonic units into contrapuntal textures, a process which will be examined in relation to the relevant works.
Chapter Two

Form, Rhythm and Text

This chapter looks at some of the different approaches to form used in the works in this folio. At its most basic, form in music can be defined as the way in which one moment follows another in time. We experience music as a sequence of events, and it is this temporal linearity which differentiates sound art from the visual or plastic. Though architectural design of some kind is always present in music, this is only discernible to the listener retrospectively – the development of a musical idea can only be understood in light of its previous instantiations. Our apprehension of a musical event is conditioned by expectations created by our experience of the work as it progresses through time. In order to apprehend the entire structure of a work instantaneously, we must either be able to hold it in our memory after the fact, or be able to read and understand the score.

In the previous chapter it was shown how the approaches to harmony developed in my music have their roots in classical formulae. They incorporate personalized techniques of pitch manipulation, but can still be considered basically tonal, in that there is usually a sense of home pitch. Whilst my music eschews many of the stricter musical forms such as the sonata, my harmonic thinking admits the use of more generalized formal plans. Ligeti was “totally against the use of traditional forms for present melodic, harmonic and rhythmic material. Knowing how to analyse traditional forms is indispensable but God save us from atonal sonatas.”¹ Whilst many of the folio works are through-composed, others are episodic in nature and develop through the contrasting of different musical elements, only one of which is harmony.

Other musical features can also be used to mark divisions of structure. Changes of tempo will clearly define sectional blocks, as will changes in texture, density and instrumentation. Rhythm and metre are strong and obvious delimiters, and melody – the contrasting and development of thematic material – is also important. All of these aspects can occur

simultaneously, and on different scales. In the case of melody, small motifs combine into phrases, which in turn become larger periods, all of which signify different levels of structure. Finally, the addition of text opens up another level of form. This may dictate musical events, or work in counterpoint with other structural aspects.

**Synthetic organisation - Golden Section and the Fibonacci sequence**

My own approach to form distinguishes between structures which develop intuitively and those whose growth is consciously controlled. Whilst with intuitive works structures evolve directly from the shaping of basic musical materials, controlled works are based on pre-ordained structures. This process will be explained more fully, but an example of this contrast in approach is the two settings of *The Actual Petals of a Flower*. Whilst the motet developed along mostly intuitive lines (musically, in any case – the combination of two separate texts did provide one level of pre-ordained structure), the solo song was composed according to a strict plan of numerical proportion. These approaches are not mutually exclusive. Sometimes, post-analysis of material intuitively constructed during the composition process suggests underlying structural principles which can be then used to shape the material consistently in subsequent drafts. Conversely, sometimes a pre-ordained structural model is abandoned in favour of a more intuitive approach, in cases when the results are unsuccessful or the process feels too restrictive.

In the case of controlled forms, aspects of the structure are put in place early on, often prior to pitch selection. In these cases, I employ various mathematical processes which create structural grids along which to position musical events. As these processes are used as ways to organize temporal structure, they mostly divide numbers of bars into proportional patterns. I am aware that it is also possible to work with duration in terms of minutes and seconds in this respect, but I choose to work with bars because of the many other factors which will influence the listener’s perception of elapsed time. Tempo can affect this, as during faster and busier passages time seems to be moving faster than when the tempo is slow. Likewise, rate of harmonic change and relative rhythmic density will also influence this.²

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² In this regard, I am in agreement with Italian composer Giulio Castagnoli, with whom I studied briefly in 2007. (See Introduction, p. 7).
The most common processes used in the folio works are the Golden Section and the related Fibonacci sequence. According to Ernő Lendvai,

Golden Section ("sectio aurea", and henceforth GS) means the division of a distance in such a way that the proportion of the whole length to the larger part corresponds geometrically to the proportion of the larger to the smaller part.³

In order to find the Golden Section (henceforth GS, to borrow again from Lendvai), we multiply the length of the larger section by the number 0.618. Music theorists have found evidence of proportions calculated from the GS in the music of composers including Mozart, Debussy, Chopin and Satie. Most convincingly the case has been made by Lendvai for its frequent and conscious use in the works of Bartók. In his work Béla Bartók: An analysis of his music Lendvai subjects the first movement of the Sonata for Two Pianos and Percussion to detailed formal and harmonic analysis, revealing a complex web of GS relationships.⁴ In my own music, GS points are used to signpost climactic moments which divide pieces into strongly contrasting sections. An example of this is the climax in One Last Tango at bar 117, where a triple-forte orchestral tutti coincides with the arrival at the pitch-goal of E in the bass. As described in the previous chapter, the section following this climax features a different system of harmonic organization, in which previously functional relationships are superseded by a directionally neutral pitch collection. Sectional change is enhanced by the subsequent return to a slower tempo and more irregular rhythmic structures. Fig. 2.1 shows a visual representation of these proportions and the mathematical workings used to establish them.

When the total amount of bars is multiplied by 0.618 the result is as follows -

\[ 186 \times 0.618 = 114.984 \ (115) \]

The GS point divides the work into two sections of 115 and 71 bars respectively. The main musical climax arrives at bar 117, which approximates the GS, when rounded off and bars of different lengths are allowed for. Although the piece divides most obviously along lines of tempo differentiation, the GS point does not mark one of these. However, following this climax, there is a passage during which intensity is wound down through the use of sustained harmonies and much slower rhythmic activity within the tempo crochet = 132. The final section of the work really begins at 142, with the establishment of a slower tempo and new pitch collection.

It is also possible to use this process in the delineation of further formal divisions, creating compound GSs, and to reverse the order of sections so that the shorter fragment precedes the longer. This occurs in *One Last Tango*, where within the proportions of this final section of 45 bars is hidden another GS relationship. When the length of the \((a)\) section is multiplied by the GS number, this result can in turn be subjected to this process:
Long section \((a)\) \(115 \times 0.618 = 71.07\) (71)

\(71.07 \times 0.618 = 43.92126\) (44)

This reveals that the important C or \((c)\) section forms the lesser part of the GS proportion in relation to \((a)\). Thus, the relationship between the longest section of the piece \((a)\) is proportionally identical to the relationship between the lengths of \((a)\) and \((b)\). Additionally, \((c)\) is the inverse GS of the length of \((a)\).

Despite being one of the most significant uses of GS proportion in the folio pieces, its application occurred late in the compositional process. The work was essentially completed up to the main climax, after which the formula was used to ascertain the number of bars in the final section. This is typical of the use of GS in these works, in that it is usually applied at some point in the middle of the compositional process, but rarely as a structural goal from the outset. If a piece’s form seems to be working in this direction, (ie. it may feel like it needs a climax, sectional change or other structural signpost at around the relevant position), I have found the GS formula to be an effective way of defining this.

Another mathematical process used in the folio works, closely related to GS, is the Fibonacci sequence. This occurs when two numbers, beginning from 0 and 1, are added together, and each subsequent number is the sum of the previous two. Fig. 2.2 shows the first few terms of the sequence.

Fig. 2.2 Fibonacci number sequence

<table>
<thead>
<tr>
<th>Term</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 + 1 = 1</td>
<td>1</td>
</tr>
<tr>
<td>0 + 1 = 1</td>
<td>1</td>
</tr>
<tr>
<td>1 + 2 = 3</td>
<td>2</td>
</tr>
<tr>
<td>1 + 2 = 3</td>
<td>3</td>
</tr>
<tr>
<td>2 + 3 = 5</td>
<td>5</td>
</tr>
<tr>
<td>3 + 5 = 8</td>
<td>8</td>
</tr>
<tr>
<td>5 + 8 = 13</td>
<td>13</td>
</tr>
<tr>
<td>8 + 13 = 21</td>
<td>21</td>
</tr>
</tbody>
</table>
Although Lendvai avers that Bartók uses the Fibonacci sequence to generate harmonic structures, this is not an aspect of my own harmonic technique.\(^5\) Rather, the sequence is used to generate formal dimensions. The most obvious musical application is using these numbers to generate relative durations, which is how the process was used in the setting of *The Actual Petals* from *Visionary Songs*. As the text deals with the natural miracle of reproduction, it seemed appropriate to make use of a mathematical principle in the laying out of a structural grid symbolizing the process of natural regeneration.

In *The Actual Petals* each node or Fibonacci number marks the point at which a new cycle of development of motivic material begins. The most important of this material is found in the accompaniment figures which grow outwards and extend their ranges and rhythmic complexity in symbolically evolutionary fashion. The first section gradually builds up a nine-note pitch-class set suggesting the mixolydian mode of E. The song eventually attains a pitch goal comprising the complement pitch-class set - the previously unheard pitches. The use of the Fibonacci sequence suggests a GS point, and this coincides with the attainment of this pitch goal, after which the sequence resets to zero and begins again. This significant moment is reinforced by a change of tonal centre to B\(^\flat\), which in turn becomes the new tonal centre via a transposition at the tritone of the original nine-note set. The second section is also differentiated from the first by its slower rate of development, a decrease in rhythmic energy and the piano’s use of a lower and darker register. Rhythmic divisions are more diffuse and figures tend to wind down rather than accelerate. Fig 2.3 catalogues the ways in which the Fibonacci moments are realized.

Fig. 2.3 Structural events in *The Actual Petals* as defined by Fibonacci grid

<table>
<thead>
<tr>
<th>Section</th>
<th>Bar No.</th>
<th>Fib. No.</th>
<th>Cycle no.</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) E</td>
<td>1</td>
<td>0</td>
<td></td>
<td>Represented by a bar of silence</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td>Octave E - establishes tonal centre</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1 1</td>
<td>1</td>
<td>Suggestion of mixolydian mode</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2 2</td>
<td>2</td>
<td>First appearance of $#6$</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>3 3</td>
<td>3</td>
<td>First appearance of major 3rd</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>5 4</td>
<td>4</td>
<td>Voice enters during this cycle</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>8 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>13 6</td>
<td></td>
<td>G$#$ in bass, introduction of accompaniment motif</td>
</tr>
<tr>
<td>2) B♭</td>
<td>35</td>
<td>0</td>
<td>Golden Section (GS) point – attainment of pitch goal (complement)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>1 1</td>
<td></td>
<td>Change of register in accomp. and tonal centre (B♭) voice tacet</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>2 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>3 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>5 4</td>
<td></td>
<td>Re-entry of voice</td>
</tr>
<tr>
<td></td>
<td>48</td>
<td>8 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As well as beginnings of new cycles of accompanimental growth, many of the Fibonacci nodes introduce a new pitch, thematic idea, registral change or harmonic structure, and many of the cycles commence with anacruses. Some of these signposts are more significant than others. The number 0 is symbolically denoted by silence or sustained notes, and other sections are elided (e.g., bars 36-37).
One final device used in these works in the establishment of formal proportions is the mirror. This technique involves the repetition of musical material in retrograde form, allowing the events to occur in the opposite order. An example from the folio works is Heredity from Visionary Songs, which revolves around a central point. Additionally, separate lines can be repeated backwards (retrograde process), generating longer linear forms such as those occurring in the accompaniment of John the Revelator. The use of mirror technique in both of these works will be discussed in later chapters. The works of Webern, especially Variations (Opus 27) for piano and Symphony (Opus 21), were useful models for my own use of this technique.6

Tricks of Light – Form and Illusion

Sometimes the proportional parameters of a work are pre-established in more subjectively arbitrary ways. The guitar trio Tricks of Light was originally envisioned as the second in a series of four related works, collectively entitled Magnifications for Many Guitars. The original idea was for each work, scored for a different number of guitars, to describe different ways in which light behaves. This particular movement was concerned with illusion and trickery – things being other than they seem. Whilst this quality is captured most immediately by rhythmic uncertainty and melodic unpredictability the metaphor also plays out in the work’s multi-layered approach to form. On the most basic level this piece alternates two types of music which are characterised by contrasting rhythmic drives and harmonic approaches. Music A consists of a busy polyphonic texture, in which a jazzy melodic theme develops over a rhythmic bass line and strummed staccato chords in 4/4. The harmony used is freely chromatic. This is contrasted with music B, in which rhythmic stasis is achieved by the use of sustained note values working against barlines in 3/4 meter. These B sections are also based on register-specific harmonic fields, as opposed to the free chromaticism of music A. Musics A and B alternate episodically and for irregular numbers of bars, giving the work a sense of unpredictable expansion and contraction.

6 It is also possible for a mirror structure to work horizontally. In this case pitches are situated in equal intervallic distance either above or below a fixed central reference pitch. This device was used frequently by both Webern and Dutilleux and also occurs in the folio work John the Revelator, as will be discussed in Chapter Three.
 Whilst exact numerical proportions were not preordained, awareness of bar numbers was useful in achieving this sense of unpredictability. Fig. 2.4 breaks down the work’s structure in terms of alternation of musics A and B, showing the relative proportions of each section. Blue bars represent music A, signifying the main thematic and accompanimental materials, and red bars denote music B, the contrasting periods of metrical suspension based on harmonic fields.

Fig. 2.4 Comparison of relative proportions of different sections, *Tricks of Light*

![Figure 2.4](image_url)

After four iterations of music B and five of A, music C is really part of a development section, with rhythmic and harmonic material derived from A. The only real point of difference is the absence of A’s melodic material. During the previous A5 section rhythmic activity has continued to intensify, and this momentum carries forward into C, which is based on development of elements from the accompaniment texture. The harmonic field of B has by this stage reached saturation point with the employment of all twelve tones, and consequently this section does not appear again. The music builds to a climax at the end of C, after which there is a brief recapitulation of melodic material from A. Looking at the relative proportions
of the different sections, the piece establishes a balance between the length of the introduction and A1, but expectations of continuing symmetry are dashed by the unexpectedly short B2. The following sections vary in length, but overall are expanding, the largest section being the development beginning at A5.

Having defined the piece’s most obvious formal divisions in terms of meter, rhythmic intensity and harmonic density, looking at the distribution of the thematic materials themselves reveals a finer and more detailed level of structure. Music A includes the main thematic (melodic) material and an accompaniment texture composed of three elements. The melody (a) consists of loose, jazz-like variations of a rhythmic theme occurring at three different pitch levels. This melody is improvisatory in character and defined mainly by its rising opening gesture and general directional profile. Subsequent iterations vary significantly in length and range, mostly beginning on the fifth quaver of the bar. Motivically, there is a tendency to begin with step-wise motion and then leap to a larger interval on a syncopated beat. The final quaver of the bar is often used as a beat of anticipation, typical of jazz phrasing.

The accompaniment consists of three basic elements: the bass line (b), a strummed chordal accompaniment (c), and a harmonic cluster (d). The pitch collection for the bass line (b) centres on E and contains both the minor and major third of this tonality and many colour tones, reminiscent of jazz or blues harmonies. This line is one of the rhythmic engines which drive the piece. Acting as a counterpoint to the bass line the chordal accompaniment constitutes a rhythmic motif constructed from quartal chord voicings strummed in rapidly repeating semiquavers. These two elements combine to form the backbone of the accompaniment, and Ex. 2.1 shows the opening of the piece, demonstrating this interaction in relation to the melody (a). Note the presence of both G and G♯ in the bass line, reminiscent of a blues scale based on E. The chordal accompaniment (beginning bar 6, guitar 1) is based on quartal voicings against this, and the melody (guitar 2, bar 10) also uses a freely chromatic palette.
Ex. 2.1 Introduction of melody (a) and accompaniment (b) and (c), *Tricks of Light*

The Ds which begin in bar 2 of guitar 2 and transfer to guitar 1 at bar 10 are the opening statements of element (d). As the piece progresses this single pitch opens outwards chromatically in both directions, constituting another structural layer. Its intervallic ambit becomes wider as it accumulates internal pitches, reaching its widest point at the conclusion of development section C. It now spans a major seventh, and is sounded fortissimo with aggressive tamboura (percussive) techniques. During the coda it converges down to the single tone (Ab), which stands in a relationship of tritone equivalence to the starting point of D. Ex. 2.2 below charts the growth and development of cluster (d) in comparison with the previously defined sectional divisions.
Ex. 2.2 Development of cluster \((d)\) in relation to sectional divisions, *Tricks of Light*

This example shows irregularity in the widening of the intervallic ambit of \((d)\) and how this develops in contrast to the sectional divisions. The opening D remains stable through the introduction and initial exposition of A and B, beginning its expansion trajectory during A2. The first extension downward from the unison to a minor second is balanced by the subsequent upwards extension of the same distance. Two new pitches are then assimilated into a cluster surrounding the central D, before the ambit extends briefly to a perfect fourth and again to the tritone a bar later. Progression is slower and more orderly from here, and divisions rarely coincide with cluster changes until it attains the ambit of a major seventh at bar 123, the climax of the piece at the conclusion of the development. Whilst the ambit of \((d)\) changes several times in the middle of A sections, it never does so mid-B section. Thus, the structural layer represented by \((d)\) works against that defined by sectional divisions.

The following table outlines the order of musical events in *Tricks of Light*, highlighting the relationships between the melodic material \((a)\) and the structural divisions. Unlike \((d)\), the main melodic material works in ways which emphasize sectional divisions, marking these with changes of pitch level and phrasing.
Fig. 2.5 Basic formal scheme of *Tricks of Light*

<table>
<thead>
<tr>
<th>Section</th>
<th>Bar no.</th>
<th>Length</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
<td>10</td>
<td>Establishment of accompaniment texture consisting of 3 elements: <em>(b)</em> bass line and pitch collection, <em>(c)</em> a strummed chordal accompaniment semiquavers &amp; <em>(d)</em> expanding structural cluster</td>
</tr>
<tr>
<td>A1</td>
<td>11</td>
<td>10</td>
<td>First statement of <em>(a)</em> – thematic material on D and F</td>
</tr>
<tr>
<td>B1</td>
<td>21</td>
<td>3</td>
<td>First suspension of metre (B♭)</td>
</tr>
<tr>
<td>A2</td>
<td>24</td>
<td>14</td>
<td>Second statement of <em>(a)</em> on G♯ and D</td>
</tr>
<tr>
<td>B2</td>
<td>38</td>
<td>6</td>
<td>Second suspension of metre (B♭)</td>
</tr>
<tr>
<td>A3</td>
<td>44</td>
<td>9</td>
<td>Third statement of <em>(a)</em> on F</td>
</tr>
<tr>
<td>B3</td>
<td>53</td>
<td>11</td>
<td>Third suspension of metre</td>
</tr>
<tr>
<td>A4</td>
<td>64</td>
<td>15</td>
<td>Fourth statement of <em>(a)</em> on D and G♯</td>
</tr>
<tr>
<td>B4</td>
<td>79</td>
<td>6</td>
<td>Fourth suspension of metre</td>
</tr>
<tr>
<td>A5 (Devel)</td>
<td>85</td>
<td>23</td>
<td>Fifth set of entries of <em>(a)</em> - many entries, including retrograde</td>
</tr>
<tr>
<td>C (Devel)</td>
<td>109</td>
<td>16</td>
<td>Juxtaposition of <em>(b)</em> and <em>(c)</em></td>
</tr>
<tr>
<td>Coda (Recap A)</td>
<td>125</td>
<td>18</td>
<td>Final statements of <em>(a)</em></td>
</tr>
</tbody>
</table>

The episodic nature of the form is obvious from this table. Whilst the work alternates sections A and B the musical argument is driven by dynamic interplay between the three instrumental parts and these four basic musical elements. Harmonically, it is difficult to isolate key centres. Whilst the bass line is anchored around E, melodic statements always begin on D, F,
or G♯. (Note the relationships by minor third, including the harmonically-equivalent tritone.) There is no real modulation, though the E of the A episodes is contrasted with B♭ in the first two B episodes. Subsequent versions of B are too tonally unstable to define, and there is instead a sense of an alternatively thickening and simplifying chromatic space.

Looking in more detail at the work’s structural elements teases out still deeper layers of formal organisation. Responsibility for all of the musical elements is spread more or less evenly between the three guitars, with no one instrument dominating. The following example maps more fully the interaction between the main ideas as they are spread between the instrumental parts. Thematic and harmonic materials are shown as they occur. Coloured shading represents each of the basic structural elements: (a) melody (orange), (b) bass line (blue), (c) chords (lilac) and (d) cluster (olive). Horizontal lines symbolize instrumental parts, and the verticals bar lines. The first few notes of the melody (a) are shown at pitch, thus clarifying each entry. The pitch collection of bass line (b) is shown in the first bar, and since this remains constant, not subsequently. A musical example of chordal motif (c) is shown at its first appearance only; the lilac-coloured shading indicates its presence in the texture. Whilst cluster (d) has already been defined in contrast to the basic structure (Ex. 2.2), Ex. 2.3 also shows its part distribution and relationship to melody and accompaniment, but not its pitch. Sectional divisions are labelled in boxed text.
Ex. 2.3 Structural map of part interplay, *Tricks of Light*

**Key**

(a) main thematic (melodic) material

(b) bass line generated from pitch collection

(c) strummed chordal accompaniment

(d) outwardly expanding harmonic cluster

---

**Diagram**

- **Intro - establishment of accompaniment**
  - Guitar 1: expanding cluster (d)
  - Guitar 2: pitch collection of bass line (b)
  - Guitar 3: (c) strummed chordal accompaniment

- **A1 - introduction of main theme**

- **B1 - harmonic field-suspension of meter**

- **A2 - continuation of main theme**

- **B2**

---

(a) 1

(b) melody on D

(c) accompaniment (c)

(d) melody on F

(e) 3 on G♯
C - continuation of development - juxtaosition of bass motif & quartal chords

(a) 12 on F retrograde

(b) 13 on F retrograde

Coda - (recapitulation of A)

(a) 14 on F in octaves

(a) 15 on F in fifteenths

Meno mosso

(a) 16 on G in convergence onto single tone
Each of the different rhythmic and structural elements follows its own trajectory. Though roles are clearly defined in the introduction, it is immediately apparent that no single musical element is exclusively associated with any one particular instrument. For instance, initially guitar 3 introduces bass (b), guitar 2 expanding cluster (d) and guitar 1 chordal motif (c). After the accompaniment is established, thematic material (a) is also introduced in guitar 2. This distribution of roles continues until bar 87, the beginning of A5, when (a) transfers to guitar 1. As all three instruments should be identical in sound, this change is not easily comprehended aurally, and serves simply to send the individual parts off along new trajectories. Instrumental interplay of this nature is intended primarily for the players themselves, and is reminiscent of the dynamic involved in jazz performance, where players must constantly listen and spontaneously react. All three instruments participate in the harmonic field textures (B) and also share the main thematic/accompanimental material.

Whilst the three instruments do not remain committed to their initial roles, they each operate in slightly different registers. Guitar 3 is the only one to sound the low open E, and for the most part remains in the register below the staff. The middle area around the staff is the main tessitura for guitar 2, though this instrument ranges freely above and below it. Guitar 1 sits slightly higher, and has much material in the upper registers, including in the area above the twelfth fret. Ex. 2.4 shows the registral extremes of each part, with the main tessiture braced.

Ex. 2.4 Instrumental range and tessitura in Tricks of Light

---

7 As this is a guitar work, all written pitches are transposed up an octave.
The three accompaniment elements \((b), (c)\) and \((d)\) strongly influence the work’s structure. Roles are assigned at the outset, but become progressively intertwined. Concentrating firstly on \((b)\), the bassline in guitar 3 rhythmically drives the work through the introduction and first three \(A\) sections, before shifting up two octaves in guitar 1 at bar 62. Guitar 3 re-enters seven bars later to create a counterpoint before the line is broken off to accommodate the final \(B\) section. In \(A_5\), the line is resumed by guitar 3 harmonized in sevenths, before disappearing briefly in bar 95. It reappears in guitar 1 five bars later, this time doubled in octaves in the highest register. It remains there until the end of the development at bar 124, expanded into high register quartal voicings. From bar 137 there is one short, final appearance of \((b)\) in guitar 3, in its original register.

These quartal voicings in the development derive from motif \((c)\). This strumming first appears sparsely from bar 6 in guitar 1, and continues sporadically until \(B_2\), after which it disappears completely in preparation for a later role. It reappears in \(A_5\) (guitar 2), and begins to dominate the development sections, taking its melodic profile from the intervallic structures in the bass. These chords build towards the work’s climax, linking all three guitars in a busy polyphonic texture which attains closure at bar 123. Motif \((c)\) does not reappear following the climax.

The other accompanimental element, expanding cluster \((d)\) appears in all three parts, and sometimes in two concurrently, for varying lengths of time. It often occurs in conjunction with the harmonic field sections, blurring the harmonic boundaries and often intersecting with these fields. Though it appears only intermittently in the developmental sections the most widely spread version of it is used to percussively punctuate the climax in bar 23. It then forms the sole accompaniment in a coda driven by melodic development of \((a)\).

Following the progress of the melody \((a)\) divulges another layer of structure. The evolving formations of this melody begin at three pitch levels - \(D\), \(F\) and \(G\). There are sixteen statements of \((a)\), and tracing their occurrence as they appear relative to sectional divisions reveals the pattern shown in Fig. 2.6. Following the initial exposition of these three pitch levels, the phrases appear severally in different combinations, creating formal units which emphasize sectional divisions. The initial exposition of \((a)\) canvasses all three pitch levels, but extends beyond the interruption by \(B_1\), requiring the next unit to commence midway through \(A_2\). The next entry of \((a)\) in \(D\) signals the commencement of a new formal block operating on a larger scale, Part 1. This section contains further reiterations of \((a)\), always
unpredictably interrupted by B sections. In Part 2 (B4 - A5 - C) there are six entries, commencing with a restatement at all three pitch levels in the original order. The second section of Part 2 (C) omits this element entirely, and in the coda all three pitch levels are again recapitulated in their original order. At this point, the two levels of structure are again in sync with one another.

Fig. 2.6 Distribution of theme (a) in relation to sectional divisions, Tricks of Light

<table>
<thead>
<tr>
<th>Exposition</th>
<th>Part 1</th>
<th>Part 2</th>
<th>Recap</th>
</tr>
</thead>
<tbody>
<tr>
<td>D F A1</td>
<td>G# B1</td>
<td>D B2</td>
<td>D FG#</td>
</tr>
<tr>
<td>D F B1</td>
<td>G# A2</td>
<td>F B3</td>
<td>D FG#</td>
</tr>
<tr>
<td>D F A3</td>
<td>G# B3</td>
<td>D G# A4</td>
<td>D FD</td>
</tr>
<tr>
<td>D F A4</td>
<td>G# B4</td>
<td>D G# A5</td>
<td>C Coda</td>
</tr>
</tbody>
</table>

The arrow depicts the intensity of contrapuntal activity which develops through increased rhythmic density, building towards the climax at the end of Part 2 coinciding with the end of section C. This thematically-based point of view suggests an over-arching three-part structure, loosely based on the exposition, development and recapitulation of motif (a). Note the gradual increase in the number of thematic entries through Parts 1 and 2, from one to two entries per unit in part 1, expanding to three entries per unit in part two. These phrases also expand progressively throughout, and never occur in B sections.
“Three wings you have” - Three-part structure and metre

A study of the structure of *Tricks of Light* reveals a web of connections between many different aspects of the composition, including multiple harmonic strata, melodic development, rhythmic intensification, sectional contrast and textural density. At its simplest level the form of this work can be represented by a three-part structure:

\[ \text{I (exposition)} \rightarrow \text{II (development)} \rightarrow \text{III (conclusion)} \]

Many of the other folio works are also based on this principle. The following table summarizes forms used in these works, and gives a general description of the underlying techniques used in their development.

**Fig. 2.7 Summary of forms used in folio works**

<table>
<thead>
<tr>
<th>Work Title</th>
<th>External Form</th>
<th>Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The Actual Petals of a Flower</em></td>
<td>through-composed</td>
<td></td>
</tr>
<tr>
<td><em>Two Pieces for Guitar Trio</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. <em>Prism</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <em>Tricks of Light</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Dark was the night,</em></td>
<td><em>I – II - III</em></td>
<td>episodic (rondo)</td>
</tr>
<tr>
<td><em>Cold was the ground</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>John the Revelator</em></td>
<td><em>I – II</em></td>
<td>Golden Section</td>
</tr>
<tr>
<td>Work Title</td>
<td>External Form</td>
<td>Mechanism</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td><strong>One Last Tango</strong></td>
<td>I - II - III</td>
<td><strong>Golden Section</strong></td>
</tr>
<tr>
<td><strong>Trio</strong></td>
<td>I - II - III</td>
<td><strong>Golden Section</strong></td>
</tr>
<tr>
<td><strong>Visionary Songs</strong></td>
<td>(song cycle)</td>
<td></td>
</tr>
<tr>
<td><em>O Virtus Sapientiae</em></td>
<td>through-composed</td>
<td></td>
</tr>
<tr>
<td><em>The Actual Petals of a Flower</em></td>
<td>I - II</td>
<td><strong>Fibonacci sequence/ Golden Section</strong></td>
</tr>
<tr>
<td><em>Heredity</em></td>
<td>I x2</td>
<td><strong>mirror</strong></td>
</tr>
<tr>
<td><em>No bird soars too high</em></td>
<td>strophic</td>
<td><strong>passacaglia</strong></td>
</tr>
<tr>
<td><em>There is grandeur in this view of Life</em></td>
<td>through-composed</td>
<td></td>
</tr>
<tr>
<td><strong>Vorrei</strong></td>
<td>(song cycle)</td>
<td></td>
</tr>
<tr>
<td>I. Vorrei...</td>
<td>through-composed</td>
<td><strong>Golden Section</strong></td>
</tr>
<tr>
<td>Ricordi</td>
<td>through-composed</td>
<td></td>
</tr>
<tr>
<td>II. Gelosia di Fiori</td>
<td>I x2 - II - I - II</td>
<td><strong>Golden Section</strong></td>
</tr>
<tr>
<td>III. Belle Manine</td>
<td>I x2 - II - III</td>
<td><strong>mirror</strong></td>
</tr>
<tr>
<td>IV. Carina</td>
<td>Intro - (I – II) x2</td>
<td></td>
</tr>
<tr>
<td>V. Mattinata</td>
<td>through-composed</td>
<td></td>
</tr>
<tr>
<td>VI. Sei Libera</td>
<td>Intro - I - II (strophic)</td>
<td></td>
</tr>
<tr>
<td>VII. Ricordi?...</td>
<td>I x2 - II - III - II - Coda</td>
<td></td>
</tr>
</tbody>
</table>

In addition to *Dark was the night, Cold was the ground*, the works *Tricks of Light, Prism, Trio, One Last Tango* and at least a couple of the movements from *Vorrei...* can all essentially be defined as three-part forms. Of these works, *One Last Tango* has already been discussed in terms of harmonic technique, and in this case, the three-part structure is strongly delineated by tempo changes defining the three sections. The sectional divisions of *Tricks of Light* have
been examined in detail, but the alternation of musics (A) and (B) also suggests affinities with rondo form. The second of the guitar trios *Prism* is a progressive form with three obviously contrasting sections, defined by differences in thematic material, harmonic structure and instrumental texture within a consistent tempo.

The derivation of the harmonic structures of the songs *Mattinata* and *Sei Libera!*... from the chord progression of *Carina!*... has been detailed in the previous chapter. These movements from *Vorre!... present a more complex approach to structure, partly due to the ways in which the underlying poetic form of the texts interact with the organization of musical ideas, and partly due to their inter-movement relationships within the wider context of the entire work.

*Trio* for flute, piano and cello is an example of another approach to three-part form. Originally conceived as a multi-movement work describing an asymmetrical arch form, the three sections became integrated during the composition process. The I section is a result of fusing sketches of the putative first two movements, whilst the II section was originally conceived as a separate slow movement. This was to be followed by a contrasting fast movement and a final slow movement reprising the opening. The third movement became linked to the new I section, and the fourth (fast) movement transformed the material in I more substantially to create greater contrast and a stronger ending, in the process becoming shorter and more concentrated. The final reprise was omitted, as once the arch form ceased to be relevant, I felt that to return to the beginning was in many ways a negation of the growth that had occurred through the subsequent transformation of the musical materials. Figure 2.8 gives a visual account of how the final product was arrived at.
Fig. 2.8 Process of reduction from five movements to one in Trio

Original form: multi - movement asymmetrical arch

Final form: single three-part movement

Intervallic and pitch material became so tightly integrated that the work became more compelling in its eventual single movement, three-part form. Even so, each section is sufficiently different in character due to the wide variation in treatment of the basic materials as, described in Chapter One.

The omission of the final reprise highlights the significance of three-part structure in these works. Another way of describing this process is as one of beginning - middle - end, or birth - growth - attainment. These models suggest a process of constant renewal and development of materials progressively through the course of a composition, which does not allow a return to the original state. One noticeable feature of the music in the folio is the scarcity of repeated material – the repeat sign is practically non-existent in my music, and when material returns or is re-presented it is always in different guise.

Non-repetition also affects the rhythmic structure of these works. The absence of exact repetition means that it is rare for this music to fall into self-sustaining rhythmic grooves, despite the influence of jazz, blues, rock and traditional folk musics. Though rhythmic similarities with these styles does occur, the process of constant development and recasting, in addition to the juxtaposition of structural elements, make it rare for grooves to develop, though examples do exist in the folio works. Tricks of Light abounds in jazz rhythms, but is essentially a piece driven by tonal and melodic drama. Conversely, Dark was the night, Cold
was the ground contains sections where the music is sustained by rhythmic percussion patterns, devoid of melodic or harmonic activity; and John the Revelator sustains a fractured modern jazz/funk groove almost throughout, though this is disguised and submerged at times beneath layers of textural complexity. In contrast, most of One Last Tango is certainly driven by the rhythms suggested by the title, and movements of Vorrei... are based on 19th century Italian song and dance forms.

Closely aligned with rhythm is metrical structure. The tendency in these works for phrases to tie over barlines and negate metre has already been discussed in reference to Trio and Tricks of Light, and this also occurs in some of the vocal works, Prism and the introductory section of Dark was the night. This can occur in any meter, but when regular beat is not required 4/4 is the most common choice. In some cases, the music was initially composed without barlines, and a metrical grid subsequently applied to clarify accents and facilitate performance. The resulting structures tend to be mixtures of duple and triple meters in simple and compound times. An example of this technique is the introductory Visionary Song, O Virtus Sapientiae, which alternates compound bars of lengths ranging from 3/8 to 10/8. There is no mathematical logic to the resulting structure, which is designed to follow and accentuate speech rhythms inherent in the text. The final version dispenses with time signatures altogether, allowing the performers more latitude in rhythmic interpretation.

A recent development in the rhythmic conception of my music is the exploration of compound meters. Trio and No bird Soars both feature dotted quaver formations, which result in metrical ambiguity when bars of 6/8 are divided equally into four. Additionally, movements of Vorrei... are cast as a tarantella and a stornello, Italian folk forms which rely on propulsive 6/8 meter for their dance characteristics. This is exploited in these movements, and the rhythmic subdivision is correspondingly simpler than that utilized in Trio and No bird Soars.
“Con te Vorrei... Parlare d’amore”

Text, form and instrumentation in Vorrei...

There is one further aspect of this music which has bearing on structure, and that is the effect of text. More than half of the folio works are vocal, and extra-musical concerns were critical to their conception. The work with the most substantial textual component is the most recent – the song cycle Vorrei.... In this work, the large body of text was the most important factor in the organisation of form, as it provided the essential stimulus and also dictated the musical direction.

The texts themselves are of great personal significance to me, so some background to their provenance is useful in understanding the reasoning behind the resulting creative compositional decisions. The poems were composed by my maternal great-grandfather Ginese Triaca during the earliest years of the 20th century. Ginese was born in 1880, in Bagni di Lucca, (northern Italy) and first immigrated to Australia in 1907. These poems were written whilst Ginese was stationed in Verona in 1902 during his compulsory military service. They survive in a hand-written notebook entitled Raccolta di Poesie e Racconti Scritti nel tempo del mio Servizio militare (Collection of Poems and Stories Written during my time of Military service.) This slim volume has been passed down through the family and resurfaced in 2010. The subject matter and dedicatee is his future wife Italia, and the poems are a touching and personal documentation of their love and courtship.

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8 Ginese Triaca (1880-1947). I am indebted to my cousin James Massola for research done at the National Archives which authenticates biographical information. “He came without his young wife, Italia, who remained in Tuscany to run the family’s osteria (restaurant).... In 1914, Ginese went back to Italy to serve in the army during the Great War. It was not until 1926 that he returned to Australia, this time to found a factory with his brother Carmelo and the Picchi family. Ginese was a figuristi – he made statues, specifically religious icons. A year later he sent for his wife, Italia, and his surviving children, Flora, Antonietta and Antonio (others, including Casimiro and Antonio had died a decade or more before Antonietta and Antonio were born). The factory was set up in King William Street, Fitzroy, and the family lived over the road.... Ginese was the secretary of the Fascio, or the Fascist Club, a member of Club Cavour, and a founder of the Dante Alleghieri too.... Ginese was a prominent member of the Italian community. He was made a Cavaliere by King Vittorio III for his services to fascism in Australia – which... would come back to haunt him for years to come.” (http://www.massola.org/2008/02/shaking-your-family-tree/, last accessed 04-09-2012.
Fig. 2.9 Raccolta di Poesie e Racconti Scritti nel tempo del mio Servizio militare
The notebook comprises nineteen poems and nine prose pieces, in addition to various introductions and dedications. Most of the poems are collections of four-line stanzas in various rhyme schemes. There are also a few examples of more sophisticated forms, including the Petrarchan sonnet. Aiming for variation of poetic forms, I selected eight of these poems as the basis of a cycle. The language is flowery, somewhat archaic and typically romantic. Whilst there is no narrative as such, a variety of emotional states are differentiated, ranging from joy and playfulness to awe and even fearful insecurity. Realizing these qualities musically was more important than attempting to literally describe the events and concepts found in the poems. There are recurring nature motifs in the poetic imagery – hands, butterflies, birds and of course, flowers abound – and while these helped stimulate musical ideas, they are not used structurally.

It should be made clear at this point that there is no ambiguity in Ginese’s use of his future wife’s name Italia. Whilst it may be tempting to ascribe a double meaning to this and look for nationalistic fervour, numerous dedications found in the manuscript make the object of Ginese’s raptures clear. In any case, other writings by Ginese exist which deal explicitly with military and patriotic themes, which are quite different in style and content. These particular poems were meant only for his beloved, and my decision to set them was not made without some trepidation due to their extremely personal nature.

Originally, I intended that the poems be merged into groups to create four or five broad and contrasting symphonic-style movements, as the subject matter and poetic means of expression remain fairly constant. However, the intimate nature of the poems suggested an individual approach to each, allowing the singular character of each utterance its own expressive space. Out of respect for the original texts, both artistic and familial, each poem remains complete and intact. Much trouble was taken to ensure that vocal lines faithfully followed the poetic rhythm of the texts, and that the sense of the lyric was always clear. There is little distortion of grammatical sense through extended melisma, though there are sections of vocalise where the vocal line is freed from textual constraints.

Concerns for textual fidelity led to a very personal conception of the work as a cycle of individual songs of contrasting moods and tempi. It would be couched in a chamber setting, which in turn suggested a role for my own instrument the guitar, allowing me to respond intensely to this poetry in ways derived from the pure physicality of my own connection to that instrument. In the early stages of the work’s composition, many of the movements began
as sketches of melody sung over simple guitar chords, ensuring that each song forged natural and corporeal connections between text, voice and guitar. I found this process to be crucial in understanding the rhythms and stresses of the language itself, and these improvised serenades were a culturally apt place to begin the process of musical realization of these texts. The end result is that many of the accompaniments are orchestrations of guitar accompaniments. This is especially true of the dance movements, where strummed guitar patterns are orchestrated into more complex textures. The guitar is a naturally quiet instrument, and its prominent usage meant that the instrumental balance needed to be carefully manipulated. The resulting orchestrational restraint affords the cycle a greater sense of intimacy.

The rest of the instrumentation was selected to complement the central guitar. Strings were the first decision, a string trio augmented by bass to enhance the registral depth. Percussion was chosen to provide timbral variety, with vibraphone, an instrument which combines well with the guitar, the dominant voice. Ginese’s military background is referenced by the use of untuned percussion such as the snare drum, and the trumpet also has a role in this context. The clarinet was chosen for its versatility and connections with Italian music. Lastly, whilst I felt that the poems needed to be sung by a high male voice, a soprano was added to provide respite for the tenor and sonic variation. Whilst there is no dramatic significance attached to these roles, there is a sense that Ginese is characterized by the tenor. In the poems, Italia is an object to be worshipped, and is never really given voice. Accordingly, whilst the soprano plays occasional cameos such as the angry jasmine in Gelosia, her part is not intended to characterise Italia.

As well as dictating certain parameters of the overall structure, the nature and provenance of the texts also affected the aesthetic of the piece. As the work is a response to my own forebears and mother culture, I felt it necessary that the music reflect this. To this end, there was a conscious decision to incorporate recognisably Italian elements in the work. Much of the vocal writing, especially in the slower movements, is operatic in style, despite the chamber settings, in reference to Ginese’s own love of opera. A collection of sheet music dating from his involvement with the Italian Cultural Society in Melbourne during the 1940s and 50s gives some idea of his love of patriotic music. Whilst patriotic music of the period

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9 According to family history, Ginese went to school with Puccini in Lucca, and received tickets from him to the local premiere of Madame Butterfly. This could be true, given Ginese’s penchant for theatre. Another story has both as bell ringers at San Michele in Lucca.

10 In particular, the volume Inni e Canzoni della Patria Fascista (Hymns and Songs of the Fascist Homeland) contains the sort of songs that would have been well known at the time in this milieu, judging by the copious
would be a rewarding avenue of research, this material is not really suited to the setting of love poetry, and I instead opted for more relaxed folk forms. To this end, slower aria-style movements are contrasted with quicker songs reminiscent of tarantella and stornello. It was initially tempting to include instruments such as mandolin and accordion, but these were felt to have too little variety to warrant their sustained use, and also to suggest Italian music too literally. Whilst it was my intention to subtly suggest Italian musical resonances, I was aware that the reproduction of these timbres could push the work into pastiche or parody.

The cycle is also characterised by tangibly melodic writing. Melody is really at the heart of Italian music, and it matters to me that if Ginese were alive today, he would hear something in these settings that he could recognise. There is an important melodic theme which unifies the cycle, first heard in Carina!... in a plain setting for tenor and guitar, and reappearing twice in the final movement as an instrumental tutti. This melody stands in for the type of simple and recognisable aria found in Italian opera. The work uses strongly tonal harmonic language, often encompassing functional relationships. This is extended through the use of modality and even occasional use of more abstract harmonic structures, as discussed in Chapter One.

As to the musical structures employed in individual settings, the short strophic nature and regular rhyme schemes of the poems suggested repetitive verse forms typical of southern European folk music and the 19th century Lieder tradition. The challenge was to create continuity and variation alongside these structures, and to this end I employed methods of through-composition which would take more account of subtleties of expression and meaning within individual poems. Fig. 2.7 lays out the basic approach to each song, but it is worth examining the correspondences and contrasts between some of the poetic and musical forms in more detail. Fig. 2.10 compares the verse and rhyme structures to the musical forms.
Fig. 2.10 Structural treatment of poetic forms in *Vorrei*...

**LpS** – lines per stanza

<table>
<thead>
<tr>
<th>Title</th>
<th>Stanzas</th>
<th>LpS</th>
<th>Rhyme Scheme</th>
<th>Musical Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>I. (a) Vorrei</em>...</td>
<td>1</td>
<td>5</td>
<td>ABCBC</td>
<td>through-composed</td>
</tr>
<tr>
<td><em>I. (b) Ricordi</em></td>
<td>4</td>
<td>4/4/3/3</td>
<td>Sonnet</td>
<td>through-composed</td>
</tr>
<tr>
<td><em>II. Gelosia</em></td>
<td>4</td>
<td>4/4/3/3</td>
<td>Sonnet</td>
<td>A x2 - B - A - B</td>
</tr>
<tr>
<td><em>III. Belle Manine</em></td>
<td>4</td>
<td>4/4/3/3</td>
<td>Sonnet</td>
<td>A x2 - B - C</td>
</tr>
<tr>
<td><em>IV. Carina!</em>...</td>
<td>5</td>
<td>4</td>
<td>5 Quatrains (ABAB)</td>
<td>Intro - (AB) x2 (strophic)</td>
</tr>
<tr>
<td><em>V. Mattinata</em></td>
<td>2</td>
<td>12</td>
<td>(ABAB) x2, CCDD</td>
<td>through-composed mirror</td>
</tr>
<tr>
<td><em>VI. Sei Libera!</em></td>
<td>6</td>
<td>4</td>
<td>6 Quatrains</td>
<td>Intro – (AB) x3 (strophic)</td>
</tr>
<tr>
<td><em>VII. Ricordi?</em>...</td>
<td>4</td>
<td>6</td>
<td>(ABABCC) x4</td>
<td>A x2 - B - C - B - Coda</td>
</tr>
</tbody>
</table>

The poem *Vorrei*... was chosen as the starting point as the poem encapsulates the basic gist of the cycle and introduces some of the important recurrent nature imagery. The first movement is the only surviving remnant of the original structural plan to create long symphonic-style movements and combines the shortest poem in the manuscript with a sonnet.

The setting (for two voices) is continuous, and leads via a clarinet solo into the second poem. This is the first of three sonnets from the manuscript, all of which were selected due to their more sophisticated treatment of poetic forms. These appear sequentially in the cycle, and the poetic form is treated differently in each case. The first *Ricordi* continues on in the through-composed vein of the introduction as a tenor solo, and the formal divisions of the verse scheme are not strongly marked. Vocal duties are shared more evenly in the second sonnet *Gelosia*, set in the style of a tarantella. Poetic form is reflected by musical division into two themes, which are used for the opening four-line and the following three-line stanzas respectively. The first theme in Bb minor is sung by the tenor, but the setting emphasises an
irregularity in the original poetic structure. In line six, the angry jasmine is voiced by the soprano, and this is used as an abrupt musical transition into the second theme in F minor. Following this, the first theme is restated instrumentally in the new key, and then the second theme is repeated vocally by both singers together. In this way, the sectional form of the poem is both reflected and extended by the musical setting, typical of processes used in the cycle. As the fig. 2.10 above demonstrates, musical forms never directly correspond to poetic forms, but were designed to reflect the expressive needs of the text.

“The bridegroom and bride”

Two Settings of Linnaeus’ *The Actual Petals of a Flower*

One final example of the importance of text in the folio works is a comparison between two different settings of a quote from the Swedish naturalist Linnaeus’ thesis *Praeludia Sponsaliarum Plantarum*. This text is used as the basis of both the second *Visionary Song* for soprano and piano and a motet for five voices. In *Visionary Songs* the quotation stands alone as a separate song, contrasting with the motet, in which Linnaeus’ text is paired with excerpts from the Old Testament *Song of Solomon*. Looking at the motet first, it is the interaction between these two texts and the ways in which they relate to one another which provide structural interest. Both texts are given below.

The actual petals of a flower contribute nothing to generation, serving only as the bridal bed which the great Creator has so gloriously prepared, adorned with such precious bedcurtains, and perfumed with so many sweet scents in order that the bridegroom and bride may therein celebrate their nuptials with greater solemnity.

When the bed has thus been made ready, then is the time for the bridegroom to embrace his beloved bride and surrender himself to her…

Carl Linnaeus, from *Praeludia Sponsaliarum Plantarum* (1729)

---

Ego flos campi et lilium convallium.

Sicut lilium inter spinas sic amica mea inter filias.\textsuperscript{12}

\textit{Song of Solomon, 2:1 \& 2}

\begin{quote}
Ficus protulit grossos suos vineae florent dederunt odorem surge amica mea speciosa mea et veni.

Surge aquilo et veni auster perfla hortum meum et fluant aromata illius.\textsuperscript{13}
\end{quote}

\textit{Song of Solomon, 4:13 \& 16}

Whilst the Linnaeus text is in English, Solomon’s poetry is taken from the Latin translation, giving a level of sonic variation through the juxtaposition of the sounds of two different languages. The nature imagery in the biblical text perfectly complements Linnaeus’ awe-struck description of the mating process of plants, and the eroticism of the biblical verses is reflected in Linnaeus’ vivid descriptions. Both texts follow prose rhythms rather than poetic cadence, and in the work this is reflected in long asymmetrical phrase units. Linnaeus’ text is originally presented in one paragraph, but the end of the first long sentence seemed a natural place to break, giving two discrete blocks of text. The three Solomon verses each remain intact, giving a total of five text blocks around which to plan a structure. Figure 2.11 illustrates the way in which this was accomplished. The work opens with verses in Latin from Solomon’s second chapter which conclude on a relative resting point in C minor. This tonality is used at the beginning of the second section, based on Linnaeus’ long first sentence. At bar 47 the male voices enter singing the text of Solomon 4:13 in Latin \textit{against} the female voices, which continue with Linnaeus in English. The climax in the female voices at bar 57 is undermined and masked by the male voices continuation of Solomon 4:13. At bar 63, the female voices re-enter singing the text to Solomon 4:16 as the male voices reach their final word \textit{veni} (come). The texture becomes less complex here, with the female voices gradually achieving rhythmic unison and joining the male voices in dying antiphonal echoes on the

\textsuperscript{12} I am the rose of Sharon, and the lily of the valleys. As the lily among thorns, so is my love among the daughters. (KJV)

\textsuperscript{13} The fig tree putteth forth her green figs, and the vines with the tender grape give a good smell. Arise, my love, my fair one, and come away. Awake, O north wind; and come, thou south; blow upon my garden, that the spices thereof may flow out. (KJV)
word *veni*. The final short section returns to English – a harmonic resolution back to F major using the short second Linnaeus sentence. Solomon (Latin) is represented by blue circles, and Linnaeus (English) by yellow.

![Fig. 2.11 Utilization of text blocks to define structure in *The Actual Petals*](image)

As the melodic writing is both non-thematic and non-developmental, sections are delineated by textual content and relative harmonic tension. Linguistic flow can be read as a progression from Latin (A), through a blend of languages (B) towards English (C). When viewed in this way, the organisation of the five text blocks can be understood as another manifestation of three-part form.

Another way to look at the structure is in terms of voice utilization. The work is primarily polyphonic, but contains many subtle textural variations of voice combination. The following table Fig. 2.12 breaks these down in relation to the three-part structure previously described. Note the constant shifting between polyphonic and homophonic textures. In relation to the form of the motet, the opening section (Solomon 2:1 & 2) is entirely polyphonic, whereas the following section, based initially on Linnaeus, features more homophonic writing. This is the main difference between Latin and English text setting styles, as in general the English is usually presented homophonically, whilst the Latin is rendered into polyphony. This has the effect of focussing and clarifying the English sections, and at the same time strongly marking
the beginnings of each main section. In this way, the Linnaeus text is the dominant structural driver, providing both textural and formal delineation, with the Latin text forming the polyphonic background. In section C the texture relaxes into a generally more heterophonic style moving the English closer to the Latin in word setting style.
Fig. 2.12 Texture and voice usage in *The Actual Petals*

<table>
<thead>
<tr>
<th>Section</th>
<th>Bar</th>
<th>Texture / Voice Usage</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>TB polyphonic duet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>SSA poly – staggered entries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>T entry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>B entry</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>23</td>
<td>SSAT homophonic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>T solo melisma, mixed texture- stag. entries all voices</td>
<td>Linnaeus 1</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>All voices hom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>S2 solo, TB-S1 pairs hom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>hom + S1 solo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>SSA poly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>TB poly (Latin), SSA hom (English)</td>
<td>Solomon 4:13</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>TB poly only</td>
<td></td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>SSA poly (Latin), alt. TB poly</td>
<td>Solomon 4:16</td>
</tr>
<tr>
<td></td>
<td>69</td>
<td>SS poly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>73</td>
<td>A solo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>SSA hom alt.TB poly</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>83</td>
<td>ATB hom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>85</td>
<td>S2TSA staggered entries.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>89</td>
<td>SSAT hom, BTA staggered entries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>SST hom, AB solo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>SSAT hom, B solo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99</td>
<td>SSATB hom</td>
<td></td>
</tr>
</tbody>
</table>
The solo song version found in *Visionary Songs* has already been examined in the light of its use of Golden Section proportions earlier in this chapter, but it remains to clarify other links between text and form. As in the motet, two sentences of text suggest a division into two musical stanzas. These are framed by the piano’s introduction, coda and a short interlude acting as an introduction to the second sentence. Essentially, the piano part fulfils a similar function here to that of the Latin text in the motet, in that it provides a frame which helps to bring Linnaeus’ English text into clear focus.

Both of these settings share a feeling of natural organic growth. This is achieved in the motet by polyphonic coalescence towards tonal centres, where, as a metaphor for natural evolutionary processes, harmony is permitted to develop spontaneously, with occasional resolutions forming fortuitous consonances along the way. In contrast, formal development in the song setting is not left to chance; phrase lengths and overall harmonic design are tightly controlled. The vocal melody, though allowed to evolve freely, is still bound by the harmonic logic of the song, and sits within the frame of the structure elaborated by the piano part. Whereas in the motet no single voice dominates, the soprano is the main focus in the song setting.

Whilst by no means exhaustive, this chapter has looked at some of the techniques used in the development of musical structure in the folio works. These include both intuitive processes and the judicious application of mathematical formulae. Text is also an important stimulus to form, and this aspect of the music will be elaborated on in Chapter Four. Perhaps most importantly, this chapter has described and examined the links between harmony and structure, detailing some of the ways in which they influence one another in my work.
Chapter Three

“Charred with Purgatorial Fire”-

Two works inspired by Blind Willie Johnson

One of the many influences in my work is the blues and folk music that originated in the southern United States during the early part of the 20th century. For composers of my generation, popular music provided the soundtrack to our upbringing, and continues to exist either in opposition or as a complement to the music we currently create. I see blues and folk music as being one of the sources and the spiritual heart of contemporary popular music. Whilst I presently choose not to work in these fields, I am aware that elements of and influences from popular music exist in my own work, and have chosen to acknowledge and to utilize them.

Though this aesthetic is a constant element in my music, amongst the folio works two stand out as being examples of conscious manipulation of blues and gospel sources. Dark was the night, Cold was the ground is an example of this influence used in a purely instrumental setting, whilst John the Revelator is a work for baritone voice and large ensemble. Both are inspired by and based on songs by the Texan “guitar evangelist” Blind Willie Johnson.¹ This chapter will analyse and compare these two works and in doing so demonstrate the use of blues and gospel materials in my music.

Blind Willie Johnson was born in 1897 and performed mostly traditional hymns and original sacred material in a musical style based on the secular blues which originated in the Mississippi Delta. He was a skilful exponent of slide guitar technique, using the edge of a knife to stop the strings and slide between pitches. He was often accompanied vocally by his first wife Willie B. Harris and later his second wife, Angeline. Born with sight, it is thought that he was blinded when his stepmother threw lye in his face in response to a beating from his father. He remained a street musician, performing for small change on Texas street corners, and died of pneumonia in 1947. Johnson recorded around thirty songs for Columbia Records between 1927 and 1930, which are distinguished by the stridency of his earnest gravelly voice and accomplished guitar work. His music has been described as being “...charred with purgatorial fire - more than sixty years later, you can still smell the smoke on it.” It is this mixture of sacred subject and profane delivery which has fascinated generations of musicians since this music became widely available following the blues revivals of the 1960s.

2 Taken from Last FM Website http://goo.gl/WqfSy, Last accessed 11.02 am. 24/08/11.
**Dark was the night, Cold was the ground**

The work *Dark was the night, Cold was the ground* came about as a result of a joint project undertaken in 2009 by the composition department at the University of Melbourne\(^4\) and musicians from the Defence Force School of Music (DFSM). Ensembles from this academy were made available to a group of student composers, and the resulting works performed as part of the DFSM’s monthly “At Home” concert series in November 2009. Though the work was conceived with these performers and this particular performance in mind, it was also an opportunity to explore some of my then-current musical ideas.

In creating music for this organisation, I was aware of the socio-musical function that these musicians would normally be fulfilling. The DFSM trains musicians to occupy positions within the armed forces’ own bands, which fulfil a variety of obligations including the provision of ceremonial and patriotic music for public occasions, and performances and recordings for various charities. This particular performance was offered as part of the DFSM’s regular free concert series on base in Watsonia, which is invariably well attended and normally features accessible and entertaining music ranging from film themes to popular songs and light jazz, in addition to standard military band music. The challenge was to find a nexus where my own personal compositional style could exist within this milieu.

Several different instrumental combinations were on offer, leaning towards the concert and wind band set-ups characteristic of military institutions. There was also considerable variation in the size of groups, from full concert band to chamber ensembles consisting of winds, brass and percussion. The ensemble which I elected to write for was a chamber group which mixed these families in interesting and unusual ways - a quartet of clarinets, including E\(\#\) and bass; a brass quartet of two flugelhorns, euphonium and tuba; and a quartet of percussionists. This unique instrumental grouping allowed access to musical areas a little further removed from those in which these players would normally operate, especially in public.

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\(^4\)University of Melbourne Faculty of the Victorian College of the Arts and Melbourne Conservatorium of Music (VCA & MCM), at that time known as the University of Melbourne School of Music.
Choosing this unusual instrumentation limited access to the textures, forms and voicings that are traditionally associated with military ensembles. Specifically, it would be impractical to frequently use instrumental doublings, which characterise band sound. Starting with the strengths and limitations inherent in this ensemble, balance of the available forces and exploitation of distinctive solo timbres would be crucial.

The expectation had been established that I would not be offering standard wind band fare. Having no experience of this musical culture or style, the best option was to treat the work as a piece of chamber music, intimate rather than public (outdoor) in character, in order to best use the available forces and to contrast with other works presented in the program.

The idea of basing this work on Johnson's song had not yet occurred to me during pre-composition. The starting point was to consider possible sonorities offered by this instrumental combination within the stylistic confines of the project, and working out where problems of balance were likely to occur. There were essentially three well-rounded quartets - clarinets, brass and percussion – each of which could span a wide register. There were three lower register sound sources in the bass clarinet, euphonium and tuba, and the E♭ clarinet could give high upper register coverage. This work could be connected to the sound worlds associated with military music with the choice of percussion. An important role was envisaged for the snare drum in forging a link with the military music tradition through reference to rudiments, and the bass drum and cymbals could be used to enhance this link. Additionally, metallic sounds blend well with brass, and accordingly the percussion section was augmented by triangle, glockenspiel, vibraphone, tambourine and various cymbals.

By this stage an embryonic palette of sounds was emerging which could now be used to shape the work’s musical materials. The large percussion contingent and the specific timbres under consideration suggested that at least part of the piece could be driven by propulsive rhythm, and the idea of New Orleans marching bands provided a point of intersection with the military music tradition. The work could relate to blues and jazz, possibly through form, rhythm, instrumental relationships and distinctive stylistic motifs.

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5 “...in writing for band the composer or arranger never knows how many players will be assigned to a given part. Most bands have a great many players on some parts, such as the first flute or second clarinet.” Adler, S. The Study of Orchestration 3rd ed. New York, W.W. Norton & Company, Inc., 2002. p.772.
A predilection for the bass clarinet led me to assign it the initially dominant role in the opening section. Here, it acts as the leader of an instrumental congregation, with other instruments supporting and building the texture around it. This idea is influenced by recordings of Southern Baptist services such as those collected by Alan Lomax\(^6\), symbolizing a political model of one against many - the individual versus the state, the personal versus the collective. Tempo in this section is suspended, the phrases breathing according to contours defined by the leading bass clarinet.

Another inspiration for the use of call and response technique was the music of modern jazz trumpeter Miles Davis. A well known and influential example of this is the 1959 performance of *So What*,\(^7\) described by Ian Carr as “…yet another variation on the call-and-response technique, with the bass calling (preaching) and the horns and piano saying ‘amen’ (or ‘so what’) to each of his statements.”\(^8\) Davis’s music has had a profound effect on my own compositional aesthetic in many ways. Much of his output from the mid 1960s through to the mid 1970s attempted to blend increasing abstraction with driving rhythmic elements inspired by blues and rock music. Against the backdrop of the free jazz movement which was emerged in the 1960s (exemplified by the musics of Archie Shepp, Ornette Coleman and Cecil Taylor)\(^9\) Davis’s groups worked within the confines of the post-bop style to develop music based on sophisticated modal harmony and rhythmic interplay, whilst never quite embracing the tenets of absolute freedom espoused by many of his contemporaries. However, Davis himself felt that he had exhausted this path by late 1967, and was open to other influences.

…I used to listen to Muddy Waters in Chicago down on 33\(^{rd}\) and Michigan every Monday when he played there and I would be in town, I knew I had to get some of what he was doing up in my music. You know, the sound of the $1.50 drums and the harmonicas and the two-chord blues. I had to get back to that now because what we

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\(^7\) Davis, M. *So What*, from *Kind of Blue*. Columbia/Legacy 487496 2.

\(^8\) Carr, I. *Miles Davis* Great Britain, Paladin, 1982. pp 134-5.

had been doing was just getting really abstracted. That was cool while I did it, but I just wanted to get back to that sound from where I had come.\textsuperscript{10}

This sense of Davis strongly identifying with his musical roots while developing an intensely personal and complex musical language resonates with my own previously-stated aesthetic.

Whilst the opening of \textit{Dark was the night} is based on the solo bass clarinet leading the instrumental ‘congregation’ and is metrically free-flowing, the second section of the work features more evenly balanced sectional interplay and is rhythmically driven. Different instruments are given a chance to lead the ‘congregation’, and there is also a chordal/rhythmic motive which provides responses to whichever leader(s) is (are) ‘calling’. An example of this type of two-part structure, where a long introduction is followed by a repetitive and rhythmic call and answer section, was used in an earlier attempt to set another Johnson song \textit{John the Revelator} for SATB choir in 2007. The long introduction in this instance was a setting of the \textit{de profundis} (psalm 130) text, which then led into Johnson’s song. The example below shows a preliminary sketch of the beginning of the call and response setting of the \textit{Revelator} section, dating from the original attempt of 27 July, 2007.

Whilst I considered the *de profundis* section to be successful, the *Revelator* setting was eventually abandoned and remains unfinished. The distinctive character of the original singer’s own voice was missing, and I realized that it was the strikingly expressive timbral quality of the original source which I found most captivating, as opposed to the harmonic and melodic material, which is simple to the point of banal when stripped of Johnson’s personal and expressive vocal inflexion. Secondly, dissatisfaction with the modal/tonal harmonic language employed led to the realisation that a more sophisticated method of tonal organisation was needed to transform the basic original materials into something more musically satisfying.
Returning to the current work, at this point it was decided to derive musical material and atmospheric tension from a 1927 recording of Johnson's original performance of *Dark was the night, Cold was the ground*.\(^\text{11}\) My intention was never to use the piece directly, but to musically examine some of its distinctive musical features and allow it to provide the emotional starting point for the work.

This particular recording has also been used by others as a source of inspiration. Most tellingly, it appears in Ry Cooder's soundtrack to the Wim Wenders' film *Paris Texas*.\(^\text{12}\) Several cues from the film feature Cooder playing evocative slide guitar improvisations accompanied by atmospheric percussion and heavily reverbed special effects. In contrast to Johnson's decidedly lo-fi recording quality, Cooder is recorded in a modern studio in such a way that all of his idiosyncratic expressive characteristics are faithfully captured and presented in a clear mix with great audio presence. Many of the cues end with a strong rendition of the refrain motif, and the main theme itself also emphasizes the falling minor third which distinguishes motif (a) (see Ex. 3.2). In this way his score echoes the original recording, as the more strongly melodic aspect of the piece is contrasted with less structured material. The final cue is a very free rendition of the song itself, performed as a slide guitar solo.

The original recording is a solo guitar performance in which Johnson plays an intense though fragmented melody using slide technique. The piece is in the key of E, and the melody is supported by open string tonic and dominant drones throughout, facilitated by the use of open E tuning.\(^\text{13}\) There is no easily discernible verse melody, though there is a refrain which occurs at regular intervals. This refrain is distinguished both by its rhythmic character and its contrasting instrumental timbre, as it is played on the wound fourth string. This imbues the refrain with a heavier tone and lower pitch than that of the other phrases. In addition to the guitar, Johnson also sings wordlessly, loosely phrasing with the instrumental melody, though never the recurring refrain. Ex. 3.2 is a transcription of the opening section, where freely expressive material is followed by a statement of the refrain motif before the voice enters.

\(^\text{11}\) *Dark was the night, Cold was the ground*. Johnson, B. W. *King of the Guitar Evangelists*, Sagablues 03 962 077-9.

\(^\text{12}\) Cooder, R. *Paris Texas music from the motion picture*. Warner Music, France, 9262480892.

\(^\text{13}\) In guitar open tunings, the strings are retuned so that they collectively produce a particular sonority. In the case of open E, the strings are tuned E'-B'-E-G♯-B-e, producing an E major triad. As it is possible to play a triad across one fret, this tuning facilitates the use of slides and bottlenecks, which are limited to accessing one position at a time.
This excerpt shows the essential character of the melodic material, which subsequently does not vary significantly from what is shown here. The skeletal phrases are almost pointillistically short, and most notes are decorated with slides, vibrato and grace notes. There are also dramatic pauses on many notes, and no attempt to construct a free-flowing melody.

Ex. 3.2 Transcription of Blind Willie Johnson’s *Dark was the night* (opening)

Another distinctive feature of this fragment is the descending ‘blue’ note - in this case a flatted minor third falling to the second \((a)\). Gunter Schuller defines a ‘blue’ note as

A microtonal variant, usually flatted from the pure intonation of the note. It is associated almost exclusively with the third, fifth and seventh degrees of the scale. It is freely used in blues and jazz.\(^{14}\)

In this case, the major third does not occur, and the ‘blue’ minor third is itself subjected to further microtonal flating. The resulting tone is almost bluer than blue, intensifying the recording's deeply mournful character. This mood is achieved despite the major tonality.

To generate the harmonic material of *Dark was the night*, the refrain and this flatted minor third were used as starting points in the definition of basic pitch collections. Rather than quoting or stating this material thematically, some of its intervallic characteristics were used to generate melodic shapes and harmonic relationships. Ex. 3.3 below shows the derivation of three pitch-class sets from this material.

**Ex. 3.3 Derivation of pitch-class sets from basic motifs, *Dark was the night***

Motif (a), characterized by the fall from the minor third to the major second generates pitch class set (1), consisting of E, F♯, G and B, which can be harmonically defined as a minor triad with an added ninth. This set is then transposed down a major third to constitute pitch-class set (2), comprising C, D, E♭ and F. Intervallic variation is achieved by changing the last note so as not to repeat G, creating a subtly different minor-based sonority on C, which contains the added eleventh in addition to the ninth. These two sonorities combined use eight of the available chromatic pitches, and those remaining (pitch-class set (3)) form an ambiguous cluster containing three semitones. Coincidentally, a transposition of this cluster appears in the original source as the defining characteristic of the refrain motif – the consecutive semitones A, A♯ and B, which Johnson uses to harmonically suggest a chromatic rise from the sub-dominant through to the dominant. These three units form the harmonic basis of the entire piece, as discrete harmonies, in combinations which produce richer sonorities, in transposition, and when used melodically as tone-rows. In the first section of the piece the
tonal material is strictly limited to structures derived from these three chords, untransposed. The first two can both be construed tonally, and it is the first which provides the basic key centre for most of this section. Pitches from the other two sets are added to set (1) to control the amount of relative dissonance, the third set being quite dissonant in itself. This creates a broad and consistent chromatic spectrum which never entirely loses its relationship to E. The diagram below shows the distribution of these three sets in the opening section of the piece, specifying the introductory point of each pitch. White sections indicate the total absence of a particular set.

Fig. 3.2 Pitch-class set distribution in the opening section of *Dark was the night*

The work’s opening is dominated by set (1), which provides suggestions of subtle tonal gravity towards E minor. Individual pitches from the second and third sets are slowly added until almost total chromaticism is achieved around bar 28. Since the bass instruments are used melodically and the texture is mainly heterophonic, this is never quite made explicit, but there is enough feeling of tonal stability for change to be felt at bar 38, where set (2)

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15 Note that this is another manifestation of harmonic relationship by thirds.
becomes the dominant note grouping, suggesting the key area of C minor. Incidentally, the D♭ missing from set (3) appears at bar 33, in a passage utilising sets (1) and (3), but not set (2). At bar 38 the harmonic ground shifts as set (1) is abandoned, and set (2) is combined with elements of the others to create semitone dissonances within the harmonic fabric. This is all the more effective due to the absence of set (2) in the preceding five bars. In this opening section the bass clarinet leads the ensemble, usually providing phrase beginnings before the focus passes to instruments in higher registers. All instruments are treated soloistically, though they may combine to create blended sonorities. When unison or harmony is used, the parts are usually heterophonic - the same musical phrase is presented with more than one interpretation simultaneously, as in Ex 3.4 below, showing clarinet gestures from bars 14 and 20.

Ex. 3.4 Heterophonic clarinet gestures in *Dark was the night*

This personalization of individual parts is further developed by the use of expressive devices such as pitch bending and vibrato, derived directly from the model provided by Johnson's own recorded performance. The following example shows pitch bending in clarinet 1, combined with semitones in the Eb clarinet as part of another heterophonic gesture, based on set (1). This example also refers to motif (a).

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16 Since these are ornamental and of no structural importance, they are not shown in the above diagram.
These heterophonic gestures are another manifestation of the political idea of ‘one versus many’ touched upon earlier in this chapter. It was important that each instrument retain its own personality, especially when expressing the same musical idea. Interestingly, this aesthetic decision led to a fortuitous performance outcome. Due to the fact that there was so little exact synchronisation between instruments, the players felt encouraged to make their own parts as expressive as possible. Conductor Steven Stanke afterwards related that the piece had been easy to conduct and rehearse, once everyone was comfortable with their own parts. All the conductor had to do was beat time, and the piece played itself. There was little need to adjust balances or rehearse sections.\footnote{Stanke, S. Personal communication, November 6, 2009.}

The opening section builds to three climaxes, with the astringent Eb clarinet reserved for the last and most intense. The texture becomes more homophonic here, with rhythmic unison between the lead instruments and the vibraphone. The passage also heralds a change of orchestration, as the bass clarinet drops out and the texture is dominated by the previously unheard Eb clarinet.\footnote{Actually, the Eb clarinet enters earlier at bar 30, but is blended with the other clarinets, veiling its characteristic tone. The intention is partly to allow the player a few notes with which to warm the instrument and check tuning. Berlioz used this technique of blending unusual instruments within the main section before featuring a solo, noticeably in \textit{Symphonie Fantastique}.}

Over the course of the first 46 bars the pitch material generated from Johnson’s performance has been tightly controlled and limited to combinations of the three pitch-class sets. In the second section of the piece these sets modulate freely, developing a more varied harmonic spectrum. An example of this combinatory technique is shown in Ex. 3.6, where the dominant musical line is derived from set (1). The Eb clarinet’s call triggers a heterophonic response in...
the winds and brass’ heterophonous response using most of the complement, the absent pitch being D♭ from set (3).

Ex. 3.6 Use of pitch-class sets and call and response in *Dark was the night*

<table>
<thead>
<tr>
<th>Key</th>
<th>pcs (1)</th>
<th>pcs (2)</th>
<th>pcs 3</th>
</tr>
</thead>
</table>

Ex. 3.6 Use of pitch-class sets and call and response in *Dark was the night*
This technique of set partitioning allows for considerable harmonic freedom. As two of the three original pitch-class sets can function tonally, it was possible to create strong poles of harmonic clarity within the twelve-tone texture. Subsequent transposition of these sets also generated tension and movement through this section. This approach solved one of the problems of the early choral draft. Melodic writing could be effectively contrasted with blocks of harmony without dependence on functional harmonic formulae. The lack of an obvious fixed tonal centre also allowed these modulations to occur as colour changes rather than moments of structural significance, which could be further accentuated by changes in scoring. As the treatment of the original pitch-class sets is much freer in this section, it is not particularly revealing to attempt to trace the patterns of pitch distribution as was done with the opening section. Set combinations and transpositions themselves were selected and manipulated intuitively, and treated with considerable freedom. In order to prevent any particular tonality from dominating, it was necessary to use all twelve chromatic tones much of the time and to transpose the material frequently. Thus, harmonic variation became dependent on intervallic relationship.

In addition to the manipulation of pitch, the above example clearly shows the rhythmic relationship between the melody and its accompaniment. These rhythms are derived from a basic pattern, first heard in its entirety in the percussion at bar 67, which continues as it accompanies to the E♭ clarinet solo beginning at bar 72. The pattern itself is shown below in Ex. 3.7.

Ex. 3.7 Rhythmic motif from *Dark was the night*, bar 67
The pattern is divided into two parts: a syncopated ‘question’ on low toms is ‘answered’ by semiquavers in the woodblocks. Variations of this pattern are used mostly to accompany soloistic melodies. Syncopation gives the figure rhythmic drive, and relates it specifically to jazz rhythm.

Most of the modifications to this pattern were achieved by shifting rhythmic values either way by small increments and superimposing the resulting figures. The pattern was also moved to different beats of the bar and subjected to additive processes, such as repeating the first two notes in order to extend the pattern. Looking back to Ex. 3.6 we can detect the use of this figure from bar 77 by an ensemble of clarinets and flugelhorn, with support from the bass clarinet, euphonium and tuba. Ex. 3.8 shows the clarinet section developing this pattern into the extended section of four-part chords beginning at bar 98.

Ex. 3.8 Development of rhythmic motif in clarinets, *Dark was the night*, bar 98

At bar 105, the lower instruments provide a counterpoint based on augmentation of the same material, and throughout all of this, answering semiquavers are provided by the woodblocks. The effect is reminiscent of big band scoring, and is shown in Ex. 3.9.

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19 Unfortunately, in the performance, both parts were played on woodblocks. The reason for this was not clear, and I can only put this down to the player and conductor incorrectly interpreting the score, percussion key and/or instrumental part. By the time I had picked this up in rehearsal, it was too late to change. Whilst the effect of this was not crucial to the overall performance, I feel that the work loses some tonal variety, with the absence of toms giving the piece a less sombre atmosphere than originally intended.
Ex. 3.9 Sectional rhythmic counterpoint, reminiscent of big-band style, *Dark was the night*, bars 105-110

Although the original intention was to allow this rhythmic section to fade to silence, a reference to the influence of production techniques used in the popular music recording industry, it became apparent that the piece needed a final section in which rhythmic activity could abate and the opening textures return. Another example of the influence of the music of Miles Davis is the flugelhorn solo designed to complement the bass clarinet solo with which the work begins. Call and response forms feature heavily in Davis’s work, whether leading Gil Evans’ large ensembles as soloist in arrangements of *Porgy and Bess*,\(^{20}\) or his small jazz combo (*So What* from *Kind of Blue*)\(^{21}\) or even with his more abstract ensembles from the late


\(^{21}\) Davis, M. *op. cit.*
1960s (Bitches Brew).\textsuperscript{22} In the biography Miles Davis Ian Carr describes this dynamic in relation to the track Pharaoh’s Dance:

Once more, he stops while the ensemble plays on with the bass clarinet acting as a sort of leader to the responses...The soprano enters, taking over the role of leader of responses (to Miles)...It is yet another variant on the old ‘call and response’ ritual, with Miles doing the calling and the entire ensemble responding.\textsuperscript{23}

Davis’s phrasing, articulation and use of space all strongly influence the flugelhorn solo in this final section. The ensemble itself, featuring heavy percussion and bass clarinet, is actually quite similar to Davis’s own 1970s instrumentation.\textsuperscript{24} Tempo remains the same, but a sense of deceleration is achieved through abandonment of propulsive rhythm and lengthening of note values. The passage is effectively a return to the textures of the first section, with the brass taking over the dominant role. The flugelhorn material is also based on pitch-class set (1) in the home key of E minor, whilst supporting lines slowly clarify this tonal area through the gradual omission of chromatic notes. The piece ends with a final statement of motif (a).

\textsuperscript{22} Davis, M. \textit{Bitches Brew}. CBS 460602 2.
\textsuperscript{24} A prominent example of the atmospheric use of bass clarinet is the playing of Bennie Maupin on the 1970 recording \textit{Bitches Brew}. The entire ensemble comprises a front line of trumpet, soprano sax, bass clarinet, and electric guitar; supported by an extended rhythm section of at least two drummers, both double and electric bass and electric pianos. As the roles are blurred by the resulting textures, these divisions are not quite relevant. In reality, the entire ensemble is used as accompaniment to Davis’ trumpet, though others do solo at times. Davis, M. \textit{Op. Cit.}
Ex. 3.10 Final version of motif (a), *Dark was the night* from bar 172

In this instance, motif (a) is drawn out in augmentation, whilst the bass clarinet provides accompaniment similar to textures found throughout *Bitches Brew*. Note also the echo effect suggested by the second flugelhorn. This continues until the end of the piece, providing support for the first flugelhorn on exposed high notes, as well as suggesting period electronic reverb effect. This ending also approximates my original intention to fade out - it is high-frequency sounds which conclude the piece, as occurs naturally in an electronic fade. There is a sense that the music is disappearing into the distance, a reference to the fact that in 1977 Johnson’s recording was imprinted on a golden disc imbued with uranium 245 and sent into space on Voyager 2 as a representative example of the music of this planet.\(^{25}\)

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\(^{25}\) The full list of twenty-seven works includes music by Beethoven, J.S. Bach, Holborne and Stravinsky, along with folk music from Java, Senegal, Zaire, Mexico, Australia, New Guinea, Japan, Georgia, Peru, Azerbaijan, Bulgaria, North America the Solomon Islands, Peru, China and India. There is also music by Chuck Berry and Louis Armstrong. [http://voyager.jpl.nasa.gov/spacecraft/music.html](http://voyager.jpl.nasa.gov/spacecraft/music.html). Last accessed 1.56 pm, 24 July, 2011.
“Who’s that writin’?” - John the Revelator

The two folio works based on Johnson's songs reveal different approaches to form, harmony and rhythm. *Dark was the night* deconstructs intervallic relationships and then uses them to regenerate musical structure: the abstract instrumental style of the original and its fragmentary nature suggested a freer approach, and an entirely new work was constructed from the ground up. *Revelator*, on the other hand, uses the original song itself in a more direct way. As a setting for baritone voice, this work is a reconceptualised arrangement which retains the text, the verse structure and aspects of the melody.

*John the Revelator* for baritone and mixed ensemble was composed for the 2011 Ars Musica International Contemporary Music Festival in Belgium, where it was commissioned and performed by the Mons Kinky Pinky Orchestra. For this particular concert at the Mons Théâtre Royale (16 March 2011) the ensemble had commissioned “...a series of works inspired by pop music, exploring the crossover of different types of contemporary music.”

In his program notes to the event, Tom Coult elaborates:

> From the Quodlibet of Bach’s *Goldberg Variations*, through the student drinking songs of Brahms’ *Akademische Festouvertüre* up to the Ländler and folk dances of Mahler’s symphonies, classical music has frequently turned to popular music for inspiration. It is this rich vein of influence that the Mons Kinky Pinky Orchestra taps into tonight. These enthusiastic musicians, from the Musiques Nouvelles division of the Mons Orchestra, put out a call for works inspired by popular music – whether rock or folk, punk or funk. The result is this collection of eleven eclectic pieces, their sources stretching from delta blues to British punk, via French chanson, reggae, prog-rock, and apocalyptic dance music.

The ensemble, directed by Jean-Paul Dessy, consisted of a string quartet extended by double bass; solo clarinet, alto sax, horn and trombone; and a rhythm section comprising drum-kit, electric guitar, piano and percussion. Additionally, there were two singers, both of whom

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26 Taken from festival handbook.
27 Coult, T. Program notes to *Le Manege (Mons Mauberge) presente Mons Kinky Pinky Orchestra*, 16 March, 2011, Théâtre Royale, Mons.
were equally comfortable in contemporary classical and popular music styles. This instrumentation allowed for the use of tone colours lifted directly from popular music, such as the electric guitar and drum-kit. Consequently, the resulting work is strongly rhythmic in places. Keeping in step with the popular music theme, and in deference to the size of the venue, the ensemble was amplified to an extent not normally heard in classical performances. High quality mixing ensured that the voices projected clearly above complex instrumental textures, and also had the effect of generating excitement through sheer volume. The ensemble also embraced a popular music performance style through expansive physical gesturing, and accordingly the audience reaction was more vociferous than is usually the case at classical concerts.

As the original *Revelator* has more significant melodic material than *Dark was the night*, this is retained in my version. A transcription of the chorus from Johnson’s original recording is shown below. It is again based on call and response technique, where the question “Who’s that a-writin’?” is answered by a female voice, probably his wife Willie B. Harris: “John the Revelator”. This pattern repeats twice more and the fourth line “Book of the seven seals”, sung by both voices together, completes the stanza. The guitar accompaniment reiterates the F major chord throughout, sometimes doubling the melody.\(^\text{28}\) The pattern is then repeated using slightly different lyrics, making for a chorus of eight lines divided into two four-line stanzas (A - A). This chorus opens the song and occurs after each verse (B), forming an overall shape of

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\]

There is no introduction, nor are there significant breaks between stanzas.

\(^{28}\) The instrument is possibly tuned to an open F major triad (F-C-f-a-c-f’), as the instrument used on the recording seems to be using open string sonorities. In standard tuning, this tonality does not lend itself to pedal style accompaniment, as the need to keep multiple strings stopped in first position tires the hand quickly, making it difficult to sustain resonance. Alternatively, Johnson could be in standard tuning and using a capo on the first fret, which would allow him to base his accompaniment on the more comfortable E major chord shape. This is probably the most likely scenario, but there is also the possibility that his guitar is actually tuned a semitone higher, which also allows for easier open string shapes.
Ex. 3.11 Transcription of Blind Willie Johnson’s *John the Revelator* (vocal parts), first stanza

The melodic material outlines an F major triad and using the scale’s diatonic fourth as a passing note. The melody used in the verses, sung solo by Johnson, is even simpler, reiterating the fall from the fourth through the third to the tonic whilst following the natural speech rhythm of the lyric. As this melodic material is not used in my composition, verse melodies are not reproduced.

Like *Dark was the night*, the approach was to identify strong melodic features and develop the piece around these. Whereas the earlier work is based on motivic fragments and a distinctive, slightly unusual and expressive pitch bend, with *Revelator* the presence of strong melodic material in the choruses and sung lyrics suggested a different compositional approach. Additionally, Johnson’s performance of *Revelator* is much more rhythmically defined, with constant tempo and melodic anticipations which counteract the cyclic pitch patterns and give the song forward movement. Accordingly, my work is a resetting or re-composition of an existing song, unlike *Dark was the night*, which is an entirely new work based on pre-existing materials. However, *Revelator* is more than an arrangement or an orchestration of the original, as the song itself sits within the framework of a more complex musical structure. Whilst the alternating (A - A - B) verse ordering is retained on one level, changes of tempo and tonal structure give rise to a number of formal signposts which contrast...
asymmetrically with the strophic form of the song itself. This generation of two contrasting levels of form is achieved in a number of ways, including through density of orchestration, harmonic variation and the presence of solo roles for the alto sax and guitar in particular. In this manner Revelation shows a similar multi-level approach to form as that applied to other works in this folio such as Tricks of Light.

Before looking at the compositional techniques employed it is useful to examine the text, reproduced as it appears in the present work: 29

(Chorus) Who's that writin'? John the Revelator! Who's that writin'? John the Revelator! Who's that writin'? John the Revelator! (Hey), book of the seven seals

What's John writin'? That's the revelation? What's John writin'? That's the revelation? What's John writin'? That's the revelation? (Hey), book of the seven seals

(Verses) Now who art worthy, Crucified and Holy Bound up for some, Son of our God Daughter of Zion, Judah the Lion He redeemeth and He bought us with blood

John the Revelator, great advocator Gets 'em on the battle of Zion Lord, tellin' the story, risin' in glory Cried, "Lord, don't you love?"

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29 Numerous versions of this song have been recorded by a large variety of artists, and all show slight variations in the lyrics. My own version of the text is based on Johnson’s, but contains a few slight departures made for reasons of word sound and rhythm.
Well, Moses to Moses, watching the flock
Saw the bush, well, he had to stop
God told Moses, “Pull off your shoes,
Out of the flock, well, you I choose”

The two chorus stanzas which open the song repeat after each of the three verses. The lyrics are typical of Johnson’s in that they are concerned with apocalypse and salvation. Titles such as *Jesus is Coming Soon*, *Trouble will Soon be Over* and *Can’t Nobody Hide from God* are characteristic of his repertoire, in that they derive from Old and New Testament sources. 30 John the Revelator himself is the figure from the New Testament *Book of Revelations*, whose role is described in the first chapter.

The Revelation of Jesus Christ, which God gave unto him, to shew unto his servants things which must shortly come to pass; and he sent and signified it by his angel unto his servant John: Who bare record of the word of God, and of the testimony of Jesus Christ, and of all things that he saw. Blessed is he that readeth, and they that hear the words of this prophecy, and keep those things which are written therein: for the time is at hand. 31

The choruses earnestly reiterate the idea that judgement is coming soon. In contrast, the verses are cobbled together from a variety of sources but reference many of the stories most popular within the spiritual tradition. Most notably, the final stanza deals with Moses, 32 who was chosen to bring the Israelites out of slavery in Egypt. This story resonated strongly with the black American population which had endured similar conditions of slavery in the U.S. during the 19th century. It is not necessary to show the provenance of all of the verse material, but interesting to note that imagery is collected from a range of biblical sources which reinforce the image of a saviour who has been chosen to lead an oppressed people out of bondage.

30 All from Johnson, B.W. op. cit.
31 Revelation 1: 1-3. KJV.
32 Mostly from Exodus 3.
It is no accident that this aspect of the scriptures gained prominence at this time amongst the Negro population in the South. These stories were used as an outlet in the face of racial inequality and hardship. Identification with the oppressed Israelites allowed Black Americans to express a form of political protest within the confines of spiritual worship. According to mid 20th century anthropologist John Lovell “the spiritual is essentially social”\(^{33}\) and as such reflected the predicament of this social unit. Lovell

\[\text{...perceived three central themes in the black spiritual: (1) a desire for freedom; (2) a “desire for justice in the judgement upon his betrayers”; and (3) “a tactic battle, the strategy by which he expected to gain an eminent future”...Satan was “the people who beat and cheat the slave,” and King Jesus was “whoever helps the oppressed and disenfranchised or gives him a right to life.” “Hell [was] often being sold South,” and “Jordan [was] the push for freedom.”}\(^{34}\)

It is this hidden political dimension which interests me most in these texts, as opposed to the considerations of divine redemption. The concept of leader/congregation echoes in the call and response patterning which is explored in these two folio works, along with the exploitation of heterophonous textures, in which many individual voices combine to enunciate a single musical idea.

In *Revelator*, this idea plays out in the elaboration of the chorus structures. To avoid too much repetition of melodic material and lyric, these are presented in a variety of ways. Whilst the basic call and response pattern is mostly adhered to, my setting uses only one voice, the baritone. Consequently the chorus responses are voiced instrumentally, and the lyrics are all presented within the one voice part, creating a structural layer in which the voice provides answers to its own questions. Accordingly, the text for the first chorus reads as “Who’s that writin’? John the Revelator. Who’s that writin’?” Ex. 3.12 shows the first vocal entry, where the baritone’s call is answered heterophonously by the clarinet, 2 violins and viola. The accompanying rhythm section parts are not shown.


The response in the second chorus is purely instrumental. The baritone poses the initial question “Tell me, who’s that writin’?”, and the response is provided by the alto sax. The influence of jazz on this piece is demonstrated in this section, which features an elaborate improvisatory jazz-style solo. The call and response structure is still evident, but increased fluency in the sax part blurs distinctions between call and response. The corresponding
lengthening of phrases adds irregularity and variation to the response entries. Answers are provided mainly in the string parts, whilst the clarinet is used to thicken the solo part.

Ex. 3.13 Sax solo, *John the Revelator*, bars 77-83 (2\textsuperscript{nd} chorus)
Another example of jazz influence in this work is the solo for the electric guitar.

Ex 3.14 Final chorus with guitar solo, *John the Revelator*, bar 122

There is scope within this work for true improvisation, which intensifies these jazz elements. An alternate version allows for the substitution and extension of both alto sax and electric guitar solos. In the case of the alto, this is achieved with the interpolation of a section of indefinite length, in which the player improvises over a backing provided by the piano, guitar and drum-kit, also free to improvise based on previously established accompaniment figures. At the conductors’ discretion, responses in the trombone signal a return to the written score. Similarly, the section from bars 123-130 can be repeated to allow the guitarist improvisational space. In this instance, the brass and wind responses are omitted the first time.
Performing one or both of these improvisation sections both alters the proportions of the work and shifts the main focus away from the baritone for longer periods of time. This does disrupt one of the formal mechanisms in the piece, as the main Golden Section point occurs around bar 101, with the voice attaining a climactic high F before an abrupt rhythmic change, in which meter is suspended in preparation for the final vocal section. However, mathematical exactness is not of prime importance in this piece, and this is the only significant marker to be so affected.

Examining the heterophonic variations of call and response technique gives some idea of the compositional approach taken, but it is useful to look more closely at the overall form and how this is influenced by the manipulation of pitch material. Despite the different musical results, there are similarities with *Dark was the night* in harmonic development. In both cases, important structural pitches serve as basic pitch collections, which are then extrapolated into twelve-tone rows which in turn are manipulated according to typical serial procedures. However, in *Revelator* part of the melody has been retained in close to its original form, giving this work a stronger sense of tonal centre.

As previously stated, the existing material provided the starting point. Referring back to Ex. 3.11 shows how the melody used by Johnson outlines an F major triad with an added fourth degree. In *Revelator*, these four tones, with the addition of the flat seventh (E♭) form the set from which all of the pitch material used in the vocal line is taken. This set is also the basis for instrumental versions of the same material. Additionally the set is also transposed down to D, which places the melody in a more comfortable zone for the baritone and allows the possibility of intensification through the use of the singer’s higher notes as the song modulates upwards. This occurs, as just prior to the GS the key modulates upwards to F, the pitch level at which the work concludes. The final sections also use modulatory sidesteps to E at bar 102 and F♯ at 109 before restabilising in F at 123.

These descriptors place the work in areas of definite tonality, but this is only true of the vocal line. The overall harmonic picture is more complex, as the instrumental accompaniment is derived from the complement set of seven remaining pitches, creating a chromatic palette which includes all twelve tones. Ex. 3.15 sets out this division at its initial pitch level of D. Set *(a)* is defined using scale degrees, clarifying its relationship to D major (mixolydian). As
tonality and atonality coexist within this piece, defining the complement \((b)\) using integer notation reflects the possibility of different approaches to harmonic analysis. Note that \((b)\) also includes the pitch C, providing a point of intersection between the two collections.

Ex. 3.15 Pitch-class sets used in \textit{Revelator}

Whilst the vocal line uses Johnson’s melody in the choruses, the verse material was not distinctive enough to retain. In the original recording the focus in the verses is primarily lyrical, as a set of biblical scenes is paraded in quick succession, in contrast to the melodically catchy but lyrically repetitive chorus. In my work, the movement of imagery in the verses is slowed, allowing more time to savour this rich web of biblical allusion. Correspondingly, words are given more melodic significance and lyrical phrases are developed using mixolydian melodic material. This solution still maintains a level of contrast between verse and chorus material, as occurs in Johnson’s performance, but allows more opportunity for both vocal melodic development and instrumental colouring of the text.

Using \((b)\) as the raw material also allows the accompaniment to stay out of the way of the baritone pitch-wise. The main feature of the accompaniment is the bass line, which develops serially from the complement and provides a rhythmic yet unpredictable foundation using syncopated groupings of quavers and semiquavers. This begins after the opening choruses in bar 33, in the lower registers of the piano, and continues almost uninterrupted until the GS point at bar 102. Ex. 3.16 shows the introduction of this line from bar 33. At this point, notes from the complement \((b)\) appear sequentially, with variation in rhythmic placement and different starting points for the sequence in each cycle. Octave displacement also provides contrast of register. Towards the end of this example, repetition of fragments begins to occur, hinting at the manipulations to come.
This line is often doubled in the marimba or pizzicato strings, and ranges across several octaves. It resumes hesitantly at 109 in the clarinet, before a strong statement of the line doubled by piano and marimba under the guitar solo, beginning at 127. During the final verse it reappears in the clarinet’s lower register. Sections of this line are also generated using the retrograde form, as shown in Ex. 3.17. In this case, the line is based on a retrograde version of the bass line at bar 33. This is repeated, and then this entire unit is repeated backwards, revolving around a mirror point in bar 69.35

Ex. 3.17 Use of retrograde/mirror technique in bass line of *Revelator*, bar 67

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35 Only the pitch order is mirrored - rhythm is more freely conceived.
Mirror techniques are also used in the work’s opening. During the instrumental introduction, the mirror is vertical, as the lines move in contrary motion around a central D. The following example shows the basic pitch structure minus octave doublings. In the work itself, the piano plays both parts an octave higher and lower respectively, and the top part is taken by violin 1 at pitch and the horn and viola an octave lower; the bottom part by the trombone and cello at pitch and violin 2 an octave higher. The rhythm is also enhanced by snare drum.

Ex. 3.18 Vertical mirror technique in the introduction to *Revelator*

![Vertical mirror technique in the introduction to *Revelator*](image)

The strophic form of the text is contrasted with instrumental and harmonic structures which work against these verse divisions. Whilst the song form has been previously defined as basic alternation between chorus and verse, this arrangement can also be seen to follow a three-part structure, with (A) an energetically declamatory introduction (including the opening chorus) leading to (B) the main body of the work, rhythmically driven by the previously described bass accompaniment. This section contains two more chorus and the first two verses, in addition to two instrumental solos situated either side of the GS point. The third and final verse is sung over a more subdued concluding section (C), which combines fragments of the bass accompaniment with echoes of the introductory gestures. The following table visually clarifies the work’s main formal divisions.
The beginnings of the vocal stanzas coincide with none of these structural markers, and only one change of tonality. The link passage which separates the three main formal divisions of the work is an instrumental motif which acts as a substitute for the final line of the chorus “book of the seven seals”. As a result, this line is only set once in the vocal part, at the conclusion of the third chorus.

It remains to look briefly at the use of instrumentation. The roles of the alto and guitar as solo instruments have already been discussed, and the casting of piano, guitar and percussion as a rhythm section has also been hinted at. In this regard, the guitar also contributes repeated rhythmic patterns to the introduction and conclusion sections in the manner of a funk guitarist, sonically enhanced by the use of wah-wah pedal. The texture is mostly heterophonic, allowing all single line instruments distinctive melodic material.
Earlier in this chapter, lack of distinctive vocal character was cited as a reason for the failure of an earlier attempt to set *John the Revelator* for voices. By way of compensation for this, in *Revelator* the vocal line is at times shadowed instrumentally, especially by the trombone. The richness of timbre which results from this particular example of heterophony goes some way towards providing an analogue to the strident nature of Johnson’s own voice.

Ex. 3.19 Instrumental intensification of vocal line, *Revelator*, bar 24

Finally, slowing down the lyric delivery provides opportunities for word painting. An example is the martial figures used to suggest victory at the battle of Zion. The baritone ascends triumphantly to a high F on the words “risin’ in glory” accompanied by fanfares in the winds and brass.
Ex. 3.20 Word-painting in *Revelator*, bar 98

*Dark was the night, Cold was the ground* and *John the Revelator* are two works which show different yet complementary approaches to the incorporation of popular music elements (specifically blues) in my recent works. Both pieces are more concerned with suggesting distinctive tonal qualities associated with these styles within the milieu of contemporary classical composition than reproducing these styles faithfully. Improvisation is a strong influence, and manifests in the free character of melodic writing, especially of solo parts. There is also limited scope for true jazz-style improvisation in *Revelator*. Both works build up harmonic and structural material from distinctive and characteristic fragments of the original sources, and in doing so use sophisticated compositional processes including the use of Golden Section proportions and serial techniques of linear development. Harmonically, these pieces both derive an individualistic and personal language synthetically from simple modal materials, at times maintaining key centres but allowing idiosyncratic systems to create unusual tonal relationships. The influence of blues on the development of my music predates folio works, and though not the only inspiration at work here, this source will continue to be of importance to future projects.\(^{36}\)

Chapter Four

“From so simple a beginning endless forms most wonderful” -

Process in Visionary Songs

If history had worked out differently, and Michelangelo had been commissioned to paint a ceiling for a giant Museum of Science, mightn't he have produced something at least as inspirational as the Sistine Chapel? How sad that we shall never hear Beethoven's *Mesozoic Symphony*, or Mozart's opera *The Expanding Universe*.¹

The natural world has long fired my imagination and provided both the initial stimuli and methodology for compositional technique, as apparent in the use of numerical formulae to determine events within a musical structure and the treatment of pitch organisation according to basic set theory. This two-part chapter examines the 2011 song cycle *Visionary Songs* for soprano and piano. The work utilizes a variety of texts drawn from diverse sources and demonstrates a number of the techniques and processes typical of those used during the period represented by the folio works. As befits a work which celebrates the glory of creation, this chapter will chronologically trace the development of the work over the period of its compositional process. To this end, I will be referring to early sketches, plans and diary entries made during this time. These will shed light on reasons why particular creative decisions were made, and give insights into the nature of my personal musical language. Following this, I will look in more detail at techniques used in the composition of the cycle and relate these to other works in the folio.

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**Documentation of the compositional process**

The sense of wonder and awe of the natural universe evoked in the cycle is based on aspirations of rational scientific understanding independent of religious belief. Albert Einstein described himself as being

...a deeply religious nonbeliever... What I see in Nature is a magnificent structure that we can comprehend only very imperfectly, and that must fill a thinking person with a feeling of humility. This is a genuinely religious feeling that has nothing to do with mysticism."

This response of religiosity accords directly with my own musical intentions. With *Visionary Songs*, the texts were carefully selected in order to demonstrate this sense of wonder and elaborate upon two related main themes - the miracle by which species reproduce and pass on genetic characteristics and the passing on of wisdom. The cycle was first conceived in late 2010 as part of a written submission to a composition opportunity in the UK. The brief was for a work to celebrate the City Chorus' 90th anniversary, and the group was looking for works which elucidated themes and subject-matter which might, “for example, include ideas of “one generation to another”, music-making, singing, the number 90, the City of London, or celebration in general.”

Given these broad guidelines, the area that interested me most related to the idea of “one generation to another”. Though this could be interpreted as the passing on of knowledge or wisdom, I was also interested in this concept at the genetic level. Another theme of relevance was the celebratory aspect, which resonated with Einstein's “genuinely religious feeling that has nothing to do with mysticism.”

As a starting point, lines by Linnaeus describing the sexual behaviour of plants had already been set as an unaccompanied motet, a work examined in some detail in previous chapters. To complement this setting, I proposed using a poem by Thomas Hardy, a quotation from Charles Darwin, excerpts from the *Song of Solomon* and verses from St. Francis of Assisi's *Canticle*. There was never any serious intention to complete this work as proposed, but the process of hurriedly assembling these texts led to the desire to compose a work which could act as a kind of personal credo, to be attempted when the right opportunity, instrumentation or

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3 Taken from CITY_CHORUS_commission_competition_-_rules_and_regulations.doc.
texts presented themselves. In mid-2011 this idea of a credo was revisited, and to this end more texts were assembled. A composition diary entry from 12 May 2011 is the first documentation of the cycle and shows that the concept of regeneration is already present in its philosophical schema.

New project - a cycle of madrigals for a couple of voices (combinations of satb) plus a couple of instruments - cello, percussion, possibly a wind. They can all have different instrumentation, singers in common. I will start by resetting the Linnaeus - alto, soprano, tenor and cello.

Other texts are the Darwin, Hardy, possibly song of songs (related to Linnaeus). There will be a solo cello meditation, on one of the themes of the madrigals, and a couple of choral odes – St. Francis? An important theme is regeneration - this can be done melodically and also through harmony - one piece can lead to another. Rhythmic figures (in accompaniment?) can develop into cycles... Base entire cycle on the Hildegard chant.  

Already present at this stage is some idea of the soundworld the piece would inhabit, consisting of a small instrumental ensemble supporting solo voices, structurally modelled on the madrigals of Monteverdi (and Crumb). The proposed cycle would also include a cappella settings of sacred texts and at least one substantial solo instrumental work based on related material. As a unifying factor, all of the main material would be derived from O Virtus Sapientiae, a chant by Hildegard of Bingen. This chant serves a cantus firmus function in the cycle, providing the motivic basis from which all material is generated. Though it may seem at odds with the views on religiosity presented above to use sacred texts, on closer examination there is no real conflict. As O Virtus Sapientiae makes no overt reference to any

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4 Viggiani, M. Composition Diary 2009-11. 12 May, 2011. These diary entries were a means by which the progress (or otherwise) of my compositional work was documented. As such, they are a primary source and are accordingly reproduced verbatim, complete with grammatical inconsistencies and lazy punctuation. Similarly, my embryonic musical sketches are presented in their raw unedited form, though often significant aspects are highlighted. I feel that the informal nature of this documentation also gives a more personal and stronger sense of the development of the thought processes taking place during the creation of this work.  

creator but rather invokes an elemental and natural force, I chose to appropriate and interpret this text in exclusively secular fashion. In any case, I see nothing inconsistent in sharing value systems and philosophies developed in religious texts, whilst not accepting the existence of a creator. More importantly there is also the vitality of the poetry itself, not to mention the inherent musicality of Latin intonation. Both of these aspects were considered in the setting. A translation of Hildegard’s text is reproduced below.

O strength of Wisdom, who, circling, circled, enclosing all in one lifegiving path, three wings you have: one soars to the heights, one distils its essence upon the earth, and the third is everywhere. Praise to you, as is fitting, O Wisdom.⁶

Further inspiration occurred during the writing of this diary entry, as it then continues “Better idea- use old instruments- gamba, cornetto, lute. (subtle percussion? Use existing players.)”.⁷ By ‘old’ instruments, what are meant are period instruments - at this point there was a desire to use these sounds to create rarefied and distinctive instrumental backgrounds.

My composition diary also mentions other texts. The Linnaeus quotation has already been discussed in relation to the motet *The Actual Petals*, and is consistent with the philosophy of the cycle. This motet was part of the original City Chorus submission, but I decided to reset the text to take advantage of the available instrumental forces rather than include the existing version. In any case, to fit into the cycle structurally the setting needed to derive from or relate musically in some way to Hildegard’s chant.

Of the other authors mentioned in my diary excerpt, “Hardy” refers to the Thomas Hardy poem *Heredity*, which explores the passing of genetic traits from one generation to the next.

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⁶Translation of text taken from Hildegard of Bingen (1098-1175), *O Virtus Sapientiae*. Transl. Helm, C. L. http://www2.cpdl.org/wiki/images/sheet/bing-ovc.pdf, last accessed 29/06/11. Several other versions were also consulted, including a facsimile of the original.

⁷Viggiani, M. *Op. Cit.* This particular entry suggests that the idea to use period instruments actually occurred whilst writing the diary entry. This fact reinforces my belief in the importance of this source to the compositional process, and helps justify inclusion of this material in this dissertation.
I am the family face:
Flesh perishes, I live on,
Projecting trait and trace
Through time to times anon,
And leaping from place to place
Over oblivion.

The years-heired feature that can
In curve and voice and eye
Despise the human span
Of durance—that is I;
The eternal thing in man,
That heeds no call to die.

(Thomas Hardy, 1840-1928)\(^8\)

Finally, a quote from the end of Charles Darwin's *Origin of Species* sums up and draws together the two themes of regeneration and wisdom, forming an appropriate conclusion to the cycle:

There is grandeur in this view of Life, with its several powers, having been originally breathed into a few forms, or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.\(^9\)

Fig. 4.1 shows the structural outline for the work as of 12 May 2011. By this stage, it was proposed that the work be scored for four voices (SATB), with instrumental accompaniment provided by period instruments, specifically the cornetto, lute and gamba. Each of the


madrigals would be arranged for a different combination of voices and instruments, and there would be one purely instrumental movement to balance the a cappella movement. There would also be a tutti movement, employing all available forces.

Fig. 4.1 Outline of Visionary Songs, 12 May 2011\(^\text{10}\)

<table>
<thead>
<tr>
<th>Movement</th>
<th>Instrumentation, (no. of players)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. O Virtus Sapientiae - Hildegard</td>
<td>ten, solo cornetto (2)</td>
</tr>
<tr>
<td>2. The Actual Petals - Linnaeus</td>
<td>sat, gamba, lute (5)</td>
</tr>
<tr>
<td>3. Laudato Si, signore - St. Francis</td>
<td>satb, gamba, cornetto (6)</td>
</tr>
<tr>
<td>4. Heredity - Hardy</td>
<td>solo alto, cornetto, lute (3)</td>
</tr>
<tr>
<td>5. Instrumental meditation</td>
<td>gamba solo (1)</td>
</tr>
<tr>
<td>6. Ficus protulit - Solomon</td>
<td>satb (4)</td>
</tr>
<tr>
<td>7. There is grandeur in this view of life - Darwin</td>
<td>satb, gamba, cornetto, lute (tutti) (7)</td>
</tr>
</tbody>
</table>

The original conception of the introductory movement was a recomposition of Hildegard’s chant as a duet for tenor and cornetto. At this point it is constructive to look at this introductory song through a brief examination of its drafting process. Translation of the text has already been given, and Ex. 4.1 shows a transcription of the melody.

\(^{10}\) Viggiani, M. op. cit.
Ex. 4.1 Hildegard of Bingen - *O Virtus Sapientiae*

The plan was to use the text sparingly, highlighting certain important words, e.g. “comprehendendo”; and to share the melody between voice and cornetto. A fragment from the first draft of this movement is given below, showing the original rhythmic conception of the piece. No time signature is given, and interaction with the vocal line is rhythmically non-specific. Dotted bar lines were inserted afterwards to clarify accents.
Variations of the chant are used in the cornetto part, though this material is shared melismatically with the voice. Also present are tonal distortions created by the use of accidentals. Six days later, a more detailed draft emerged which revealed the beginnings of a more organised metrical scheme, along with ornamentation of the cornetto line. As the conception of this piece solidified, barlines were added to clarify a stronger sense of pulse. Though the meter changes regularly, variation of bar length over a quaver pulse ensures that particular notes are felt as accents.
There are problems with this version, however. The middle register cornetto line remains diatonically trapped, whereas a more adventurous harmonic landscape was intended. Its character does not contrast sufficiently with the vocal line, which though beginning to acquire rhythmic shape, is too subservient. This movement is designed to introduce the material used in the cycle and as such, the chant needs to be presented more strongly.

It was also unclear whether the combination of tenor voice and mid-register cornetto was the correct one at this point in the cycle. The diary entry from 24 May 2011 suggests that I was losing my enthusiasm for using early instruments. The cornetto is designed as a diatonic instrument, with intonation becoming suspect the further one moves from the natural-note scale. Though the tone of the instrument is distinctively pure, there are few effective sonic options available through the use of extended techniques, and as wind pressure affects pitch the dynamic range is limited. There were also practical problems associated with the other chosen instruments. Both the gamba and the lute exist in several different sizes and use
variations of scordatura. With limited access to these instruments, or high standard players, it would be difficult to compose idiomatic parts. Similarly, these instruments also had limited scope for extended sonic possibilities.

Have completed the intro, having trouble with the actual flowers - 2 false starts so far. Will lose the creator bit, revert to modern instruments- cello, clarinet piano. Am finding the constraints too limiting. Plan the same, just replace instruments.

Time to rethink structure- have started the st. francis, satb, I have something to work with. No idea about the Linnaus- will leave for a while. My choral writing seems very stodgy at present, will try to liven things up. Still like the idea of the cello lament- perhaps next? The hardy will also work- single voice. May attempt tomorrow. Clarinet can be obligato. Still on lookout for more texts, too. Perhaps Joyce? Try not to think of as a suite- write as a cycle, in order of conception. Not necessary to develop in any order. Also not necessary to use homogenous group of instruments- each can be different.11

The “very stodgy” choral writing refers to two unsatisfactory attempts at a cappella settings of excerpts from St. Francis’ *Canticle* and *Song of Solomon*. It had become clear that the use of ancient instruments was encouraging the work stylistically in an undesired direction. The original intention was to use this material to generate a personal musical response, not simply to modernize 12th century chant. There were also concerns about the practicality of performing such an instrumentally varied combination of pieces, and the realization that they would have to assay very similar musical ground in order for the individual pieces to cohere as a cycle. As this entry shows, by 24 May the period instruments have been replaced by the more flexible and versatile clarinet, guitar and cello. Roles are similar, but these instruments open up more possibilities for timbral variation whilst providing instrumental consistency. Accordingly the next draft shows that the cornetto has been replaced by clarinet. Immediately obvious is the increased pitch range of the obligato part – the clarinet begins quietly in its lowest chalumeau register, and larger intervallic leaps become more practical. The rhythmic

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conception has also become more refined, and the phrasing more delicately nuanced, utilizing
a greater dynamic range.

Ex. 4.4 Draft of *O Vitus Sapientiae*, 24 May 2011

Despite being more satisfied with this version, there were still problems. The vocal part did
not introduce the chant clearly enough, and despite its greater versatility, the clarinet
distracted attention away from the vocal line. There were also concerns with regard to how
the overall structure of the cycle was developing. Too great a range of instrumental colour
could also prevent the cycle from cohering. Following the failure to make progress with any
of the other pieces the decision was made to abandon the chamber ensemble instrumentation and to set the cycle for solo soprano voice and piano. Though the ambitious vision of the work's original conception had been reduced, the intimate and focussed medium of voice and piano encouraged a more succinct and potent realization of the cycle. This realization is documented in the diary on 25 May:

*Overall- Hardy, Darwin and Linnaeus as songs for piano and voice. Good to add Joyce to this, if I can find suitable thing. Also look for other texts. The two latin pieces can be acappella [sic]. Add to this cello meditation and a guitar fantasia, that is the cycle. Possibly Inversnaid (manley Hopkins?)*

The Joyce mentioned in both of the previous entries is an aphoristically short quotation from *Ulysses*:

...A very short space of time through very short times of space... Exactly: and that is the ineluctable modality of the audible. Open your eyes...

This passage, according to Jeri Johnson in her notes to the reprint of the 1922 edition, refers to one of the book's characters Stephen Dedalus “contemplating (through Aristotle) the inescapability of the material world”. This is originally used in the context of the sense of sight (“Ineluctable modality of the visible”), and then made manifest in the above excerpt in the realm of sound. Though the connections to Hildegard are admittedly sketchy, this text also references a form of received wisdom - i.e., that which is apprehended by the senses. This fact also reminds us of the cycle's title - all of the selected authors were visionaries of sorts. It forms a neat corollary with Webern's statement that “Since the difference between colour and music is one of degree, not of kind, one can say that music is natural law as

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related to the sense of hearing.”¹⁶ This sentiment resonates very strongly with the poetic intentions of this work, reminds us of its credo function.

Putting aside drafts of the opening song and the a cappella movements for the time being, the diary entry for 26 May shows that attention turned to the Hardy poem.

*Worked on the hardy- did a rhythmic plan, then added pitch to first part. Way too busy! Currently thinning out. Not sure if I like it, but don't know what else to do. Should work backwards OK, but need to refine what I have so far...*¹⁷

Ex. 4.5 below shows this initial attempt. With the composition of this song, a system for the development of the cycle’s harmonic material is beginning to evolve. Hardy’s two short verses reflect on the miracle by which “trait and trace” are passed down from one generation to the next. These characteristics transcend the physical, and constitute a form of immortality. Metaphorically, this idea is reflected in techniques used in *Visionary Songs*, as the DNA originating in Hildegard's chant is given new forms. In the sketch below, the circled numbers label localized pitch-class sets derived from the pitches used in each phrase. Though these phrases relate to motifs in Hildegard's chant, actual pitch choice is at this point intuitive.

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¹⁷ Viggiani, M. op. cit. 26 May 2011.
In the diary entry, working “backwards” refers to the use of mirror technique, as described in Chapter Two. The poem consists of two six-line stanzas, and in this setting the second stanza is a retrograde version of the first. Thus, all melodic shapes appear backwards and the resulting harmonies appear in reverse order. This use of mirror form is an appropriate metaphor for the process of reflection found both in this particular text and the relationship of this work to the Hildegard chant. The diary entry from 26 May reveals that following the initial explorations of the music material and several embryonic drafts, many of the cycle’s parameters were now more solidly defined, including instrumentation, text selection and harmonic language. These clarifications of musical direction led to faster progress. The following sketch from 26 May, 2012 shows an early version of the piano part. This initial attempt is too busy (see highlights), distracting from the vocal line.
Having completed *Heredity*, the same diary entry from 26 May reveals a clear path forward:

*An idea for Actual Petals- a repeating opening out pattern in the piano part, irregular, proliferating. Can possible derive from sixths, bothways [sic]. Melody over this.*\(^{18}\)

The sixths mentioned are an important structural feature of Hildegard’s chant, which is abundant in stepwise descending scales spanning this interval. The motif is used to generate accompanimental figuration which represents and suggests the growth and development of plants. By 30 May work has progressed further. The cello has been dropped from the cycle, but a companion piece is still envisaged at this point.

*Best morning session for ages- have set the hardy, basically fine. Am now imagining 4 song Virgo, Actual Petals, Hardy and Darwin. Also a few ideas for the guitar piece-rapid triplet arpeggios in 4ths, will work on a strong harmonic structure. Prelude and fantasia? Fugal movement which follows fast bit- keep fast bit to 3 -4 min...*\(^\text{19}\)

And again, 7 June:

*3 songs done- quite happy with Virgo, Petals and Hardy. Possibly add 1 more? Will look for text- The joyce quote could be a very short epigrammatic song? Also look at leunig? Lose Manley hopkins.*\(^\text{20}\)

The a cappella movements have finally been dropped along with their religious texts, as is Manley Hopkins’ *Inversnaid*, which was never under serious consideration. The first song *O Virtus* had by now assumed something close to its final form, with the piano accompaniment becoming less obtrusive and more refined over a number of subsequent drafts. Ex. 4.7 shows an early draft of the Darwin setting, where “grandeur” in the text is expressed by falling fifths, derived again from Hildegard. The melody is accompanied homophonically by strong chords, which also provide then soprano with occasional pitch support.


The tempo is ponderous, and the chordal accompaniment too bombastic. The conclusion of the song sees a return to the melody of Hildegard’s chant, unaccompanied. Ex. 4.8 shows the first version of the cycle’s end, and its derivation from Hildegard.
Joyce’s quote did inspire “a very short epigrammatic song”, which, lasting less than 30 seconds, was originally used as an introduction to *There is grandeur*, as suggested by the diary entry from 9 June.

*Almost finished the concluding song, Darwin. Will do the Joyce (very short) and add some Blake as well, from the proverbs of hell. Joyce very short, can be an intro to Darwin.*

*Joyce- epigrammatic, very clear, almost spoken diction, not much piano. End on eyes, whispered.*

Ex. 4.9 shows the original transition between these two songs. The final phrase of *A very short space* echoes the beginning of Hildegard's chant, and introduces the lofty sentiments of Darwin’s text. It is also based on a retrograde version of the opening of *O Virtus*. Note also the addition in the bass of descending step-wise motion derived from Hildegard’s sixths.

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However, whilst a *very short space* is successful in itself, it soon became clear that this particular song did not really fit with the others. Though the melody can be related motifically to Hildegard, the song’s most characteristic interval is the tritone, both melodic and accompanimental, which does not feature elsewhere in the cycle. Additionally, the tone seems flippant in relation to the seriousness of the other texts. As the song lasts for less than thirty seconds, its absence left no gaping hole in the cycle. However, it did provide much needed contrast with the slower movements in length, articulation and tempo.

The Blake mentioned in the last diary entry is a selection of his *Proverbs of Hell* from *The Marriage of Heaven and Hell* of 1790.\(^{22}\) These resonate in imagery with the other texts, notably Hildegard’s, and again illustrate the sentiments and ideas found in the Einstein quotation. A selection of these has already been set by Benjamin Britten in his cycle *Songs and proverbs of William Blake*.\(^{23}\) In this work, individual proverbs are used to introduce longer settings of more substantial poems or as postludes. They also share consistent musical material, acting as a linking ritornello within the cycle. My selection of these is different to Britten's, as they were chosen specifically to complement ideas explored in the other cycle texts.


No bird soars too high, if he soars with his own wings.
When thou seest an eagle, thou seest a portion of Genius: lift up thy head!
To create a little flower is the labour of ages.
One thought fills immensity.
Truth can never be told so as to be understood, and not be believ'd.
What is now proved was once only imagin'd.24

The bird and eagle of the first two lines echo the three wings in *O Virtus Sapientiae*, whilst the creation of “a little flower” is the process described so rapturously by Linnaeus. The idea of immensity is touched on by both the omnipotence described by Hildegard and Darwin’s “endless forms”. In the context of *Visionary Songs*, the concept of ‘truth’ is understood both in the sense of received or experienced wisdom (Hildegard, Joyce) and in the sense of knowledge attained through empirical means (Linnaeus, Darwin). Accordingly, the textual function of this movement is to draw these two streams of meaning together.

As both imagery and concepts vary wildly in this selection of Blake, these disparate elements needed to be unified by a consistent musical feature. The diary entry continues:

*Blake- six phrases, repetitive- a ground? This movement can predict and reuse material from other songs- both a reminder of what has been, and suggestion of things to come. This movement should come after Hardy.*25

Taking guidance from Britten again, passacaglia form is used to provide these connections. There are many significant examples of this technique in Britten's music, both vocal and instrumental. The entry also shows that the one of the purposes of this song is recapitulation. Ex. 4.10 from 4 July 2011 shows the original ground bass and the beginning of the first line of text.

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24 Blake, W. op. cit.
25 Britten, B. op. cit.
In the first full draft of 15 July (Ex. 4.11) the ground continues uninterrupted almost throughout, (though it does shift register), describing an arc from low in the bass clef at the beginning and rising through the middle register to attain octaves above the staff as the upper voice. Quite coincidentally, the point where the ground comes to a stop on a sustained rolled chord corresponds to the GS. Following this, the ground is presented in fractured form across several octaves before continuing in the lower register. In the section from bar 54 (shown below), the way in which the ground dominates the texture is obvious, as it ranges through several different registers including the vocal part.
Ex. 4.11 Draft of *No Bird Soars* from 15 July 2011, showing entries of ground

* entries of ground

54

\[ \text{mp} \]

To create a little flower is the labour of

61

\[ p \]

\[ \text{a-ges.} \]

\[ \text{poco rall.} \]

\[ (8) \]

A tempo (GS)

\[ \text{precipitato} \]

One thought fills immensity

73

\[ \text{pp} \]

\[ \text{ff} \]
As suggested in the final relevant diary entry (23 July 2011) at this point the cycle was complete, but there were many shortcomings.

*Have completed a draft of all songs- revised Hardy refined, lost many bass notes, and actual petals. This movement thinned out a little, and pedals applied more judiciously. Will have to have another go at the Blake passacaglia- spread vocal line more over faster tempo, have to decide whether to obscure the ground (or change it. I camp repeat it so obviously at this tempo.) Will also have another crack at the Darwin. The return to chant is fine, but the first part amateurish. Must reconsider, find another way. Perhaps more declaimed, leading into chant? Joyce basically [sic.] OK, not sure where it goes though. Could be the conclusion to Blake?*

*Also decided to ditch the cello fantasia, but will keep guitar piece.*

As previously asserted, the first three songs were basically successful, but the following three deemed not entirely effective. The sequencing of the songs was reconsidered, but the logical progression through the first three emphasised problems with the others. As previously explained, the Joyce setting was not “basically OK”, and was subsequently excised from the cycle. The resulting need for a contrasting faster movement led to a rethinking of the Blake setting at a more fluid tempo. Acknowledging and then stepping away from Britten’s influence made it possible to examine the piece in a different light. To negate the increased predictability of the six bar ground at this faster tempo, it was necessary to treat the passacaglia with much more freedom. Accordingly, the ground became the basis for a cycle of constantly evolving variations. The meter is modified to 3/8 and the tempo accelerated, making possible more fluid movement between longer and more varied phrase structures. The ordering of events remains intact, but instrumental passages between proverbs are lengthened and extra cycles inserted between individual proverbs. At this point the two opening proverbs are separated, giving each its own musical space. The final version is significantly different in proportion to the earlier drafts, as shown in Fig. 4.2. With the extension of the instrumental sections between proverbs the role of the piano has also taken on more importance. In the original version, the voice is heard for just over half of the duration of the song, whilst in the final version this has been cut back to about a third – there

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are also less actual bars of vocal melody. The effect of this change of proportion is to focus attention on the piano part, but also to allow more space for reflection on each proverb.

Fig. 4.2 Differences between versions of *No Bird Soars*

<table>
<thead>
<tr>
<th></th>
<th>original version 12 July</th>
<th>final version 27 August</th>
</tr>
</thead>
<tbody>
<tr>
<td>tempo</td>
<td>$\text{d} = 48$</td>
<td>$\text{d} = 60$</td>
</tr>
<tr>
<td>meter</td>
<td>3/4</td>
<td>3/8</td>
</tr>
<tr>
<td>no. bars</td>
<td>113</td>
<td>184</td>
</tr>
<tr>
<td>no. vocal bars</td>
<td>66</td>
<td>63</td>
</tr>
<tr>
<td>no. ground cycles</td>
<td>17.2</td>
<td>30.6</td>
</tr>
</tbody>
</table>

Though the progressive registral profile remains basically the same, it was necessary to significantly redraft some sections. The melody is reset in places, and configuration altered. The GS point no longer highlights anything of structural significance, and accordingly, this formal design mechanism was abandoned.

One example of differences between the two versions is the setting of the fourth proverb “One thought fills immensity”. In the 12 July version immensity is suggested by thick rolling chords in the piano’s lower register. The line is sung over sustained chords, and the ground resumes in widely-spaced octaves.
Ex. 4.12 Setting of “One thought fills immensity” from No Bird Soars, 12 July 2011

These rolled chords are replaced in the later version by soft and distant sustained tones in the upper register which fade into silence. Notice also the change of vocal register – the later version mostly uses the veiled area around the bottom of the staff, as opposed the brighter Es and Ds in the original. This lower tessitura gives the line more of a suggestion of mystery. Leaping sevenths are present in both versions, and derive from the ground itself.

Ex. 4.13 Setting of “One thought fills immensity” from No Bird Soars, 27 August 2011
The approach to tonality is also different. Whilst the original remains fixed in phrygian mode at this point, the 27 August version admits several sharps, including a prominent C♯ in the soprano part. This is representative of the harmonic approach in this version, where the natural-note phrygian mode on E is combined with the major pentatonic based on F♯ (black notes). In the section following the above examples the ground is presented in its most complete form, though it never quite attains the undistorted purity found in the original draft. This accompaniment is designed to reflect the meaning of the text, which describes the clarity and undeniability of ‘truth’.

Once a faster movement was in place, the Joyce setting could be safely omitted. It remained to revisit *There is grandeur*. Example 4.14 from 14 August shows a more fully developed version. The descending bass line first seen in Ex. 4.8 becomes a repeating figure in which cycles vary in length and amplitude. The interval of a sixth features heavily, and this derives from Hildegard’s chant, as will be explained presently. The concept of cycling is integral to the entire work, and relates to the way the Hildegard material is always the starting point for musical development.
This passage still seems to be bombastic, and also slightly mechanical in the organisation of the descending bass lines. This is an instance where a mathematical process was rejected in favour of a more intuitive approach. In the final version the accompaniment was pared down to a sparse chordal background, with the piano actually silent from about two thirds through onwards. The other significant difference with earlier drafts is found in the melody of the final section, which incorporates a C♯ into the phrygian mode of E. This subtle variation ensures that the chant material is not simply repeated, but is shown to be subject to the
processes of growth and development which permeate the cycle. Whilst the piece was completed shortly after the final diary entry, in preparation for performance, one final change was made - barlines were removed from *O Virtus* to allow for a freer vocal interpretation.

“Cycling on according to the fixed laws of gravity” –

Form and harmony in *O Virtus Sapientiae*

As previously stated, all of the musical material in the cycle is based on melodic features derived from Hildegard’s chant *O Virtus Sapientiae*. A few distinctive motifs were chosen due to their potential to provide the impetus for development. Four particular motifs, each defined intervallically, are shown below.

Ex. 4.15 Motifs from *O Virtus Sapientiae*

Motif (a) is the chant’s initial gesture, an upwards leap of a perfect fifth decorated with a lower neighbour tone. Upward motion continues to the pendant E. Hildegard frequently uses this motif to start phrases and to define sectional beginnings. It sometimes appears without the initial low E, and at other times, upward motion is extended to the G above the staff. The second fragment, motif (b) is characterised by downwards stepwise motion covering the ambit of a sixth. This scale movement appears throughout the chant, and is typical of the genre. It also appears in different registers and is sometimes extended throughout a greater intervallic range. Motif (c) is an ornamental fragment consisting of an incomplete upper neighbour combined with a passing note. Usually, the text is slurred over this motif,
emphasising its melismatically decorative function. Finally, motif (d) is a variation of motif (a). In this case, the high E destination is sounded three times, strongly enunciating the word comprehending, (to take, embrace or comprehend). This is an important concept in Hildegard’s text, and musically is positioned at the first climax of the chant. Ex. 4.16 shows the use disposition of these motifs in the original chant. Variations of motif (c) also occur, but these are not shown.

Ex. 4.16 Motivic analysis of *O Virtus Sapientiae* (original chant)
The mode of the original chant is reflected in the harmonic structure of the cycle. The chant is set in the phrygian mode based on E, and this pitch is the harmonic anchor point of the cycle. Though tonality is treated in a variety of ways (and is sometimes absent), the defining phrygian flat second degree is often present. When chromaticism is introduced within the more obviously modal songs, the ‘black’ notes are not used structurally, but to colour the mode in fresh ways. The root E also gives the melodic structure more coherence - though harmonic colour may change, crucial motifs usually appear untransposed. This gives the entire work a unity of pitch definition and function.

Reliance on a single gravitational key centre is characteristic of the Baroque suite, where it was the most important unifying factor used in the linking of multi-movement structures. Similarly, the songs in the cycle are linked by their relationship to the key or modal centre of E. However, as the cycle also takes into account tritone equivalence, the harmonic centre of E is balanced by its counterpole B♭. In *The Actual Petals*, the music reaches this point at an important structural node, whilst in *Heredity* B♭ serves as both the point of departure and the conclusion. At the beginning of the latter, tonic to dominant harmonic movement is suggested, and this is reversed to form an altered authentic cadence at the end. The intermediate material is freely chromatic, organised using melodically-derived pitch class set relationships. In *No Bird Soars* E phrygian modality is presented via a ground bass which is contrasted and blended with F♯ major pentatonic material. There is also an element of tonal ambiguity here, as the melodic writing in this ground strongly suggests a tonic of A, reinforced by a modal cadential flattened seventh. *There is Grandeur* begins clearly in E phrygian, but the mode is given a different flavour with the addition of an added raised sixth. The table below sets out the movements of the cycle along with their tonal relationships.

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27 The idea of tritone equivalence, according to Lendvai, has been explained in Chapter One.
Modal definitions are treated broadly, as chromatic notes are also often present, and these function differently according to context. In the opening song, sharp notes appear as colours in the high register of the accompaniment. As such, they act as upper partials and serve to reinforce the main modality.

In the final version of the opening *O Virtus Sapientiae*, Hildegard’s melody is presented by the voice. The original unmetered pitch patterns have been given definite rhythmic shape, with careful attention given to ensuring that importantly stressed syllables are accented. This gives the mainly quaver-based phrases an interesting metrical irregularity, maintaining unpredictable alternation between duple and triple note groupings dictated by the natural speech rhythm of the text. The chant is presented unmodified in its entirety, whilst the accompanying piano part is sparse and primarily supportive. Registrally, this provides a solid tonal foundation for the voice using bass pedals to reinforce the E tonality, whilst the upper parts of the chords are set high above the vocal range. Thus, the piano part provides both the ground on which the vocal part can stand, and a suggestion of the unattainable firmament, utilizing partials farther up the harmonic spectrum, beyond the compass of both phrygian

<table>
<thead>
<tr>
<th>Movement</th>
<th>Tonality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>O Virtue Sapientiae</em></td>
<td>E phrygian</td>
</tr>
<tr>
<td><em>(Hildegard)</em></td>
<td></td>
</tr>
<tr>
<td>2. <em>The Actual Petals</em></td>
<td>E mixolydian</td>
</tr>
<tr>
<td><em>(Linnaeus)</em></td>
<td>B♭ mixolydian</td>
</tr>
<tr>
<td>3. <em>Heredity</em></td>
<td>B♭ (I-V7) (freely chromatic)</td>
</tr>
<tr>
<td><em>(Hardy)</em></td>
<td>B♭ (V7-I)</td>
</tr>
<tr>
<td>4. <em>No Bird Soars</em></td>
<td>E phrygian <em>A aeolian?</em> / F♯ pentatonic</td>
</tr>
<tr>
<td><em>(Blake)</em></td>
<td></td>
</tr>
<tr>
<td>5. <em>There is grandeur</em></td>
<td>E phrygian</td>
</tr>
<tr>
<td><em>(Darwin)</em></td>
<td>E phrygian + #6 (C♯)</td>
</tr>
</tbody>
</table>
modality and the female voice.

These harmonies themselves derive from verticalization of the melodic structure. The following example shows the essential sonority, based on the sequence of interlocking perfect fifths which characterizes motif (a).

Ex. 4.17 Derivation of harmonies from intervallic structure of motif (a) in O Virtus

In the accompaniment, drifting fragments of melody transposed to the upper partials echo the chant, counterbalanced by soft rumbles in the bass register. There is no real harmonic movement, and rhythmically this part provides a sustained and slowly moving backdrop to the steady undulation which characterizes the vocal line.

The song The Actual Petals begins with a strong declaration of the structural E pitch across several octaves. This is the departure point for the ensuing development of a florid accompaniment texture based on motif (b) from Hildegard’s chant, a scale passage descending through a major sixth. This pitch-class set is combined with its own inversion, producing a nine-note scale based on E mixolydian. The characteristic flat seventh is complemented by two other colour tones, with G adding some ambiguity to the major sound of the mode and C providing chromatic shading. The remaining three tones (complement set) function as the main pitch goal, attained in bar 34. Ex. 4.16 below shows the derivation of

28 The importance of this structural location has been previously discussed in relation to Fibonacci sequence and
the nine-note scale from motif (b), along with its complement and subsequent transposition at the tritone. Note also the symmetrical relationships - the central pitch of the complement (B♭) is the fulcrum of the transposition at the tritone, which in turn generates the harmonic material used in the second part of the song.

Ex. 4.18 Derivation of pitch collections from motif (b) in *The Actual Petals*

![Derivation of pitch collections from motif (b) in *The Actual Petals*](image)

This material is utilized in different ways. The vocal melody is based freely on notes from the aggregate scale, using G and C as colours. The accompaniment juxtaposes motif (b) with its own inversion to create expanding cycles moving in contrary motion. These are intended as musical representations of natural growth and fecundity. Continuity is assured by consistency of the figuration, where the pitch collection develops from short simple fragments into extensive and varied coruscations. Pitches are accumulated additively as these patterns evolve, and variation includes extension into higher register and rhythmic diminution, creating ever more complex and rapid figuration. The following example shows the development of these figures at five different stages of the first part of the song.

---

Golden Section proportions in Chapter Two.
Despite its appearance of random rapid growth, the exfoliation of these cycles is subject to strict mathematical procedures. The use of the Fibonacci sequence has been explained in Chapter Two, and as this text deals with the natural miracle of reproduction, it was appropriate to make use of a naturally occurring mathematical principle in the composition of this piece. In this setting of the text, the sequence defines the musical structure and is used to symbolize the process of natural regeneration. The soprano part is only bound within this structure in a general sense, in that the two paragraphs of text define the two sections of the piece. As important structural definition occurs via harmonic movement and the unfolding of the accompaniment patterns, the vocal part itself is left to function ornamentally – like the petals themselves, it contributes “nothing to generation”.

Ex. 4.19 Development of accompanimental motifs in *The Actual Petals*
Another unifying aspect is the concluding phrase. This rhythmic motif is isolated from the main accompaniment at the end of the piece by silent preparation, and highlighted by slowing of the tempo. It had been previously used to punctuate the vocal line and provide contrast with the accompanying figuration through its strong rhythmic propulsion. The recall of this motif provides a link between the two sections of the piece. Notice that this figure contains all nine pitches of the aggregate scale.

**Ex 4.20 Concluding accompaniment phrase from *The Actual Petals***

In *Heredity* the main cell from which the song develops is the ornamental motif (c). At this point in the cycle, we have shifted from E to its tritone equivalent of B♭. Though the piece begins with this pitch, B♭ in this case does not function as a tonal centre but, for the first (and only) time in the cycle as a starting point for free chromatic development. Accordingly, the Hildegard material appears in transposed form. The backbone of this modulation is the melody, based on freely evolving transpositions and variations of a four-note fragment. The harmony is derived from small constellations of pitch which arise from movement within the soprano part. Ex. 4.18 below shows some melodic fragments and their derivation from motif (c). The variation is not limited to transposition, as in the third instance the initial semitone becomes a tone, and the intervallic profile is further stretched in the final example, though the phrase shape remains the same.
The mirror technique used to generate the second half of the piece has been explained earlier in the chapter. There is some freedom employed within the retrograde section, in that register is sometimes changed and rhythmic positioning altered due to variation in the interpretation of sustained notes, particularly in the piano part. As melodic development and relationship to the chant are taken care of by the soprano, the piano is largely decorative and atmospheric. It also frames the two stanzas with a brief introduction, a central interlude and a coda.

In addition, the piano part contains two important structural signposts. The opening gesture of the piece is pendant to the B♭ tonality arrived at in the conclusion of the previous song. Though the harmony is derived melodically and there is no definite tonal centre in Heredity, the broad registral sweep of the opening statement disguises the outline of a harmonic movement in B♭ from the tonic to the dominant seventh. This becomes clearer when the retrograde form at the end suggests an authentic cadence. The following example shows the structural harmonic implications of the first and last bars:
Ex. 4.22 Harmonic implication at the beginning and end of *Heredity*

The other important moment in the piano part is the axis of the formal mirror. At the exact midpoint of the movement the piano has an exposed single line melody in the upper registers which leads up to a high A. The melodic direction is unambiguously upwards, and the apex is framed by silence. Note also the modification of tempo - the approach to this central high point is emphasized by a ritardando, and after the concentration of a brief pause, a short accelerando leads into the second half of the movement. The fall in register of the melody which follows is designed to emphasise its retrograde character.

Ex. 4.23 Mirror point in *Heredity*
In *No Bird Soars* the vocal line develops over a ground derived from the opening of Hildegard’s chant. Based in E, the first four notes form a motif taken directly from motif (a). This is followed by a leap of a seventh which emphasises the phrygian character of the line and leads to another rising fifth deriving from (a). The sequence of descending scale steps which follows balances the previous leaping fifths and echoes the chant's predominant method of melodic progression. The third part of the ground is a melodic cadence which rises by step to the final before embarking on the next cycle. The circularity of the ground form is also another manifestation of cyclic thinking.

The influence of Britten is particularly strong in this movement. Ex. 4.24 compares the eventual form of the ground to both Hildegard and a specific instance in Britten's work. I was not aware of this at the time, but in retrospect, the slow tempo, dotted crotchet rhythms and tied notes over barlines are reminiscent of the ground bass used by Britten in *Death Be Not Proud*, from his settings of Donne sonnets.\(^{29}\) Note the predominantly stepwise movement and circularity leading back to E. Despite the 4/4 signature, Britten's ground also has a definite triple pulse across the barlines.

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\(^{29}\) Britten, B. *Death Be Not Proud*, from *The holy sonnets of John Donne: op. 35: high voice and piano*. London: Boosey & Hawkes, c1946.
Ex. 4.24 Derivation of ground in *No Bird Soars* from Hildegard, with comparison to *Death Be Not Proud* (Britten)

There are also similarities in profile, as both grounds rise and then fall by step. *No bird soars* also shares tonal ambiguity with *Death Be Not Proud*. Despite the key signature denoting B major, the conclusion of Britten's ground leads strongly up through a raised leading note to suggest lydian modality in E. Likewise, the B in the initial gesture of *No bird soars* can be convincingly defined as an incomplete upper neighbour resolving to the A, suggesting a mode based around this pitch. This is reinforced in the third bar by the fall of a minor third.

The ground also occasionally appears as part of the soprano melody, and the pitch range of the song is not limited to the basic mode. The complement set of five pitches (black notes) form the major pentatonic scale based on F♯, and this scale is sometimes used in juxtaposition with phrygian mode. Mostly, the two key centres are used to delineate different musical ideas, as the ground is exclusively phrygian.

The ground is also used to provide a means of linking the disparate proverbs. Sustained melismas and leaping fifths are used to evoke free-wheeling avian flight, with harmonic support from quartal chord voicings in the right hand of the piano. As well as connecting
textually to the other songs, *No bird soars* also contains references to musical ideas found elsewhere in the cycle. The section from bar 69 reprises the motif (b) accompaniment figuration from *The Actual Petals* in juxtaposition with the ground. This is musical reminder of the subject matter of the earlier song, echoed in the Blake proverb.

Ex. 4.25 Juxtaposition of ground and accompaniment figuration (b) from *The Actual Petals* in *No Bird Soars*, bar 69

The final song in the cycle both brings together the poetic philosophical strands of the texts and recapitulates important musical material. The chant itself is initially presented in close to its original form, but in this case, a clear 4/4 meter is suggested. The piano part uses similar upper partial harmonies to those used in *O Virtus*, and also figuration reminiscent of that used in *the Actual Petals*. The idea of circling which is so central to the cycle’s philosophical background is evoked in the developing figuration which appears at the words “cycling on.” Incidentally, this important climactic moment references motif (d), with a rising pentatonic
figure leading to a reiteration of the important structural pitch E. This serves a similar function in Hildegard's chant, set to the word “comprehendendo”. The example below compares these two moments.

Ex. 4.27 Comparison of motif (d) from *There is grandeur* with *O Virtus*

The movement concludes with another example of cycling. The second part of Darwin's quote is set to a melody which increasingly grows to resemble the end of Hildegard's chant, combining the inspirational with the empirical. This culminates in a melisma highlighting the significant word “evolved”, taken directly from Hildegard. However, at this point the phrygian mode is modified by raising the sixth degree to C♯, providing an instance of harmonic ambiguity. This does not alter the minor or flat second characteristics of the mode, but presents the tonality in a subtly new light. Additionally, the piano re-enters very softly with the E-B♭ tritone, one last restatement of the harmonic dichotomy which has dominated the cycle.

Examination of sketches and diary entries reveal a slow and deliberate process whereby the cycle grew from simple concepts to its eventual completion. Whilst the plan of basing the songs on Hildegard’s chant arose early in the process, this never led to the formation of an unalterable pre-ordained structure. Conversely, the cycle was permitted to develop flexibly as texts were added, removed and re-ordered throughout the process. Relating back to Hildegard motivically allowed the freedom to juxtapose different approaches to harmony ranging from simple diatonic modality to the use of chromatic serial process.
Chapter Five

Concluding remarks

This dissertation has identified and analysed many of the qualities and attributes which characterise the works in the folio. Whilst overall stylistic categorization or pigeon-holing remains problematical, the sense of eclecticism alluded to in the introduction is evoked by the variety of techniques employed and the diverse range of musical and cultural influences, ranging from the blues to southern European folk music, and from 12th century chant to 20th century compositional techniques. Whilst it is inappropriate for me to attempt to objectively evaluate the success or otherwise of these works, it remains to summarize compositional tendencies and to explore future possible directions in which the trajectory of the present musical aesthetic may lead.

In general terms, I do not see the influences of blues and folk music on my own work diminishing. These act as both references and stimuli in my music, and are important links to the most basic expressive impulses – they constantly remind me of my initial inspirations and help to ensure that my music remains both spontaneous and connected to an emotional wellspring, however abstract the compositional process may become. Whilst there are no specific current plans for works based on or influenced by other sources, I foresee developing further interest in Italian folk and popular music.

The works composed over the last four years encompass a wide harmonic spectrum ranging from diatonic modality through functional harmony to the use of serial procedures and pitch set manipulation. There is no direct progression towards or away from any consistency of language, and I am no closer to aesthetically staking out the borders or limits of a harmonic territory. I reserve the artistic freedom to range along this spectrum as the expressive needs of each particular work dictate. It is possible to find examples of different harmonic processes at work within a single piece, as occurs in both Trio and One Last Tango.

Whilst the most recent work in the folio Vorrei... is the most harmonically functional this is not necessarily an indication of future tendencies. The sole post-doctoral work completed to this point utilizes a chromatic register-specific pitch field derived from falling minor thirds
and is characterised by dense atonal clusters. This work, for guitar orchestra, ties up some loose ends which hang over from the folio. It was originally intended as part of a set of four motivically connected pieces for variously-sized guitar ensembles as a work for large forces. When the initial draft proved too difficult for the ensembles it was designed for, it was temporarily set aside. Consequently, it has been rewritten as a study in texture using controlled indeterminacy, where the coordination of the ensemble is dependent on a conductor signalling arrival points. Whilst some motivic material is derived from Prism, the work has no real sonic relationship to the folio trios. Additionally, entitled the ineluctable modality of the audible. Open your eyes..., the work is also an attempt to interpret musically the James Joyce excerpt which was eventually omitted from Visionary Songs.

The folio works demonstrate the use of various mathematical processes such as Golden Section in the development of structure and the generation of harmony. If anything, the chronological presentation of these works shows decreasing reliance on mathematical formulae, and a shift towards intuitive process. This tendency is amplified when works pre-dating the current selection are taken into account. During a sequence of exploratory works during this period, there was generally more use of pre-ordained structure and mathematical process. Whilst there are presently no plans to abandon these techniques, there is always the question of balance. In the case of GS, there is increasingly a sense that a feeling for these proportions have been unconsciously internalised, and something close to them often appears naturally. These techniques and others will probably continue to exist in my work, but not as initial stimuli.

Non-repetition has also been identified as a defining feature of this body of work. This is also manifest in the ways in which compositional techniques are continually modified and renewed to accommodate each work. Whilst the same techniques (such as use of GS proportions) appear in successive works, their application is different in each case. Each new work seems to demand the development of something new in my compositional toolbox – techniques need to be updated to suit the aesthetic requirements of individual creative situations.

Vocal music will continue to be an important part of my work, and in this regard, the material from within my family history may be a future source of text. Ginese Triaca’s manuscript (tantalisingly labelled “No.3”) contains a wealth of unused material, and other prose writings
of his exist elsewhere. There is also the possibility of using his story to create the narrative for a dramatic work.

The last four years have been a period of intense solo compositional activity, and I would like to return to music performance in some way, especially in conjunction with others. This will probably take the form of some kind of creative improvised music ensemble. In this context I am also interested in exploring less formal avenues of performance. The introduction describes the increasingly blurred line between serious contemporary classical composition and the more sophisticated and arty side of popular music. This is an area which I would like to explore from the popular side in order to take advantage of the more accessible means of diffusion and greater audiences which come with this territory. This includes the use of the recording studio as a creative medium and the recording itself (as opposed to the score or performance) as the artefact. It was popular musicians who first realized the potential of the recording studio itself as a compositional tool.

...while classical divisions of record companies led the way in studio technology, their pursuit of fidelity limited their studio imagination. It was pop producers, unashamedly using technology to ‘cheat’ audiences (double-tracking weak voices, filling out a fragile beat, faking strings) who, in the 1950s and 1960s developed recording as an art form, thus enabling rock to develop as a “serious” music in its own right.¹ (Italics mine)

I am interested in the creation of sonic artwork existing independently of performance as a recorded artefact which can be solely experienced through playback technology. In this case, performances of ‘the work’ are invariable from one another, and interpretation is dependent on physical factors such as acoustic space and the quality of the playback equipment.

The works in this folio were chosen as being representative of the scope of compositional activity undertaken during the period 2009-12. As such, they showcase a range of techniques and a broadly diverse selection of cultural and musical influences.

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