

...a settling stillness, weighted dust...
A portfolio of original compositions and commentary

A thesis submitted for the degree of Doctor of Philosophy

by

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Abstract

The compositions in this portfolio explore the technical and expressive applications of some sonic aspects of church bells and some theoretical aspects of English change ringing. In terms of compositional technique this research manifests as the exploration of decaying sonorities and decay-driven rhythms, overtone partials of the harmonic series, pitch and scordatura resources derived from the tuning analysis of specific bells, and the use of static and pulsating drones. These technical resources form the backbone of my harmonic and rhythmic language throughout this thesis and are seen to develop and undergo a process of reflective refinement across the portfolio. In addition, the works presented here explore my fascination with the use of improvisation and performer choice by means of aural response and interaction, the application of apotheosis endings and the practicalities, and artistically rewarding results, of self-transcription and arrangement. In general my music searches for a poignant blend of stasis and activity, of meditateness and unpredictability, that I have termed 'fragile intensity'. During the accompanying commentary the impact of these technical resources on the expressive content of my music is assessed and elucidated. An artistically fruitful tension between compositional intuition and intellectual self-analysis is noted. An overall trend of diminishing reliance on large-scale prefabricated compositional systems in favour of small-scale bespoke procedures is observed. Within the context of the author's compositions, this trend, together with an acquired instinct for the most successful deployment and contexts for the previously described technical explorations, is highlighted as artistically healthy and a potential sign of compositional growth.

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Contents

Abstract.....	2
Acknowledgements.....	3
1. Introduction	7
2. <i>My lungs taste the air of Time Blown past falling sands...</i>	16
3. <i>Curved lines 'gainst square glass</i>	26
4. <i>Reflections on Blue</i>	35
5. <i>...but their stillness showed plainly</i>	46
6. <i>At the edge of his dreams...</i>	61
7. <i>Like Trees in November</i>	68
8. <i>...on plain air...</i>	76
9. <i>...to the same failing light</i>	86
10. <i>...with magic in my eyes...</i>	97
11. Conclusion	108
Bibliography.....	113
Appendix 1 – Tuning analysis of St Stephen’s, Rochester Row (see chapter 4.2)	115

List of Scores (bound separately)

My lungs taste the air of Time Blown past falling sands... (2015) – piccolo, violin, cello, harp, piano

...to imprison the wind (2017) – piccolo, cello, guitar

Curved lines 'gainst square glass (2015–16) – solo theorbo

Reflections on Blue (2016) – mixed ensemble of 9 instruments

...but their stillness showed plainly... (2017) – clarinet in B \flat , violin, viola, cello

...but their stillness showed plainly... (2017) – string quartet

At the edge of his dreams... (2017) – mixed ensemble of 6 players and church bells

Like Trees in November (2016–18) – solo piano

Refracted Meditations III (2018) – solo guitar

...on plain air... (2017–18) – alto recorder, baroque violin, baroque cello, theorbo

...to the same failing light... (2018) – accordion and string quartet

...with magic in my eyes... (2019) – children's choir, percussion, piano

Audio Material (see enclosed USB Drive)

1. *...to imprison the wind*

- Audrey Milheres (piccolo), Corentin Chassard (cello), Sam Cave (guitar)
- Coronet Print Room, London, UK, 25/10/17

2. *Curved lines 'gainst square glass*

- Johan Löfving (theorbo)
- St George's, Bristol, UK, 27/02/17

3. *...but their stillness showed plainly...*

- Distractfold
- Antonin Artaud building, Brunel University, London, UK, 10/05/17

4. *...but their stillness showed plainly...* (version for string quartet)

- Manon Quartet
- Gaskell building, Brunel University, London, UK, 29/06/17

5. *At the edge of his dreams...*

- Adrien Bernege (clarinet in B \flat), Fra Rustumji (violin), Corentin Chassard (cello), Sam Cave (guitar), Bartosz Glowacki (accordion), Guillaume Mathias (piano), the church bellringers of Thornham Magna, Jon Hargreaves
- Thornham Magna, Suffolk, UK, 22/07/17

6. *Refracted Meditations III*

- Sam Cave (guitar)
- *Refracted Resonance*, CD, Metier MSV 28586, 19/04/19

7. *...on plain air...*

- Improviso
- The Beldham, Brunel University, London, UK, 01/02/19

8-10. *...to the same failing light...*

8. *...the space that lies between them...*

- Michele Bianco (accordion)
- “Eglès” sanatorija, Druskininkai, Lithuania, 23/06/18

9. *...touchless as they sleepwalk... I and II*

- Anna Brigham (violin and viola), Mandhira de Saram (violin) and Corentin Chassard (cello)
- LSO St Luke’s, London, UK, 11/11/18

10. *...to the same failing light...*

- Irina Serotyuk (accordion), Simas Tankevičius (violin), Konrad Levicki (violin), Ugnė Petrauskaitė (viola), Ignė Pikalavičiūtė (cello)
- “Eglès” sanatorija, Druskininkai, Lithuania, 23/06/18

11. *...with magic in my eyes...*

- Holloway Children’s Choir, Tom Green (piano), George Holloway
- Holywell Music Room, Oxford, UK, 08/07/19

1. Introduction

Listening intensely to the decaying sound of a bell is one of the most evocative and pleasurable activities I can think of. As the sound pulsates and ebbs away, whole worlds of pitch, colour and timbre can be heard 'inside' the strike note. The 'interior' universe of a single perceived sound is one of the most significant themes running through this portfolio. Perhaps it is my formative training and continuing performance career as a guitarist that explains my fascination with decaying, bell-like sound; in any event a fascination with the colouristic possibilities of individual pitches and the combination of these colours represents a large part of the motivation behind the works in this portfolio.

In a more general sense the musical works presented here display many technical and expressive traits that have become essential ingredients in my musical language. Broadly speaking they can be divided into two types:

Type A: Technical resources related to bells or bell-like sounds

1. The tuning analysis of real bells. Analysis of the bells of St Stephen's, Rochester Row in Westminster and St Mary Magdalene in Thornham Magna, have provided the inspiration for the harmonic framework for several pieces. The tuning of the bells at St Stephen's inspired the chords upon which *Reflections on Blue* is based and defined the instrumental scordatura for both versions of *...but their stillness showed plainly...* The bells of Thornham Magna in Suffolk are used as an instrumental resource in *At the edge of his dreams...* and the interplay between the tuning of the bells and that of equal temperament forms a large part of the musical discourse.
2. Duration controlled by decay. The time it takes for a note or chord to become inaudible is an important rhythmic device in my music. It can be used to control the rate of harmonic change (*...on plain air...*), define the length of phrases (*Like Trees in November*), or sections (*My lungs taste the air of Time Blown past falling sands...*) and can create moments of repose and reflection when contrasted with music driven by pulse.

3. Pulsating Drones. The repeated striking of a decaying pitch provides the harmonic reference of a drone. The rhythmic impetus of the 'strike' can be layered in the foreground of the music using different tempi, (*My lungs taste the air of Time Blown past falling sands...*), used as a accompaniment to support other material (*...on plain air...*) or as a decorative rhythmic figuration (*Curved lines 'gainst square glass*).

Type B: Technical resources not related to bells or bell-like sounds

1. Partials five and seven of the overtone series. The contrasting of these overtones with their equally tempered equivalents forms a major part of my harmonic language. In this portfolio gliding, blending, jumping and contrasting between two harmonic areas defined by the varying colours of a central pitch form the central discourse of phrases, sections and whole pieces.
2. Creating space for improvisation and the importance of performer listening. In the most obvious sense there are works that attempt to create a framework for improvised melodies or 'solos' (*Reflections on Blue* and *...on plain air...*). More subtly, there are several examples of performers responding to each other based on what they can hear the other players doing. Examples include the 'textural chaconne' in *...on plain air...*, dynamic swelling in *...to imprison the wind* and the balance of dynamic hairpins against vibrato strength and intensity in *...to the same failing light...*
3. Apotheosis ending. It is difficult for me to trace the origins of my fascination with music that lifts away from the preceding discourse at the end of a work, although I think that I first became aware of it when analysing the magical ending of Stravinsky's *Les Noces* (1923). In any case I feel it plays an important part in the dramatic concept of my music by implying that the music will continue to happen and develop after the audience has ceased to listen. I view each piece as a minute, and yet infinite, universe that the audience and performers are visiting for the duration of the piece. In my music the apotheosis ending is effected by several technical means including, but not limited to, the emergence of a new melodic element (*Curved lines 'gainst square glass*), the introduction of a new playing technique (*...but their stillness showed plainly...* and *...to the same failing*

light...) or a subtle yet distinctive harmonic shift (*...on plain air...*). Effecting an apotheosis ending is not, however, simply a technical matter of deploying 'something new at the end'. Rather it is a means by which the music reaches a high point of expressive potency. This can often involve the emancipation of something already latent in the preceding music such as the melodic phrases at the end of *Curved lines 'gainst square glass* and the way their seed is embedded, but not germinated, in the main body of the piece. In this way the work strives for a perfection of that latent expressive potential and in so doing evokes the true meaning of apotheosis: 'making divine'.

4. Self-transcription and arrangement. The act of arranging one's works for different forces can sometimes be a practical necessity. On occasion that pragmatic act can give rare insight into the nature of one's musical material and its intrinsic expressive strength. Three such instances have been included in this portfolio.

Expressively speaking, this portfolio represents a search for 'fragile intensity'. In each piece I have sought to build a universe in miniature and tried to create a feeling of the music exploring the infinite poignancy of a frozen moment. To achieve this I have attempted to use, amongst others, the technical means laid out above to focus the music on the detail of timbral colour, textural interest and inventiveness of sonority. Although I have arrived at these specific technical means over long periods of aesthetic self-reflection and refinement it is nonetheless important to acknowledge the 'compositional heritage' of my music.

My music is not 'spectral' in the original sense of the term but my interest in certain 'spectral insights' has greatly enriched my harmonic language and for this I would like to acknowledge the impact of the music of Horațiu Rădulescu, Tristan Murail and Gérard Grisey. Through my study and enjoyment of Rădulescu's music, especially the fifth string quartet *Before the Universe was Born*, and my experiences in giving many performances of his 1985 work *Subconscious Wave* for guitar and digital sound, I gained great insight into the harmonic series and the colouristic potential of various partials of that series. In the music of Giacinto Scelsi I found a kindred interest in the 'internal' beauty of single pitches. His *Quattro Pezzi* for orchestra, for example, seemed to revel in

the almost infinite possibilities for the colouration of single notes that I wanted to become part of my harmonic language.

It is also important for me to acknowledge the impact of Morton Feldman and Anton Webern on my music. The economy of pitch resources and focus on the minutiae of timbre, texture and sonority in Webern's Five Pieces for Orchestra op.10 and the combination of this delicate, pitch-driven intensity with a fleeting sense of lyricism in Feldman's output, especially *The Viola in my Life II*, are both great sources of inspiration to me. Feldman's thinking on the topic of musical form also resonates deeply with me. The idea of 'getting rid of the glue' so that the sounds could 'be themselves' perpetuated by Feldman, John Cage and other 'New York School' composers was an important starting point for my ideas about musical form.¹ Nowadays I have refined my thinking and feel that there is formal 'glue' in my music, but the type, weight, density and strength of the 'glue' is different from piece to piece, and is largely defined by the nature of the musical material and the context of that material within each piece. In this way I feel that my structural thinking also owes much to the legacy of Edgard Varèse and his idea that 'each of my works discovers its own form, I could never have fitted them into any of the historical containers'.²

Just before I began my PhD research I had spent a lot of time evaluating and refining my rhythmic thinking and the use of structural polyrhythms in particular. The music of Elliott Carter is very important to me, in particular the inspiring rhythmic architecture in his Double Concerto for piano, harpsichord and two chamber orchestras, his Variations for Orchestra, his Third String Quartet and the reflective beauty of his song cycle *In Sleep, in Thunder*. Indeed, the impact of Carter's rhythmic language can be seen clearly at the beginning of this portfolio in the structural polyrhythms of *My lungs taste the air of Time Blown past falling sands...* and the ghost of this technique returns, on a smaller localised scale, in later pieces, most notably in *At the edge of his dreams...* and *...on plain air....* It is fascinating to me that Carter made over two thousand pages of sketches for his Third String Quartet, and that one of his earliest successes, the Cello Sonata of 1947–8, was not composed until he was forty years of age. His work ethic and

¹ Rich, A. 1995. *American Pioneers: Ives to Cage and Beyond*. London: Phaidon, p.169

² Varèse, E. 1966. *The Liberation of Sound*. Perspectives of New Music, 5.1, p.16

dedication to developing his musical language serve as poignant reminders of the importance of hard work over long periods in order to achieve artistic growth.

Alongside this 'historical' heritage and its thread of influences within my music it is also important to acknowledge the impact of my colleagues, peers and friends. Much of this is done in the acknowledgments section of this commentary document but I would like to particularly mention the music of Christian Mason, specifically his works *Isolarion: Rituals of Resonance* (2012), *Learning Self-Modulation* (2011) and *Noctilucence* (2009). Through the use of drones, 'spectral emanations' and timbral colouring of individual pitches, these works exemplify Mason's fascination with the nature and colour of pitch. This is a fascination that mirrors, and in some ways inspired, my own. The decay-based rhythmic language of George Holloway's *Second Guitar Sonata* (2014) contains the seed of much of my own thinking about the nature of decaying sounds and their impact on rhythm. The beautiful, hushed and delicate textures of John Croft's music are also an important contemporary influence and I would wish my ear for the balance of texture and timbre to be as finely tuned as Croft's in pieces such as *Seirenes* (2014–16).

Several extra-musical influences also contextualise my research, most notably the eclectic literary references that provide titles for many of my works. Michael Finnissy impressed upon me the importance of selecting the right title when I was an undergraduate student at the University of Southampton. He taught me that titles are like keys in that they provide both the audience and the performers with a route into the expressive world of the music. As a reflection of my interest in 'frozen moments' my titles are usually phrases or sentiments taken from literary works that, to me at least, capture something of the spirit of the music. The fact that these phrases are lifted out of context is also important as it reinforces the idea that there is something happening before and after the words that make up the title; this in turn reinforces the idea that the music is a frozen moment, an extraction from a larger, unseen, whole examined and inhabited in minute detail.

Frank Herbert's *Dune*, Richard Adams' *Watership Down* and William Peter Blatty's novels *The Exorcist* and *Legion* are some of the main literary works that lend titles to my pieces. They may seem disparate and unconnected at first but, for me at least, they share some important characteristics. All of these authors share a magical gift for

creating special moments in their works that feel as though they could be inhabitable indefinitely. A good example of this is the scene in *Watership Down* when Bigwig stumbles upon some captive does. One of the does is reciting a poem longing for freedom and her listeners are hanging on her every word and sentiment, wishing the feeling could go on forever:³

The frost is falling, the frost falls into my body.
My nostrils, my ears are torpid under the frost.
The swift will come in the spring, crying "News! News!
Does, dig your holes and flow with milk for your litters."
I shall not hear. The embryos return
Into my dulled body. Across my sleep
There runs a wire fence to imprison the wind.
I shall never feel the wind blowing again.

On the surface it may appear that this scene inspired *...to imprison the wind* because the imagery in the fictional poem mirrors some of the 'wind-like' sounds in the cello near the beginning of the work, or because the collective longing for an elusive freedom, shared by the reciting doe and her listeners, is evoked by the *Klangfarbenmelodie* line in the central section of the work that never quite manages to take flight into a fully formed melody. However, it is important to note that this is a retrospectively inferred relationship. *...to imprison the wind* is not 'inspired by' this passage in *Watership Down* in any traditional sense. Very often I do not settle on a title until late in the compositional process and, occasionally, pieces are finished untitled. The naming of a work is often a process of 'finding' the right passage of a literary work that shares some expressive characteristics with the music I have already composed and that also shares the fragile and elusive intensity that much of my music searches for.

Recently I have been fortunate enough to meet the distinguished poet David Harsent on a number of occasions, after he heard some of my music in a concert. His poems have had an important effect on me as they reinforce the importance of the balance of intuition and craft in the creative process. Many of David's poems are set in, or take

³ Adams, R. 1974. *Watership Down*. Suffolk: Penguin Books, p.326

their impetus from, dreams. *A Dream Book* from his 2014 collection *Fire Songs* revolves around a relationship between a man and a woman that is conducted entirely in dreamtime. The poem is constructed of many highly detailed, evocative, yet essentially abstracted snapshots of various stages of the protagonists' relationship and it has proved endlessly fascinating to me to try and imagine the unwritten narrative that connects one stanza to the next. In this way David's work perfectly occupies the undefined region between abstraction and deliberate evocation that I find so expressively engaging. This poem has also provided titles for all of the movements of *...to the same failing light...*, and David's work *Bowland Beth*, also from *Fire Songs*, shares a similar relationship with *...on plain air...*

Finding titles is an intuitive and organic process for me and is a reflection of the fact that I would like my music to strike a balance between abstraction and evocation. I feel that if I made pieces that were too closely 'inspired by', or attempted to convey to the listener, a specific image or emotion the expressive power of the music would be reduced, as it would inhibit the listener from engaging with the 'rhetorical ellipses' of the work and thus truly inhabiting the music by filling in the gaps between the sounds and the title with their own ideas and feelings about what they are hearing.

Closely linked to these ideas is the way my interest in the visual arts informs my compositional practice and helps to contextualise my approach. I greatly admire the works of British sculptor Sir Anish Kapoor for their balance of abstraction and evocation and their economy of material. His pigment sculptures from the 1980s, titled *A Thousand Names*, inspire me with their perfect balance of form and material. They are beautiful, exotic and beguiling shapes and are seemingly constructed of pure colour: the material has defined the form and, in fact, the form has become the material; I would like my music to also achieve this delicate balance. The Japanese ink painter Sesshu Toyo strikes the same balance in much work from a much earlier period and I would particularly like to acknowledge the impact of his *Haboku-Sansui* (Broken Ink Landscape Scroll) of 1495 on my work. At first glance the work appears to be built of abstract shapes, but the closer one looks the more detail there is to find. It is a painting that rewards close and concentrated observation and strikes the perfect balance between fragility and intensity, elusiveness and poignancy.

In 2015 I visited Tianjin, China to perform and lecture at the Tianjin May Festival. As a souvenir I purchased a book instructing the reader in Chinese ink painting. Each picture is divided into a number of 'lessons' where new layers of detail are added to an initial sketch. I have spent many hours enjoying this book and moving through each picture as it takes shape through the 'lessons'. It is probably very instructive for the reader of this portfolio to know that I, almost every time, prefer the intermediate 'lessons' to the finished painting. Their beauty is, for me, enhanced and not diminished by being 'unfinished' in the traditional sense and they possess a certain elusive 'otherness' that I find deeply satisfying and moving. Very early in my PhD research Professor Christopher Fox and I were discussing a melodic line in one of my sketches. He suggested that it would be more successful in the context of the piece if I 'poked some holes in it' and he remarked that 'some of the best music is music that is only just music'. The pictures in this book are also very successful as paintings because they are 'only just paintings'.

I would like to make some observations on the nature of pursuing composition as PhD research. I have previously mentioned that the balance between compositional intuition and analytical self-reflection is a necessary and fundamental part of creativity and there is a danger that undertaking a PhD in composition can shift the balance too far in the direction of analysis. Analysing one's own music inevitably entails a degree of self-consciousness and I believe that, although creatively healthy when balanced against intuition, too much of this can be crippling for the creative process. At many points in the composition of a work a 'leap of faith' is required and the ability to trust one's instincts to make the right artistic decision, or to try new and unexplored things, is possibly the single most important thing for any creative artist to possess. Having said that, without critical self-reflection no artist can refine their techniques and hone their expressive language. Throughout the commentaries that form the bulk of this written component of my thesis I have tried to represent the balance between intuition and analysis that I have sought in the compositional process.

I would also like to point out that the commentaries in this portfolio should not be viewed as exhaustive studies of the works that I have composed. Instead they should be thought of as attempting to identify and explain the most prevalent technical resources

in my musical language whilst also clarifying the expressive intent of each piece and exploring the relationship between these two essential parts of musical discourse. Many of the most important creative decisions I take when composing music are intuitive and arise naturally from personal and organic responses to the material and expressive aims of the music. In this way it is not always possible to capture in writing precisely what makes the music 'work'. The 'success' or 'failure' of a piece, the things that make it hang together, make it expressive, and give it life beyond the building blocks of pitch and rhythm are often things that one hardly notices because they are so much part of ourselves. I have tried very hard to be aware of this shortfall in the self-analytical nature of this process when writing these commentaries and where possible acknowledge the importance of the intuitive side of my compositional decision making.

In the summer of 2018 I was selected to attend the Composer+ Summer Academy in Druskininkai, Lithuania in order to compose *...to the same failing light...* for accordion and string quartet. Whilst there I was invited to try to write down in words why I compose music, as a kind of 'totem' in case it ever seemed impossible to continue composing. This little slip of paper now lives in a drawer of my composing desk, tucked inside a book. It is the metaphorical tooth under my musical pillow and every so often I take it out and re-examine whether I still believe in its sentiment. Happily I still do and as time goes by the sentiments on that slip of paper mean more and more to me. The three sentences that I wrote down in Lithuania probably provide the best possible introduction to this portfolio and so they will conclude this introduction. I hope my scores and commentaries are their embodiment and animation.

Resonance allowing for:

Escapism, through the beauty and vibration of pure sound, to an intensely fragile place

Veiled poignancy such as memory may evoke

S. Cave 16/6/18 Druskininkai, Lithuania

2. My lungs taste the air of Time Blown past falling sands...

2.1 Beginnings

In Frank Herbert's 1965 science-fiction masterpiece *Dune* the underhand political manoeuvrings of an old enemy forces the Duke Leto Atreides to uproot his family from their lush home-world of Caladan and take up administration of the desert wasteland planet Arrakis. In his first days on Arrakis the Duke laments the loss of his beloved Caladan and in a quiet moment of self-pity and longing he recalls two lines from a poem:

My lungs taste the air of Time
Blown past falling sands...⁴

This scene greatly influenced the soundworld of the piece: the dry, dusty, arid landscape surrounding a moment of almost lyrical longing that is quickly rejected as the oppressive heat of Arrakis asserts a languid tension.

In selecting the ensemble for this piece I was very conscious of finding a combination of sustaining instruments (like the piccolo or violin) and resonating instruments (such as the piano and harp) to be able to evoke the vast open spaces of Arrakis and, when needed, the intimate fleeting lyricism of the Duke's longing for his home. I eventually settled on the combination of piccolo, violin, cello, piano and harp as this seemed to have the perfect balance of sustain and decay.

2.2 Rhythmic Experiments

One of the first compositional decisions I made was to find a slow polyrhythm to help structure the piece. I knew that I wanted the piano and harp to state a slowly undulating series of decaying chords and that each instrument should have its own pulse rate. I began experimenting by setting two metronomes to different, slow pulse rates and listening to the resulting polyrhythm. I eventually settled on a pulse ratio of 21:15 beats

⁴ Herbert, F. 2010. *Dune*. London: Orion, p.86

per minute (MM21:MM15). These seemed to have an advantageous coincidence rate for structural purposes and were slow enough to allow sufficient decay of the two chords I had designed. To notate this rhythmic framework I worked out that at a tempo of 70 beats per minute the two pulse rates could be notated thus:

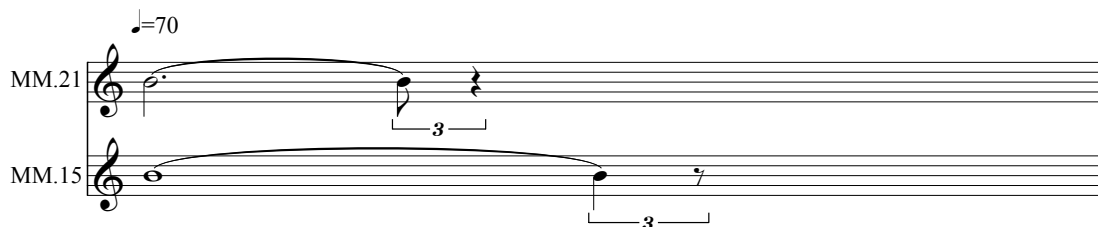


Figure 2.1: Rhythmic layers

This, notionally, gave a fourteen-beat palindromic cycle for the slower pulse rate and a ten-beat palindromic cycle for the faster pulse rate. At the start of the sixth and seventh repetitions respectively, i.e. after 15 iterations of the MM15 layer and 21 iterations of the MM21 layer, the two pulse cycles would coincide, forming a kind of ‘downbeat’ which, in many cases, marks the structural change from one section of the piece to the next.

Onto this pulse ratio I layered a cycle of accents taken from a rhythmic form in Flamenco music called the Buleria. This is a twelve-beat cycle with accents on beats 3, 6, 8, 10 and 12, beginning on beat 12:

12, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

The Buleria is a fast Flamenco form and represents a folk music from an arid area of Planet Earth. It struck me as fitting that it should appear in my music greatly slowed and ‘alienated’ from its origins.

2.3 Harmonic Beginnings

The harmonic canvas of the piece takes its cue from the first piano cluster and, indeed, the first harp chord:

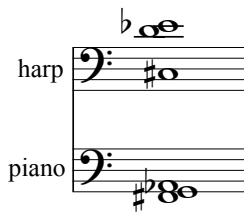


Figure 2.2: Initial harmony

For the violin and cello I took the harmonic series of the low F# and simply tuned all the C, G, D and E strings to match a ‘rounded’ overtone series:

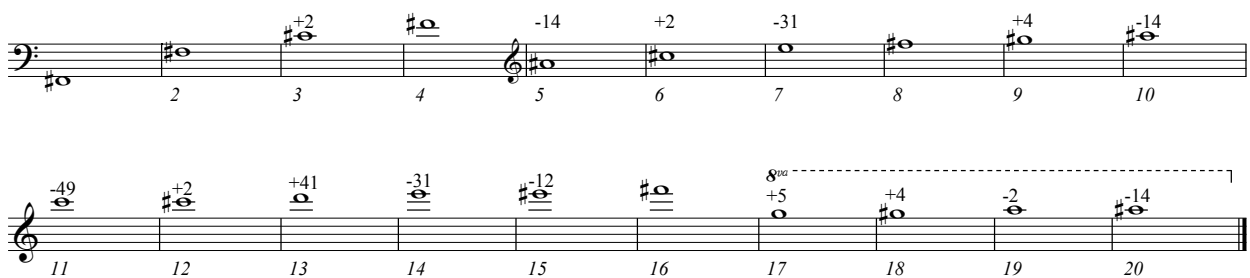


Figure 2.3: Harmonic series of F#2

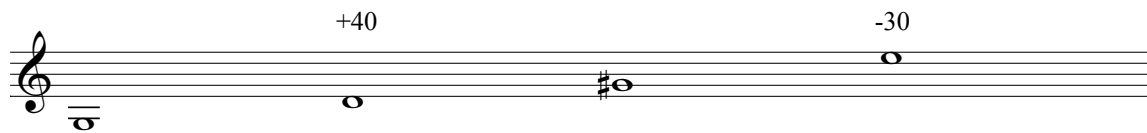


Figure 2.4: Violin scordatura (deviations shown in cents)

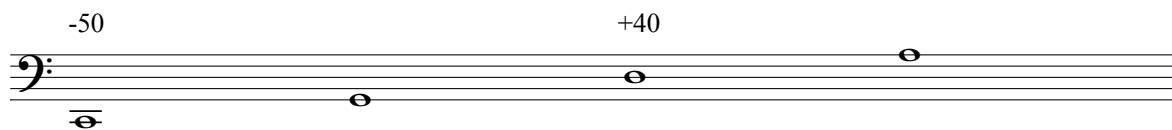


Figure 2.5: Cello scordatura (deviations shown in cents)

I also decided that I wanted to be able to access an interval of a minor ninth in natural harmonics on the violins so I tuned the A string down to a G#. This sets up a harmonic tension between the equal temperament of the piano and harp and the microtonality of the bowed strings. At many points in the piece the piccolo works as a bridge between the two worlds, either by the use of vibrato or lip-bending. The cello and violin are also

used to provide a ‘white noise’ drone during the opening sections of the work that gives an arid context for the decaying chords.

2.4 Macro-form

Structurally this piece divides into five main sections.

Section	1	2	3	4	5	
Rehearsal Letters	Start – A	A – B	B – C	C – D	D – End	
Features	Chord pulses in piano and harp. Very high drone in cello. Fragmentary material in piccolo and violin.	Chords and associated pulse rates ‘swap’ instruments. Drone moves down and into violin. Accelerating phrases in cello and decelerating phrases in piano/piccolo.	Major textural change. Piano and harp state coincidence points with four new chords. Fragmentary, more lyrical melody in Piccolo, sometimes hocketed by other instruments. Strings support the piccolo melody by <i>Klangfarbenmelodie</i>	Polyrhythmic cycle not stated. Progress controlled by conductor judging decay of chords. Repeating fragments in violin, cello and piccolo.	D–b.70 ‘Buleria’ rhythm stated at faster pulse speed. Drones return over decaying chords.	b.71–End ‘Apotheosis’ ending. Layering of ‘Buleria’ rhythm to create ‘poly-temporal textual canon’.

Figure 2.6: Macro-form

2.5 Small-scale Procedures, Continuity and Gesture

An additive and subtractive process drives the ‘swapping’ of pulse rates and chords at letter A. The piano’s slower pulse rate of MM15 accelerates by subtracting a triplet quaver from each iteration, whilst the harp’s MM21 pulse decelerates by similar means making for a ‘mirror image’ arithmetic series.

Harp (length in crotchets)	$3^{1/3}$	$3^{2/3}$	4	$4^{1/3}$	$4^{2/3}$
Piano (length in crotchets)	$4^{2/3}$	$4^{1/3}$	4	$3^{2/3}$	$3^{1/3}$

Figure 2.7: Rates of acceleration and deceleration

The swapping of pulses and pitches is a relatively short process, being completed in b.23, but it begins to free up the pitch space of the piano and harp and allows them to begin rising in register, a trend which continues throughout the section.

Bar 23 also marks the beginning of another trend, the rise to prominence of the pitch D in accelerating and decelerating phrases. In the build-up to rehearsal letter B the cello takes the role of accelerator and deploys three phrases working in quintuplet semiquavers, usually around subsidiary coincidence points of the polyrhythm:

bb.28-29 (lengths in quintuplet semiquaver pulse)				
5	4	3	3	1

Figure 2.8: Length of cello phrases

These are often answered by decelerating phrases in the piccolo and piano.

bb.35-37 (lengths in fraction of crotchets)															
Picc.	$2/5$	$2/5$	$2/5$	$2/5$	$2/5$	$1/2$	$1/2$	$1/2$	$1/2$	2					
Pno.										$3/5$	$3/5$	$4/5$	1	$1^{1/2}$	$2^{1/2}$

Figure 2.9: Lengths of answering phrases

The major textural change at rehearsal letter B coincides with, and acts as support to, the emerging piccolo melody. Now the piano and harp tend to work together only at the coincidence points of the polyrhythm; at other times they work independently in support of the melody above. The harmonic materials for this section are derived from four chords developed out of the 'arrival point' chord at rehearsal letter B. The general procedure was simple: retain the external interval (albeit transposed to create movement in the bass) and re-order the internal intervals. This created a set of chords that were slightly different in colour but intrinsically 'belonged' together.

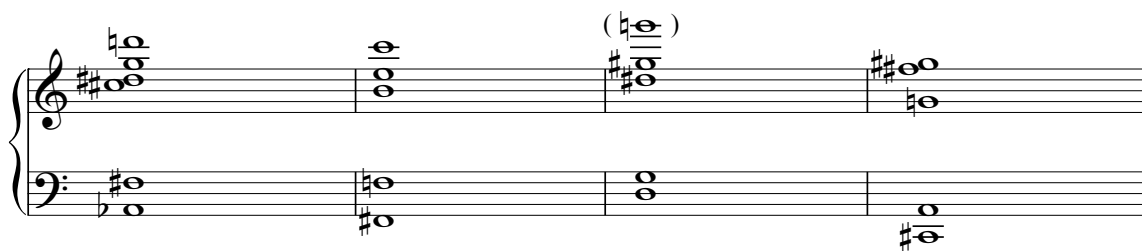


Figure 2.10: Chords for rehearsal letter B

The pitch content for the melody itself is derived from the higher pitches of each chordal set, and the contours of the melodic line were crafted mostly by intuition. This was an attempt to create a slightly broken lyricism, at once fleeting and poignantly lamenting, like wisps of a song long forgotten. Occasionally phrases of the melody are hocketed with the piano whilst the other instruments make use of *Klangfarbenmelodie* to add colour to the texture. The interaction between the ‘tuning’ worlds is also an important feature of this section. The use of different strings to colour the same basic pitch in the violin and cello (bb.48–49), and the vibrato (b.42) and glissandi (b.44, 50, 52) intended to blend and bend between fixed pitch reference points, all add to the slightly freer feeling of this section.

During all the previous sections the harp and piano polyrhythm has continued unbroken and, whether every pulse was stated or not, it played some role in the structural continuity of the music. At rehearsal letter C this is completely disregarded as a new procedure controls the flow of the piece: the piano and harp state chords that are held on a pause by the conductor until he/she can no longer hear the harmonic identity of the pitch collection. Above this the piccolo, violin and cello project repeating fragments that highlight certain pitches from the harmonies. The repetition of these fragments, combined with the decay of the chords, creates a kind of ‘flowing-stasis’ that I find very attractive, and I very much enjoy the way the challenges of continuity in the section are controlled by listening to the sounds being produced. Designing the chords for this section presented an interesting challenge: the conductor is not listening for the death of each note but rather the decay of the harmonic identity of the chord. I also wanted to find chords that had the potential to last for different lengths of time and so would imbue this section with a new kind of harmonic rhythm compared to the rest of

the piece. I began by using the same ‘internal interval rotation’ technique previously described and eventually arrived at the following set of chords with associated possible lengths (melodic ‘projections’ are given in brackets).

The figure shows a musical score for five chords. The top staff is in treble clef with a key signature of two sharps (F# and C#). The bottom staff is in bass clef. The chords are labeled 1 through 5 with their associated lengths: 1 - medium, 2 - short, 3 - medium plus, 4 - very short, and 5 - long. Melodic projections are indicated by brackets above the notes in the treble clef staff. Chord 5 is a complex chord with multiple notes in both staves.

Figure 2.11: Chords, melodic projections and associated lengths for the build up to rehearsal letter D

The intention was to build up to chord 5 as that marks the start of the final section. As such the chords were deployed in the following pattern:

1 2 3 2 3 4 5

This develops a sense of harmonic rhythm, which in turn is tempered by the halting, floating nature of the decay of every chord in the pattern.

Chord 5 arrives at rehearsal letter D and reinstates the low F# as the principal bass pitch of the work. It also emphasises a very high D, returning that pitch to the prominent role it enjoyed in the first sections. Rhythmically speaking it is the Buleria cycle that becomes the star of the final sections of the work, the harp reintroducing it at its fastest pulse rate (MM105) at letter D. The music from letter D to the end of the piece divides into two subsections. The first of these is characterised by the high D pulsating in the harp against the decay of chord 5 with drones in the piccolo (C#), cello (C) and violin (D). From b.68 a special texture is developed: the notes of chord 5 are restated in the harp and piano as they become inaudible to the players. To reinforce this the drones in the other instruments become single pitch iterations triggered by the players hearing ‘their note’ in the piano. These two techniques are intended to create a shimmering, artificial extension of the natural decay of the harmony. At b.71 the final section of the work allows the high D pitch to take over completely the texture. Beginning with the

violin, new layers are added to the harp pulse, each one stating the pitch at a different pulse speed, but all united by the Buleria cycle of accents:

Pulse speeds of 'Buleria' high D from b.71	
Harp	MM105
Violin (joins at b.73)	MM42
Piano (joins at b.78)	MM21

Figure 2.12: Poly-temporal canon speed layers

Together these layers form a poly-temporal textural canon which, when coincidences are taken into account, projects a repeating 5 beat cycle:

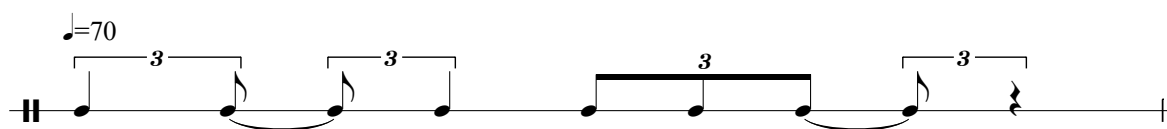


Figure 2.13: Resultant projected rhythm

Or in its simplest form:



Figure 2.14: Simplified projected rhythm

The harp drops out at b.81 leaving the two slower pulse rates alone. Plucked bass notes on the piano provide an eerie metallic bell that decays into the distance and evokes a memory of the opening of the work. The violin shifts to natural harmonics and together with the piano projects a gently lilting rhythm in six beats.



Figure 2.15: Projected lilting six beat rhythm

2.6 ...to imprison the wind - Adaptation for piccolo, cello and guitar

My lungs taste the air of Time Blown past falling sands... was composed for The Octandre Ensemble. The opportunity for the ensemble to premiere some of my work came at the 2017 Coronet International Festival at the Coronet Theatre in Notting Hill, London. The practical considerations of these concerts forced me to create a version of this piece that could be performed by a trio of piccolo, cello and guitar.

Introduction of the guitar

The main challenge in this reduction was to find a way to combine the original piano and harp parts into one guitar part.

Fortunately both the piano and the harp begin the piece with harmonies constructed of three pitches each. The six strings of the guitar can be used to accommodate the six pitches required by these two harmonies by retuning the instrument.

Guitar Number	String	Pitch in Standard Guitar Tuning (sounding)	Piano Pitches	Harp Pitches	Resultant Guitar Tuning (sounding)
1		E4		E \flat 4	E \flat 4
2		B3	A \flat 2		A \flat 3
3		G3	F \sharp 2		F \sharp 3
4		D3		D4	D3
5		A2	G2		G2
6		E2		C \sharp 3	C \sharp 2

Figure 2.16: Creation of the guitar scordatura

In creating this tuning some octave transpositions from the original harp and piano chords were necessary and these had an interesting effect on the harmonic ‘weighting’ of the guitar part when compared with the original piece. The relocation of the C \sharp to the bottom of the harmonic range is probably the most striking effect as it roots the music in relation to this low C \sharp 2 in contrast to the low F \sharp 2 of the piano in the original version. The ‘standard’ intervallic structure of the piano’s harmony is also altered by this tuning in that the G now sits at the bottom of the chord instead of in between the F \sharp and A \flat .

Essentially the process of incorporating the guitar transformed two parts into one part, both in the obvious sense of the number of people playing but also timbrally and dramatically. In a documentary about his compositional habits Sir Harrison Birtwistle talks about making music that is built of independent layers and that when one combines two things together one gets ‘another form of one’.⁵ This is clearly evident in *...to imprison the wind* as the guitar embodies the idea of a new form of one thing, built from two independent layered parts. The process of creating this version of piccolo, cello and guitar was really my first insight into the way in which self-transcription, arrangement and re-composition significantly enhance one’s awareness of the nature of musical material and was a poignant reminder of the ways in which the need to be practical can lead to exciting artistic discoveries.

⁵ Mustill, T. 2014. Harrison Birtwistle: Notes from the end of a Garden.

< <https://www.youtube.com/watch?v=7pzM7Iq4zMs> > 16/10/17

3. Curved lines 'gainst square glass

3.1 Beginnings

Although I had long been fascinated by the very special nature of the theorbo's resonance, before beginning to compose this piece I had no knowledge of the instrument's technical workings – I didn't even know how it was tuned. It was immediately obvious that close collaboration with a player would be essential to produce the expressive aims I had in mind whilst also developing an idiomatic set of materials for the piece: Johan Löfving was, and has been for many years, a perfect collaborative partner.

In my mind's ear I had a clear picture of the kind of resonances I wanted for the piece. I wanted to build on the 'flowing-stasis' of *My lungs taste the air of Time Blown past falling sands...* and find a set of materials which had a meditative yet melancholic feeling, an inactive yet restless world where the mostly quiet sounds invite close and concentrated listening and where the gestures evoke a kind of 'energy-less intensity'.

To realise these ideas I began learning about the practicalities of the theorbo by listening to, and watching, Johan play pieces from the standard repertoire. It immediately struck me that the relationship between the open bass strings and the fretted upper strings was almost always defined such that the bass note would be plucked first and then any chords or melodic decoration would be stated above it. I was initially very attracted to this idea as the natural decay of a bass note could be used to rhythmically structure sections of the work, much as I had done in my 2010 work *10:01* for violin and piano. It was also interesting that when there were scalar runs on the bass strings they invariably descended in pitch and they were played *apoyando* (rest stroke) so the stroke would mute the previous note. I knew that I wanted access to as much resonance, sympathetic or otherwise, as possible so I decided to try and include plenty of ascending bass runs and have Johan play them *tirando* (free stroke) to allow the notes to blend and over-ring.

Features of the tuning scheme

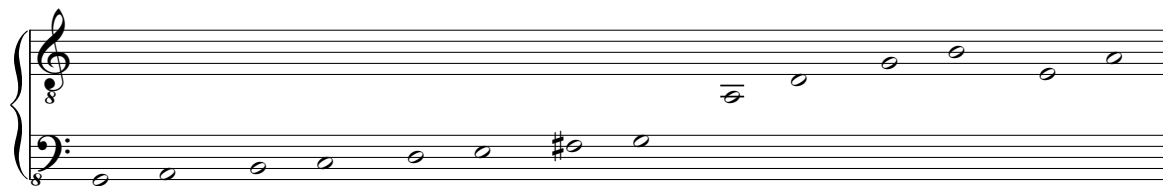


Figure 3.1: Standard theorbo tuning

We experimented with various interesting chords voicings arising from the nature of the tuning and explored the possibilities of using vibrato on the relatively low-tension strings to bend the pitch of notes and chords. Johan also demonstrated the rich melodic qualities of the second string with its relatively low pitch and thicker string gauge. I was particularly struck by the way this string could activate the sympathetic resonances of the other strings and resolved to try and find other gestures and harmonies which would similarly activate the ethereal sounds of this resonance.

Initial Materials

Two particular materials emerged as having the poise and meditative melancholy I was looking for. One was a simple interval of a minor third that could be fingered in a variety of ways to project short melodic cells. The other was some unison pitches that were particularly effective when ‘pitch-bent’ with a wide, slow vibrato.

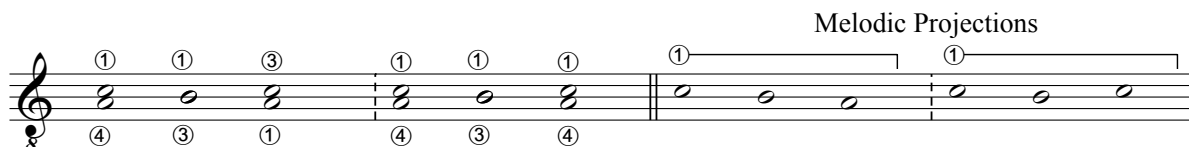


Figure 3.2: Minor third material and associated melodic projections

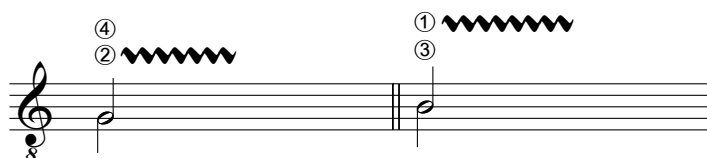


Figure 3.3: Unison pitch bend material

In my reflections on our first session together I began to expand on the materials we had discovered. I became attracted the idea of balancing them against a material defined

by the natural decay of bass notes accompanied by a trill or tremolo and made some sketches of the possibilities:

1. Right hand 'trill' with bass notes plucked by the left hand
2. Left hand 'trill' with bass notes plucked by the right hand

Johan and I met again and tested the materials once I had assembled the first few phrases into what eventually constituted the first section of the piece. Revisions were made and from this point on the piece began to grow from two materials that had emerged as complementary and evocative of the expressive soundscape I wanted:

1. A-B-C minor third with associated rhythmic character, fingerings and tone-colours
2. Plucked bass notes, held to natural decay length, combined with a trill, tremolo or varying filigree.

Essentially the piece developed in the way described above – regular meetings with Johan to play new sections or materials and receive his feedback. This process was invaluable as it allowed me to continually judge how well I was assimilating the natural style and gesture of theorbo technique, how well I was developing my internal ear for theorbo resonance and how fluent I was becoming in designing and visualising fingerings to assess playability. In short it was this close collaboration with a player that allowed me to develop an idiomatic musical syntax that achieved my expressive aims.

3.2 Form and Structure

Broadly speaking the finished work falls into four large sweeps or sections.

Section	1	2	3	4
Rehearsal Letters	Start – D	D – F	F – G	G – End
Length (min:sec)	2:58	2:56	1:25	2:06
Features	Fragile and spacious exploration of natural resonance using materials 1 and 2	Scalic exploration of ‘campanella’ playing style evoking a more intense capricious melancholy	Synthesis of materials from sections 1 and 2. Floating, ethereal sound of left hand plucking releases the tension of section 2	Apotheosis ending lifts away from the main body of the piece

Figure 3.4: Structural map

3.3 Small-scale Techniques and Procedures

Section 1 explores the two main materials outlined above and its overall shape is that of a crescendo towards rehearsal letter D. The minor third is mostly notated with precise rhythm except for one phrase which gives a set of chords and fingerings as a starting point and allows the player to mix the voicings at will. This is a nod to the improvisatory history of the theorbo as an accompanying instrument and it further unsettles the pulse established in the opening phrase. It also brings the ‘decay period controlled’ bass notes away from their more initially static iterations and into a ‘directional’ gesture that builds up towards the chords at rehearsal letter B. It is worth noting that I have been very specific throughout the work with regard to which string certain notes should be played on – the string chosen for a note or chord at a specific moment had a huge impact on its sonic and expressive effect. This discovery was, in fact, one of the most fascinating things about writing for theorbo. The subtle and introverted nature of the instrument means that small decisions about fingering take on an unprecedented level of gestural and expressive importance, perhaps even more so than on other famously introverted instruments such as the guitar.

Section 2

As this first section was taking shape I began to feel that the arrival point at letter D would demand a change in texture and as such a third type of main material was

necessary. I began to work on some ideas using scales and movement by step. In order to understand the practical implications of my ideas Johan showed me some tonal scales and their characteristic fingerings.



Figure 3.5: D major scale with a traditional fingering

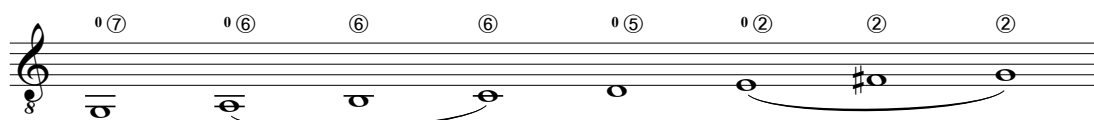


Figure 3.6: G major scale with a traditional fingering

Whilst these traditional fingerings were very characterful and idiomatic, they contained several consecutive pitches on the same string. These could be slurred with the left hand or plucked but in either case Johan and I felt that they reduced the amount of overall resonance. I wanted to capitalise on the over-ringing, ‘campanella’, style of playing and the resonance it generates. To this end I needed to maximise the use of open strings in my scale figures and minimise the amount of consecutive notes along the same string and so Johan and I redesigned the above fingerings.



Figure 3.7: D major scale with a modified fingering

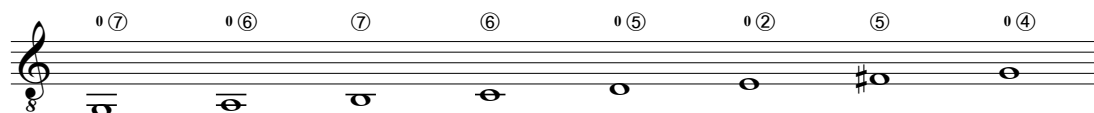


Figure 3.8: G major scale with a modified fingering

These features seemed to lend the scales an overall sense of motion and purpose tempered by a slightly directionless, almost meditative haze of over-ringing resonance; sounds that fitted perfectly with my expressive aims for this section and the piece as a whole. Combining this with my previous ideas about rising figures and the use of

tirando stroke I was able to form a ‘super scale’ that preserved the ‘spirit’ of our new theorbo scale fingerings but included the pitches and intervals I wanted to work with.



Figure 3.9: Section 2 ‘super scale’

This ‘super scale’ was broken into smaller phrases and gestures and used to form the basis of section 2. It appears in its entirety on the second system of page 3 and builds to the climax of the section on the third system of page 3. At this point the highest pitch of the work so far is reached and a special chord intensifies the minor third interval of the opening material by combining it with semitones, minor ninths and a more angular sense of gesture.

Section 4: Apotheosis Ending

The next section to be composed was the final one (section 4), running from the 6/8 bar after rehearsal letter G to the end of the work. I wanted to construct an apotheosis ending that lifted away from the other materials in the piece, especially rhythmically speaking, but heightened the sense of melancholy. From the initial sketches of this section a lilting kind of modal melody began to emerge.



Figure 3.10: Section 4 lilting melody

It had the feeling of a hazily remembered, or half-remembered, song or dance and seemed to have the right sense of continuity and apotheosis in relation to the music that would precede it. I felt that I could heighten the linear nature of this new melody by deploying it all on one string. The natural choice was the second string due both to its warm, rounded tone and the way it activates many sympathetic resonances in the other

strings. This, supported by occasional harmonics on other strings, created a hazy backdrop for the final section of the work.

I wanted this 'song' material to grow organically from the music and give a sense of the piece 'evaporating into memory' as final sections progressed. To this end I explored the 'unison pitch bend material', essentially the same pitch played on two different strings with one (or both) of them 'pitch bent' to a varying amount by vibrato, and embedded phrases of these held notes into the preceding sections. Working backwards from the ending in this manner allowed me to hint at the stillness to come in section 4 and heighten the sense of 'flowing stasis' that embodies so much of this work's expressive concerns.

Section 3

Having set up a mechanism to facilitate the ending of the piece I turned my attention to section 3. This attempts to synthesise the scalar material from section 2 with the 'natural decay with tremolo/trill' material of the opening section. The flow of this section is again largely governed by the natural decay period of bass notes – however, this time the bass seemingly attempts to form snatches of melody by recalling the minor third material from the opening of the work. To create the expressive rise and fall of this section I again attempted to balance and contrast the following tones and colours:

1. Left-hand trill/tremolo .
 - 1a. Right-hand trill/tremolo.

2. Right-hand plucking of 'decay' notes.
 - 2b. Left-hand plucking of 'decay' notes.

For example, at the beginning of this section (1 bar before Letter F) the softer attack, and therefore shorter decay period, of left-hand plucking is used to create a 'veiled' and hazy tone colour that introduces the minor third material in its new register. The different tone colours, decay periods and attack created by the right-hand/left-hand pluck opposition is deployed as an aid to the expressive contour of the music

throughout the work, yet it seems that this procedure is most obvious in this section; possibly because of the fact that many of the materials are gathered in close proximity here. It is a similar story with the trills and tremolo materials. The different ways of articulating them create different tone colours and also give different amounts of control over the dynamic range of the trill/tremolo and the internal rhythm of the gesture. A case in point are the phrases on the second system of page 4 where the contours of the bass line require a finer degree of dynamic control – a job naturally suited to the right hand. This also allows for the crescendo up to the third system of the page to flow and deploys both hands in their ‘natural’ playing positions in order to access the loudest dynamic levels.

At various points in the composition of this section, and indeed the whole piece, it was necessary to revise my choices of which string, or which hand, a certain material was assigned to. Johan was an extremely sensitive guide in these matters and often suggested solutions that were both practical and in keeping with the expressive qualities of the music and the passage on the final system of page 1 gives a memorable example. I had placed the left hand trill (C–B) on the first string for its entire duration. We found that this was not practical given the sustained nature of the bass part at this point. The solution turned out to be to move the trill onto the third string just before the first bass note. We discovered that the timing of the string change was critical as the new attack on the sustaining bass note helped to cover up the physical action of the trill swapping strings. In the intimate world of the theorbo even a tiny break in the trill constituted a major event in the discourse. Much like finding good fingerings for solo classical guitar performance there was a ‘smoke-and-mirrors’ element to finding the right strings and hands for best effect on the theorbo.

In a large-scale expressive sense this work attempts to capture and inhabit the fleeting melancholy of a moment, poignant yet distant and frozen in time by memory. This feeling can perhaps be best summed up by the scene in Frank Herbert’s *Dune* that gave the work its title: a young soldier lies dying of his battle wounds in a litter and requests a song to ease his passing. His commanding officer obliges and plays the nine-stringed ‘baliset’ whilst another soldier sings softly.

My Woman stands at her window,
Curved lines 'gainst square glass.
Uprais'd arms... bent... downfolded
'Gainst sunset red and golded-
Come to me...
Come to me, warm arms of my lass.
For me...
For me, the warm arms of my lass.⁶

⁶ Herbert, F. 2010. *Dune*. London: Orion, p.293

4. Reflections on Blue

4.1 Beginnings – Jazz, Bells and Spontaneity

I have long been fascinated by jazz and especially the modal jazz of the late 1950s. The technical and theoretical knowledge and skill of the jazz musician are akin to that of the classical performer but the differences in their psychological outlook and their approach to ‘perfection’ in musical performance are both marked and beguiling. The cultivated ability to have the confidence, within a pre-ordained framework, to do what comes naturally and intuitively is perhaps what draws me to jazz and is a timely lesson for any composer working in any style. In short it is the acquired instinct of improvisation that I admire and envy most.

For me this approach to making music is at its best on the 1959 Miles Davies album *Kind of Blue* and is best summed up by Bill Evans’s liner notes to the album:

There is a Japanese visual art in which the artists [sic] is forced to be spontaneous. He must paint on a thin stretched parchment with a special brush and black water paint in such a way that an unnatural or interrupted stroke will destroy the line or break through the parchment. Erasures or changes are impossible. These artists must practise a particular discipline, that of allowing the idea to express itself in communication with their hands in such a direct way that deliberation cannot interfere. The resulting pictures lack the complex composition and textures of ordinary painting, but it is said that those who see will find something captured that escapes explanation. The conviction that direct deed is the most meaningful reflection.⁷

This attitude and outlook on musical material and the nature of improvisation and composition provided the main impetus for *Reflections on Blue*: a wish to define a framework whereby instinct and intuition could be given the space to deliver their full expressive potential.

⁷ Evans, B. 1959. Liner note to *Kind of Blue*. 1997. Compact Disc. Sony Music Entertainment. 01-064935-10

Alongside this there is a preoccupation with melody in the works on *Kind of Blue* that resonated with the desire to engage directly and overtly with melody that I was experiencing when I composed this piece. I wanted to incorporate through-composed melodic material with intuitively led melodies, essentially improvised ‘by hand’, and some music improvised by the performers.

Basic Premise and Instrumentation Concept

The basic structural principles of most jazz standards and original compositions – a ‘head’, or main melody, interspersed with solos from each performer in turn, whilst the rhythm section outlines the harmonic underpinnings of the piece – inspired the basic formal and conceptual principles of *Reflections on Blue*. Instead of a repeating ‘head’ section followed by improvised solos I combined my soloists in pairs and defined their roles as ‘solo’ and ‘shadow’, a foreground/background relationship that could be crossfaded or juxtaposed between the instruments of each pair at will. In each soloist pairing one of the instruments is tuned to equal temperament and the other exists in a microtonal tuning.

Tuning	Equal Temperament	Microtonal (variation shown in cents)
Soloist pair 1	Flute	Soprano Recorder (+40)
Soloist pair 2	Soprano Saxophone	Oboe (+20)
Soloist pair 3	Clarinet	Alto Flute (-30)

Figure 4.1: Soloist pairings and tuning

These tunings were chosen for their harmonic colour and the combination of instruments was chosen because of their overlapping ranges and registral colours. The tuning of each pair was arranged to avoid a situation in which all the standard orchestral instruments were tuned in equal temperament.

Alongside these ‘soloists’ I conceived of a ‘rhythm section’ consisting of guitar, piano and double bass, a fairly standard jazz line-up. Whilst the piano and the double bass

were tuned in equal temperament, the guitar tuning was designed to bring together the disparate tunings of the solo parts and blend the ensemble.

4.2 Basic Materials

Harmonic Constructs

At the outset of the composition of *Reflections on Blue* I was heavily involved with a fundraising project to restore the bells of St Stephen’s Church in Rochester Row, Westminster, London. During the course of the project I found a detailed tuning analysis of these bells, both as a complete ring and also as individual bells (see appendix 1). I used this tuning analysis of the overtones pitches of some of the bells to define seven ‘bell chords’ or harmonic areas for the piece. The register, voicing and intervallic content of each sonority was decided intuitively at the piano and is varied for expressive and dramatic ends as the piece progresses.

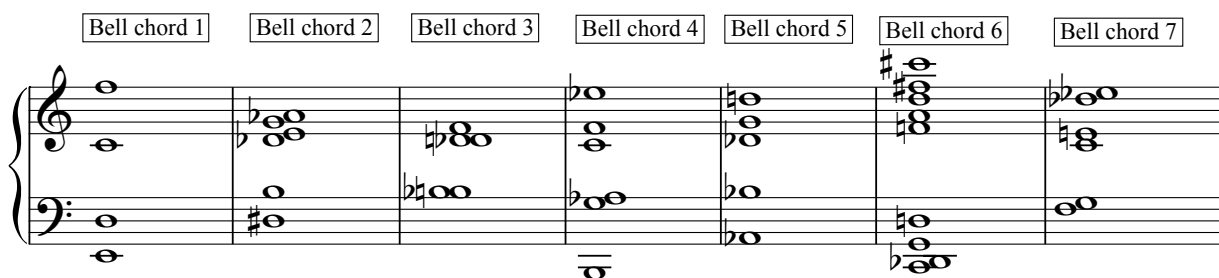


Figure 4.2: Chords derived from bell tuning analysis

Taking chord 5 and comparing it with the overtone profile of bell 5 in the tuning analysis (see appendix 1) gives the following insight into the chord’s construction.

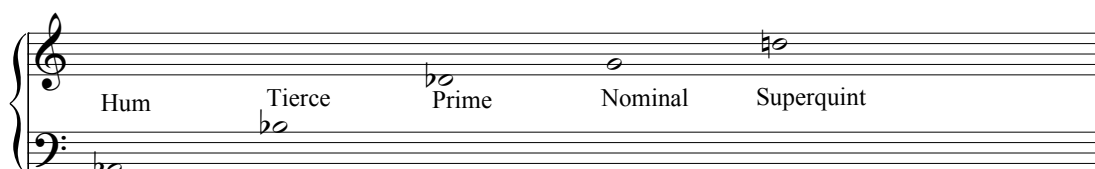


Figure 4.3: Chord 5 pitches as bell overtones

The other chords in this diagram were all created using the same method of making intuitive choices from the seven partials of each bell listed in the tuning analysis and

arranging them in a satisfying registral and intervallic configuration. Each of these harmonic sets was arranged in its closest intervallic format to provide a scalic or modal version of each harmony from which to construct the solo parts.

The tuning of the guitar is derived from the tuning analysis of the ring of bells as a whole, rather than the overtones of any one specific bell, and is a mixture of equal temperament and microtonal tuning. The amount of deviation from equal temperament is defined by an ‘idealisation’ of the bell tuning analysis as displayed by comparing the ‘scale’ of the bells and the tuning of the guitar’s open strings.

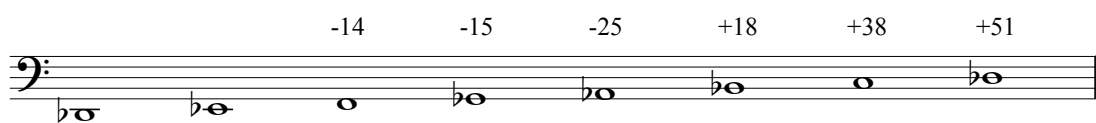


Figure 4.4: Bell notes with cent deviations from equal temperament



Figure 4.5: Guitar scordatura

This tuning facilitates the guitar’s aforementioned role as a ‘blender’ and ‘synthesiser’ of the equally tempered and microtonal harmonic materials that make up the piece.

Rhythm Section

Basic jazz drumming patterns provide a gently undulating yet essentially fixed and cyclical support for the melodic and improvised solo material that sits above them. In *Reflections on Blue* I wanted to create this effect with the ‘rhythm section’ (guitar, piano, double bass) and I felt that cyclic structural polyrhythms could achieve this when assigned to non-percussion instruments, provided that the speed ratios were chosen carefully. In *My lungs taste the air of Time Blown past falling sands...* I used a ratio of 21:15 beats per minute (MM) to provide the rhythmic backbone of much of the work. *Reflections on Blue* adds a third, slightly faster, layer for the guitar to form a three-part polyrhythm of MM25:21:15, orchestrated as guitar : piano : double bass respectively. These speeds were carefully chosen so that they have what I term ‘coincidental

coincisions'. By this I mean that at least two of the pulse rates land together when not at the beginning of a cycle: i.e. the general coincidence of all three speeds after fifteen pulsations of the MM15 layer, twenty-one pulsations of the MM21 layer and twenty-five pulsations of the MM25 layer. To illustrate these 'coincidental coincisions', consider that the MM speeds of 15 and 25 exist in a ratio of 3:5, so that for three pulsations of the slower speed there will be five pulsations of the faster rate and then the two pulses will coincide. Similarly MM15 and MM21 exist in a basic ratio of 5:7 and there will be coincidence of these layers after the respective number of iterations required by this ratio. MM25 and MM21 do not share a common factor and so no such 'internal ratio' exists and these two pulse layers will only coincide at the cycle-start as defined above. During the composition of *My lungs taste the air of Time Blown past falling sands...* I had calculated that a pulse ratio of MM15:21 could be simply notated at a tempo of 70 beats per minute. Happily the new pulse layer of MM25 can also be simply notated at this tempo, using units of 2.8 crotchets per pulsation.

This underlying polyrhythmic structure is used in a variety of ways during the piece. Sometimes it is clearly visible on the surface of the music, as at rehearsal letter C. In other parts of the piece it is buried within the accompanimental role performed by the 'rhythm section' where it creates a guiding rhythmic framework for the gestures of rehearsal letter D. At still other points in the music, such as rehearsal letter H, it is ignored completely for reasons of drama or to accommodate a surface texture free from periodic rhythmic inflection. Incorporating the structural rhythmic elements into the pitched material of the 'rhythm section' in this way liberates the percussion to take on a decorative or augmentative role and so I decided that the soloists, when not playing their normal instruments, could perform the percussion parts. I have always found the sound of ride cymbals played with brushes and hi-hats played with the feet very evocative and attractive and, on a practical level, exclusively using these free-standing instruments would mean that the soloists would not be required to put their instruments down.

4.3 Solo lines and the roles and relationships of each 'soloist pair'

The 'soloist' parts and indeed the whole ensemble are unified by the 'bell chords' defined above but within this unified framework I wanted each soloist and each soloist pair to have distinct characters and gestural identities. To this end the materials for each soloist and pair of soloists were sketched independently of each other and out of context in terms of the dramatic arc of the piece.

Instrument	Character when alone	Character of pair	Significant features	Significant features of pair	Chords used in sketch
Flute	Jazzy, slightly flighty. Fragmented yet joyful, bouncy rhythms.	Jazzy, slightly flighty. Fragmented yet joyful, bouncy rhythms.	Large amounts of acciaccaturas, leaps of sevenths and ninths.	Spiky semitone clashes, close canonic shadow.	5
Soprano Recorder	Bright and brittle. (Shadow of flute).		'Lip' bends.		
Soprano Saxophone	Cascading melodic gestures and flowing scales.	Cascading melodic gestures and flowing scales.	'Written out' rallentandos, smooth legato slurs.	Predominant melodic intervals of minor and major second. Most phrases contained within the total compass of a minor ninth.	4
Oboe	(Flowing and cascading scales as shadow of soprano sax.).		As above.		
Alto Flute	'In glorious shadow' – dark, round and veiled. (Also as shadow of clarinet).	'In glorious shadow' – dark, round and veiled.	Trills of major and minor seconds, slightly unfocused sound.	Clusters of acciaccaturas followed by upward leaps of diminished, minor and major seventh.	4
Clarinet in B \flat	Warm and lyrical. ('In glorious shadow' – dark, round and veiled as shadow of alto flute).		Chord 7 used in alternating phrases with flute. Phrases interspersed with small leaps.		

Figure 4.6: Instrumental characters

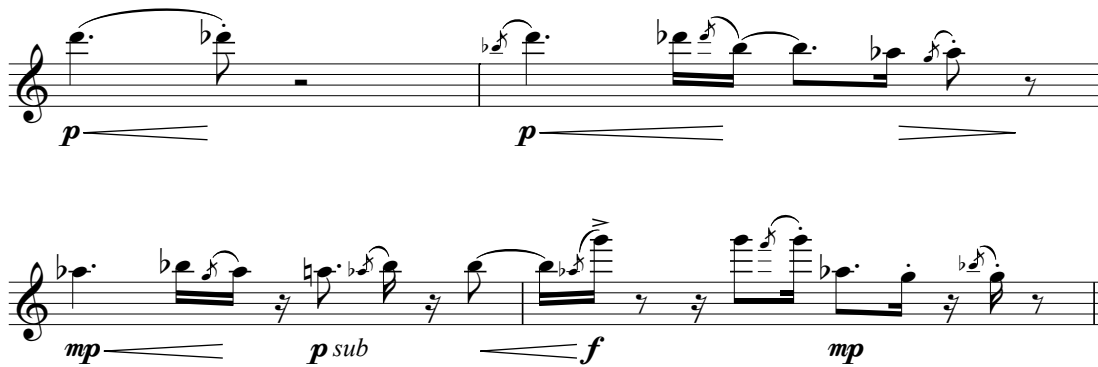


Figure 4.7: Flute and soprano recorder material archetype

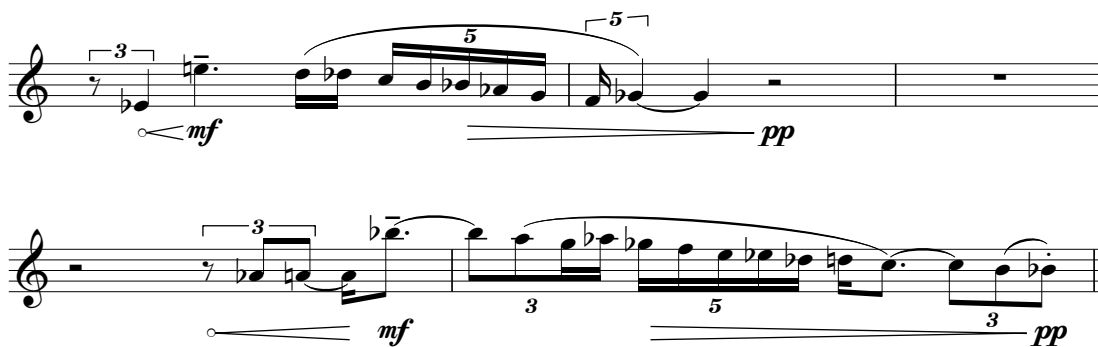


Figure 4.8: Soprano saxophone and oboe material archetype

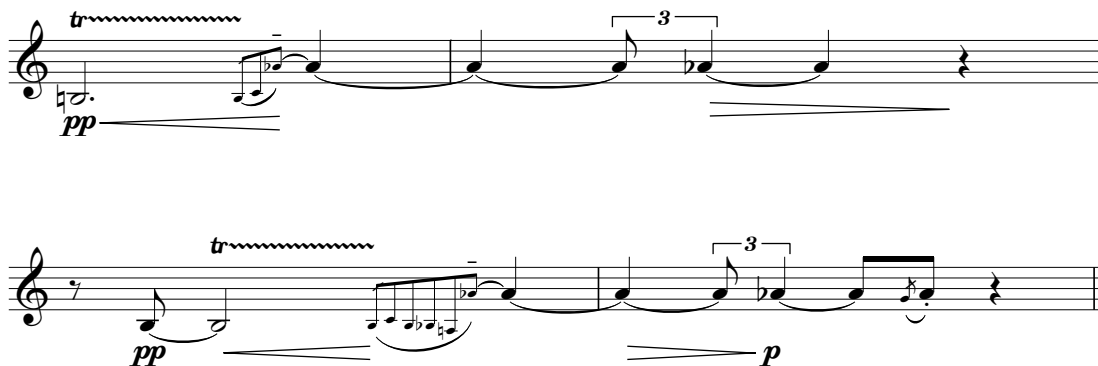


Figure 4.9: Alto flute and clarinet material archetype

Other than the usual ‘soloist pairings’ defined above there are several other instrumental pairings used in this piece. In the opening of the work the clarinet and the flute team up and in later sections various trio and sextet textures are employed to make the original pairings and instrumental roles more or less visible. The desire to create a large variety of characters for the solo instruments was also driven by an inability to vary the tempo in any substantial way. The ‘rhythm section’ is unified by the notated tempo of 70 beats per minute and so creating variety in the surface gesture and

rhythmic, intervallic and registral contour is extremely important. Large tempo changes are unusual in jazz, particularly modal jazz, and this was something I was keen to reflect. This idea is in direct contrast with a large amount of classical music and western art music in general where tempo is often used as a tool for characterisation of contrasting materials.

4.4 Large-scale Form

Main Section	Introduction		'Solos'								Coda
	I	II	III	IV	V	VI	VII	VIII	IX	X	
Rehearsal Letters or Bar Numbers	Start-B	B-D	D-F	F-G	G-b.107	b.107-H	H-I	I-K	K-L	L-M	M-End
'Soloist(s)'	Clr. + Fl.		Alto Fl.	Sop. Sax. + Ob.		Sop. Rec. + Fl.			Sop. Rec. + Fl. Alto Fl. + Clr.	Fl.	Cb.
Instrumental Groupings		Clr. + Fl. Gtr. Pno. Cb. Perc.			Sop. Sax. + Ob. Alto Fl. Gtr. Pno. Cb. Perc.		Fl. + Sop. Sax. + Clr. Sop. Rec. + Ob. + Alto Fl. Gtr. Pno. Cb. Perc.	Tutti			
Textural Features	Weaving solo lines	Static decay-driven vertices and pointillist klangfarben melodie	Sustaining backdrop for solo	Flowing, cascading melodies	Static decay-driven vertices	Bright, ponticello guitar accompaniment Canonic 'shadowing' in energetic solo parts	Opposing trios with 'wet' and 'dry' resonance	Sextet textures Decorated solo lines with 'plain' shadows	Metallic, energetic melodies juxtaposed with calmer phrases	Most overtly 'jazzy' language leading to improvised section	Luminous, resonant chords lifting away from the main body of the piece
'Bell Chord' Harmonic Basis	7	4,7	4	4	3,1 and 7	5	4, 7 3,1 (accomp.)	Initially 7	5	5	2

Figure 4.10: Structural map

4.5 Small-scale Techniques and Procedures

Much of the main body of the piece is constructed out of the aforementioned 'soloist shadowing'. Essentially this is a technique based on the principle of non-strict canonic imitation and is employed in a variety of ways. The first overt instance is in subsection IV where the soprano saxophone leads and is shadowed by the oboe in the phrases beginning in b.86 and b.91. The exact content of this 'shadow' is determined intuitively by following the contour of the saxophone's main line and weaving a shadow that is close in pitch contour and tends to move rhythmically when the main line is sustaining. The flute (main solo) and soprano recorder (shadow) from b.107 and the alto flute (shadow then main solo) and clarinet (main solo then shadow) at b.163 are constructed

in very similar ways, but with the contour and proximity of the shadow adjusted to support the character and dramatic contour of the main solo line.

The trio textures in subsection VII alternate sections in a kind of antiphony between the equally tempered soloists and the microtonal soloists. As the two groups of soloists share the basic characteristics of their material, due to the pairing of the soloists, it is the style of accompaniment and the ends of these trio phrases that help differentiate between them. The equal tempered group is accompanied by through-composed material and finishes its phrases abruptly, after which the resonances of the percussion and the 'rhythm section' are left to decay naturally. By contrast the accompaniment of the microtonal group is constructed of 'mobiles' of repeating figures. This time it is the accompaniment that is cut off 'secco' and the soloists are left sustaining their final note for as long as possible.

Subsection VIII, beginning at rehearsal letter I, is built of sextet textures. The phrases in this subsection are again defined by shadowing, except that in this case the shadow is a stripped down version of the main solo line. Beginning in b.134 the main solo line is taken by the clarinet, with all of its material's trills and grace notes intact, and the shadow is provided by the alto flute but in a stripped back canon at the unison. At b.140 these roles are reversed with the alto flute taking the decorated main line and the clarinet providing the plain shadow. This process is repeated from rehearsal letter J for the next phrases of this subsection, but with the soprano saxophone and oboe providing the main decorated line and the plain shadow respectively before swapping in b.151.

The apotheotic coda beginning at rehearsal letter M is an emancipation of the double bass and transforms it into a high range soloist. The use of the double bass as a solo instrument in jazz recordings, such as Miles Davies' *So What* and John Coltrane's *A Love Supreme*, was something that I wanted to reflect in this piece. This final section, along with some moments of soloistic pizzicato playing and 'fills' (most notably b.69, b.84 and b.141), brings the double bass to the foreground of the music.

4.6 Improvisation – written and performed

In his article ‘Thoughts on Improvisation: a Comparative Approach’ (1974) Bruno Nettl argues that composition and improvisation would be better defined as ‘fast’ and ‘slow’ composition.⁸ I have always felt that in all composition there is something akin to improvisation and in all improvisation there is something akin to composition and the compositional process of *Reflections on Blue* very much reinforced this idea. Allowing oneself to be guided by instinct and intuition is a critical creative leap of faith. In this piece I have tried, within an expressive and technical framework that is in any case largely self-imposed, to allow the materials to be shaped by a free and uninhibited approach; much like Paul Klee’s concept of ‘taking a line for a walk’. Klee’s *Pedagogical Sketchbook* opens with a demonstration of “an active line on a walk, moving freely, without goal. A walk for walk’s sake.”⁹ As well as showing deference to the jazz-oriented thoughts expressed by Bill Evans, I crafted the materials for each ‘soloist pair’ in this piece with Klee’s words very much at the forefront of my mind. Within the harmonic and registral confines of the work’s concept I allowed my mind and hand to be guided by instinctively following a perfect ‘platonic form’ for each gesture that I had fixed in my mind’s eye. Redrafting was minimal and in fact for many sections of this piece I resisted the temptation to construct several drafts and instead chose to deploy the materials I had previously designed in various combinations and textures that I felt supported the musical drama or expressive contour of each moment.

In contrast to this ‘written’ improvisation, perhaps better termed ‘slow composition by the author’, subsection X contains a passage of ‘true’ improvisation, or ‘fast composition by the players’, for the flute soloist and the ‘rhythm section’. This part of the piece is perhaps most akin to the modal jazz approach discussed earlier where the player is given a set of materials (a modal scale in the jazz archetype) and a short passage to give the mood and style of the music (the ‘head’ section) and is then allowed free creative reign. In *Reflections on Blue* the phrases from b.183 to b.191 function in place of the archetypal ‘head’ section and provide a gestural context for both the flute soloist and the rhythm section. Creating a framework for improvisation in generally notated music

⁸ Nettl, B. 1974. *Thoughts on Improvisation: A Comparative Approach*. *The Musical Quarterly*, 60.1: 1–19

⁹ Klee, P. 1960. *Pedagogical Sketchbook*. New York City: Praeger, p.16

is discussed in greater detail in future chapters but suffice it to say that, in regard to this piece, the location of the improvised section is critical. It is set late in the overall narrative to ensure that the general expressive language of the music is sufficiently internalised by the players in advance. Another factor in the placement of this improvised passage is its proximity to the apotheotic coda. In a sense the improvised nature of subsection X is a 'taking flight' of the underlying expressive and psychological inspiration for the main body of this piece before the music lifts away into the double bass solo of the coda.

5. ...but their stillness showed plainly...

5.1 Beginnings

This work was the result of an opportunity to write for the Distractfold Ensemble in May 2017, and their proposed ensemble line-up of clarinet in B \flat , violin, viola and cello provided the initial impetus for the work. It struck me that the real strength of this ensemble was the fundamental differences between the lone clarinet and the bowed strings. I wanted to begin by using the bowed strings to define a harmonic landscape made up of two main areas, one rooted in equal temperament and the other in the harmonic series, and then use the clarinet to blend, bend, slide and move between those harmonic elements. My vision for the relationships between the instruments could be summed up thus:

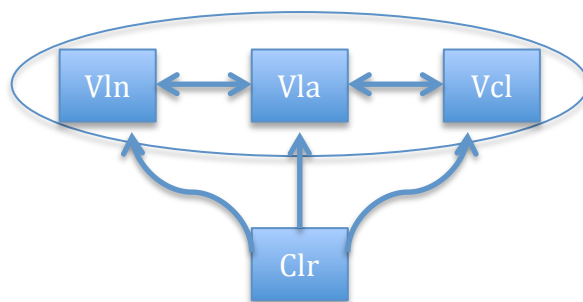


Figure 5.1: Conceptual sketch of inter-ensemble relationships

Bells in Knightsbridge

This initial plan was augmented by my fascination with church bells. At St Paul's Church, Wilton Place in Knightsbridge there is a ring of three bells tuned in E \flat , with a tenor (lowest sounding bell) weighing 22cwt. These bells have fallen into disrepair and are currently unringable due to safety concerns. They are tuned to the notes 1,4 and 8 of a ring of 8 and in these bells I saw potential to develop the harmonic framework of my piece. I assigned each of the strings to a bell:

1(vln) 4(vla) 8(vcl)

Church bells are numbered inversely when compared with degrees of a scale i.e. the lowest bell has the highest number. As there is no tuning data available for these bells beyond that of the strike notes, I decided to base my work on C to allow the lowest range of the cello to define the bottom end of the works tessitura. This process resulted in identifying three important pitches and associated instruments.

Bell	1	4	8
Instrument	viola	viola	cello
Characteristic 'bell note'	C	G	C

Figure 5.2: Bell and bowed string associations

5.2 Defining the Harmonic Space

As there were no tuning details available for St Paul's Knightsbridge I turned to a ring of bells whose tuning I know well: St Stephen's, Rochester Row. These bells were a great inspiration for *Reflections on Blue* and have a very characterful tuning scheme.

Bell	8	7	6	5	4	3	2	1
Tuning deviation (cents)	♯				♭ (5 cents)			♯ (50 cents)
Assigned Instrument	cello				viola			violin

Figure 5.3: Tuning scheme for the bells of St Stephen's

The 'stretched octave' between bell 8 (lowest pitch) and bell 1 (highest pitch) is very attractive and gives the same kind of qualities I admire so much in the interval of a minor ninth: a restlessness, a weightless yearning and a fragile stability. As in my previous work I exaggerated the flat nature of bell 4 by dropping it further to 20 cents below equal temperament. The three 'landmarks' in my developing harmonic space were now defined thus:

Bell	1	4	8
Instrument	viola	viola	cello
Characteristic 'bell note'	C (+50 cents)	G (-20 cents)	C

Figure 5.4: Combination of St Stephen's tuning scheme and bowed strings

In turn this lead to the following scordaturas for the violin and viola:

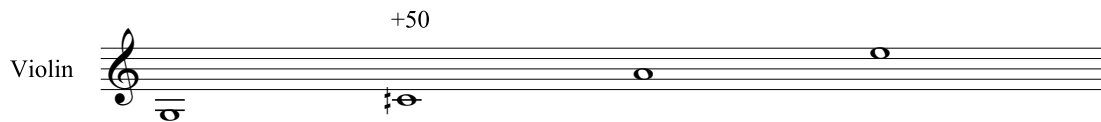


Figure 5.5: Violin scordatura

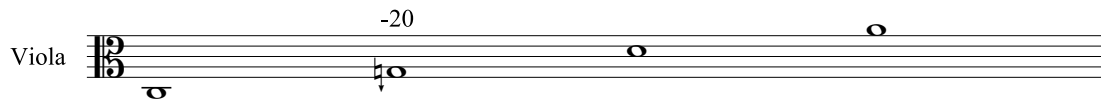


Figure 5.6: Viola scordatura

Expanding the harmonic landscape

These 'bell notes' were not enough to sustain the musical discourse and would need contextualising and supporting within characterful and identifiable harmonic zones if they were to have the desired structural effect. Fortunately I had designed several chords related to the tuning of St Stephen's bells during the composition of *Reflections on Blue* and these sonorities again proved fruitful.

Bell chord 1

Bell chord 4

Bell chord 8

Figure 5.7: Bell chord sonorities

There are some important features of these sonorities to consider.

Chord for bell note 1

- The bell note itself (C quarter sharp) is in the middle of the pitch space.
- The whole pitch set is encased by the interval of a minor ninth.
- Other prominent intervals include the minor and major sixth, the major second and the minor seventh.

Chord for bell note 4

- Again the bell note (G 20 cents flat) is not on the bottom of the pitch space, although it is closer to the bottom than in the chord for bell note 1
- This pitch set is again encased within a minor ninth.
- The prominent intervals are similar to the chord for bell note 1 with the addition of a minor second.

Chord for bell note 8

- In this chord the bell note (C) is on the bottom in the lowest register of the cello. From here the pitch can act as a tonic anchor.
- The intervallic focus of this chord is reorganised with the minor ninth at the top of the chord and a minor seventh at the bottom. This time the whole pitch set is encased by a perfect fourth.
- In the sketches for this work this chord is noted as being 'most restful – very beautiful' and the spacing of this chord was earmarked for moments of restful serenity.
- It was decided very early in the composition process that the special colour of the low cello C would be saved for the final sections of the piece. The sketches describe a desire to create a 'shimmering ending' with 'wide tremolos in the clarinet and bouncing harmonics in the strings'.

Between them these three chords define the tessitura of the whole work (C2–F6):

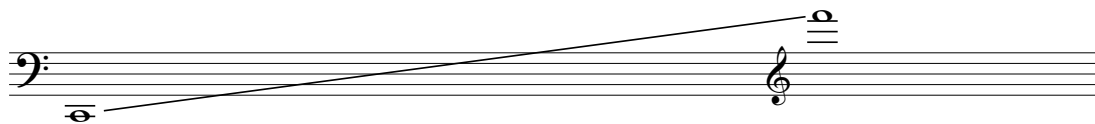


Figure 5.8: Tessitura of *...but their stillness showed plainly...*

Looking back, it is clear that I had a strong sense of the feeling and expressive territory I wanted to explore, especially in the ending of the work, and was carefully designing a harmonic landscape to suit my needs. It is normal, however, for plans to change as feelings within and around the music grow and develop. Allowing oneself to be awake and responsive to the intuitive side of composition is, as we shall see, essential and exciting; one adjusts the original plans to accommodate moments of intuitive inspiration or overcome practical problems the music becomes stronger, more real and more expressive.

5.3 Structural Beginnings

Having defined these three harmonic areas I was convinced that the small-scale harmonic structures, and their expressive implications, were in line with my aims for the piece and its relationship to the 'big ideas' of my creative practice:

- Fragile intensity
- Meditative yet concentrated
- Flowing stasis
- Poignant stillness

In terms of large-scale form these three harmonic areas immediately suggested a six-part structure following the change ringing pattern of plain hunt. This is a system of organising the six possible permutations of three individual elements, my three harmonic areas, into a structured group and is given by reading down the left hand column of the following diagram.

Order of harmonic areas	Section
1,2,3	a
2,1,3	b
2,3,1	c
3,2,1	d
3,1,2	e
1,3,2	f

Figure 5.9: Early six-part structural plan

- 1= bell note 1
- 2= bell note 4
- 3= bell note 8

I was drawn towards repeating section ‘a’ at the end of the piece to lend a strong sense of closure to the work and so I initially planned seven sections with varying amounts of each harmonic area explored within each. It was not immediately apparent whether such a structure would satisfy the dramatic aims and needs of the piece as the music developed, and it was also not clear whether a structure of this size could be fitted into the timescale allowed for the project with the Distractfold Ensemble.

As I began to compose the first sub-section (‘1’ of section ‘a’) it became apparent that to explore fully the colours and expressive potential of each harmonic area the subsections would need to be longer than anticipated and the rate of change from one harmonic area to the next would be generally slow and gradual in nature. My seven-part structural idea needed modification.

The opening 123

My first intention in the section was to include only the bell notes themselves by using close, cluster-like, voicings and gradually spreading from these into something more linear and layered:

```

1   1   1   1
2   2   2   2
3   3   3   3

```

On reflection this felt contrived and it became clear that this process ‘showed the hand’ of the piece too soon. The revised opening begins with only bell notes 4 and 8 (structural harmonic areas 2 and 3) albeit in altered forms, with bell note 1 only appearing in b.8.

Bell note 4 alterations

- This bell note initially appears as G \sharp and not as G 20 cents flat.

Bell note 8 alterations

- The register of this bell note first appears three octaves above its final resting place at the bottom of the cello.

Within these first eight bars the essential role of the clarinet is defined along the following verbal lines.

- Blender, transfer enabler, binder, pre-empter, shadower, augments, reinforcer

The clarinet pre-empts the move from G \sharp to G 20 cents flat at the end of b.3 in the viola, and facilitates the music pushing up to C quarter sharp with the introduction of the violin in b.8. Similarly, it again widens the pitch space by sliding up to D in b.11. This is a significant moment as this is the first 'non bell note' in the piece and it is important to note that it is a pitch taken from bell chord 1 and 8 and not bell chord 4 which will open the next section of the work. The first section ends in bb.13–14 with the clarinet again widening the pitch space of the music by defining the top range of the piece as we hear bell chord 1 in its entirety.

This section now had the right pacing to introduce the right harmonic material and maintain the hushed intensity of which I am so fond. The veiled, fragile poignancy evoked in this opening was artistically very satisfying to achieve. It is something that I had been developing in previous works and would come to define a large part of the expressive power of later pieces. The technical resources detailed above contributed greatly to the expressive effect of this section; there are however some important additional features, both practical and expressive, to note.

Cello

- The C \sharp harmonic that begins the work is not available on the violin due to the scordatura.

- Placing it as a high partial on the cello C string lends an air of weightless intensity.

Viola

- Placing the G \sharp in a very high position on the C string of the viola also serves a dual purpose as it allows for a smooth glissando down to the octave harmonic of the G 20 cents flat and gives the G \sharp a fragility which is in keeping with the expressive aims of the work.

Clarinet – pitch bending

- The ‘unifying’ role of the clarinet is largely achieved through pitch bending, enabling the player to blend seamlessly between microtones and equally tempered pitches.
- This technique allows new pitches to grow organically out of those already sounding.
- The strings also take up the bending effect as glissandi and this allows for integration of the clarinet into the ensemble at key structural moments. This also means that the blending and shifting of harmonic areas can be spread around the ensemble.

All instruments – vibrato

- This is an expressive resource that I felt had to be carefully considered as it can be used in a variety of ways and the ultimate expressive effect of adding, or taking away, vibrato is largely dependent on context.
- It can be used to add intensity to pitches or subtly alter their colour when layered with different instruments (see rehearsal letters K–L).
- It can be used to highlight a certain part of the texture without necessarily altering the dynamic relationships between the instruments (bb.56–62).
- Very wide vibrato can obscure the true identity of a pitch and make it more or less ‘in focus’ (b.68.)
- It can also be used as part of ‘passing’ a pitch from one instrument to the other, with bb.10–11 and b.22 being notable examples.

By this point in the composition process it was clear that these technical resources and expressive features would form the backbone of the work.

Ending 123

The voicing of bell chord 8 displayed earlier was so balanced and attractive that I turned my attention to the ending of the work as soon as the draft of the first section was complete. There are several key features of this final section to consider.

- The lowest C of the cello is the pitch focus of the chord and only appears in the ending sections of the piece.
- There is a focus on achieving multiple colours of only three main pitches, C, E, F. These appear both as equally tempered notes and microtonal products of multiple harmonic series. Multiple colourations of the same essential pitch form an ever-increasing part of my harmonic and textural language and to thoroughly explore the possibilities in this piece I constructed charts for each of the pitches (see below where deviations from equal temperament are noted in cents).
- Rehearsal letters H-K introduce a melodic fragment in the clarinet. This new material begins to lend an apotheotic quality to the ending sections of the piece.
- From rehearsal letter K to the end of the work there is an apparent 'settling' onto the note C. This pitch is seen in many different guises (natural notes, natural harmonics, with and without vibrato) in many registers, but eventually the lowest C possible returns in the cello. This time, however, the pitch is plucked. This previously unseen technique enhances the apotheosis of the ending by maintaining the delicate balance between finality (ending on the 'tonic' of C) and eternity.
- The 'bouncing' harmonics referred to in the sketches quoted above first appear around rehearsal letter H. I first came across this technique in *Bird Learning to Fly* for solo cello by Christian Mason and was immediately captivated by the fragile, yet intense, fluttering sound.

Vcl *sul c* *sul d* *sul c*
-31
(also *sul pont*)

Vla (also harmonics as in cello) *sul d*
-31

Vln +50 (also harmonics as in cello)

Figure 5.10: Multiple colours of C

Vcl -14 *sul c*

Vla -14 *sul c* *sul a*

Vln *sul e* *sul a - gliss on 'a' string* *sul e* *sul d (c 1/2)*
-36 (+50-14)

Figure 5.11: Multiple colours of E

Vcl -31 *sul g*

Vla -51 (-20+(-31)) *sul g*

Vln -31 *sul g*

Figure 5.12: Multiple colours of F

Overall, the fragile intensity of the harmonics and the apothecic function of the clarinet melody and the pizzicato technique, combined with a narrowing of pitch focus, deliver the right balance of a form that both ‘closes the circle’ and also hints at a continuation of unexplored possibilities.

5.4 Structural Modifications

The length of this ending section (from rehearsal letter H to the end of the piece) had grown so much, and my discoveries regarding the slow rate of harmonic change demanded by the first section, indicated that it would not be possible to complete my original seven-part formal plan. Instead I settled on a four-part structure:

Order of Harmonic Areas (determined by ‘plain hunt’ principle)	Section
123	a
213	b
231	c
123	d

Figure 5.13: Modified structural plan

Sections ‘b’ and ‘c’ would focus on exploring the colours of bell chord 4 (harmonic area 2 in the structural diagram above) and the final form and structural proportions of the work emerged from these decisions:

Section	a	b		c		d
Harmonic order	<u>123</u>	<u>213</u>		<u>231</u>		<u>123</u>
Internal structure	Opening 123	2 of 213	1+3 of 213	2 of 231	3+1 of 231	Ending 123
Rehearsal Letters	Start-A	A-E	E-F	F-G	G-H	H-End
Length (in bars)	bb.0-15 (15)	bb.16-39 (23)	bb.40-49 (9)	bb.50-61 (11)	bb.62-79 (7)	bb.70-133 (63)

Figure 5.14: Final formal map

Sections ‘b’ and ‘c’

The introduction of the first pitch of bell chord 4 (B₄) in the cello, between rehearsal letters A and B, gives insight into the most important features of these sections, and indeed the whole fabric of this music.

- The infiltration of pitches from bell chord 4 is slow and their takeover of the harmonic landscape is gradual in nature; only at rehearsal letter C are there no longer any pitches from bell chords 1 or 8 in the underlying harmonies.
- There is a gradual process of colouration of the B \sharp in the cello, beginning with a mute, progressing to a 'sul tasto' playing position without muting and gradually moving towards a 'molto pont' bowing position. Additionally, the amount of pressure applied to the bow of the cello is varied in order to activate the harmonic series of the B \sharp and act as a launching pad for the clarinet entry at rehearsal letter B. This technique is seen throughout this passage in the cello and bleeds over into the violin at b.42, again to act as a launching pad for the clarinet.
- Since *My lungs taste the air of Time Blown past falling sands...* I have been fascinated by the role of listening within ensemble music. In this piece there are several moments where the success of the gesture relies intimately on the players listening very closely to what is going on around them. Examples include the way in which the clarinet is required to 'match the pitch' of other instruments: see, for example, b.15, b.25, b.38. The matching of dynamics as pitches move around the ensemble is also an important part of the listening element of this music in, for example, the viola at rehearsal letter A and the violin at b.19.

A special feature of bell chord 4 is explored between rehearsal marks F and G. A configuration of this chord can be achieved whereby the chords of C minor (second inversion) and A \flat major (root position) are heard above a drone of F \sharp .



Figure 5.15: 'Magic' apotheotic harmony

This moment is ethereal; diatonically settled yet tonally unclear and expresses a balance between beauty, fragility, stability and disquiet.

5.5 Adaptation for String Quartet

In 2018 I had the opportunity to workshop and record a piece with the Manon Quartet. This opportunity came at short notice and so there was not time to compose a new piece for the quartet. At the time *...but their stillness showed plainly...* was my most recent work and so I decided to make a string quartet version for the recording project.

Technical and Conceptual Aspects

Initially this seemed straightforward as there are no pitches in the original clarinet part that lie outside the range of the violin, so the clarinet material could simply be reassigned to the first violin of the string quartet. On reflection I felt that this was an overly simplistic solution, especially when considering one of the key points of the conception of the original piece. The clarinet is conceived as a 'blender', a 'transitional force' between the harmonic worlds of equal temperament and that of the 'bell pitches' and natural overtones, thus setting up a quartet divided into groupings of one and three. This conceptual and textural premise is supported in the original version of this piece by the sonic contrast between the clarinet and the bowed strings so the material that I composed for the clarinet was permeated with this basic conceptual underpinning. In a string quartet the timbral difference between the instruments is removed from the equation and so the basic conceptual groupings of one against three would need to be adjusted to create a true work for string quartet. In order to facilitate this textural and conceptual change I decided to take the clarinet and violin parts from the original and consider them together. The materials contained within those two parts could then be mixed, swapped, shared and blended to create the two violin parts of the string quartet version.

Swapping – Long Range and Short Range, Crossfading and Passing

At the opening of the string quartet version the material of the clarinet and violin from the original piece is distributed as follows:

Violin 1 = clarinet

Violin 2 = violin

At b.19 the material begins to swap and at rehearsal letter B the 'long range swap' has been facilitated as follows.

Violin 1 = violin

Violin 2 = clarinet

This swapping of material, after rests in the music, is also facilitated at 'short range', with b.26 being a notable example, and is the basic mechanism for weaving and integrating the first violin into the piece.

The blending of the clarinet and violin material, to facilitate swapping without rests, is seen in b.41, b.91 and in an extended passage at bb.103-104 using a tremolo figure to blend the two parts together.

Expressive Ramifications

In *...to imprison the wind* I created a new part out of two pre-existing parts and found ways to accommodate the dramatic and structural changes that this required. In some ways *...but their stillness showed plainly...* represented a simpler challenge, as the number of parts was not changing. In another sense this was a subtler process because of the timbral differences between the instrument being introduced and its relationship to rest of the ensemble. In both *...to imprison the wind* and *Refracted Meditations III* the instrument being introduced (the guitar) had essentially the same plucked, or basically percussive and decaying, sonic profile as the instrument(s) being replaced (piano and harp). The timbral differences between the violin and the clarinet, and the fact that the extra violin has the same timbral quality as the rest of the ensemble it is being introduced to are clearly important considerations from a technical standpoint. Expressively speaking the contour of the piece and the parts can remain the same, but it is the integration, weaving and blending of these parts that will exploit the unique and

perfect balance of the string quartet and create a truly satisfying and successful work for that ensemble.

6. At the edge of his dreams...

6.1 Beginnings

This work was commissioned by Corentin Chassard for the Thornham Summer Festival 2017 to be performed in St Mary Magdalene, Thornham Magna. After a little research I found that this church has a ring of six bells in G. I received some recordings of the bells from the festival and on discovering that they were nearly a quartertone sharp I realised I had the starting point for the piece.

The initial structural and expressive concept of the piece was to blend and migrate between the tuning of the bells and equal temperament, with the bells acting as a trigger for the other instruments. This 'triggering' would be especially effective in the strings and clarinet as they would be able to adjust their pitch to match the tuning of a 'bell note' and then glissando or bend back into equal temperament thus:

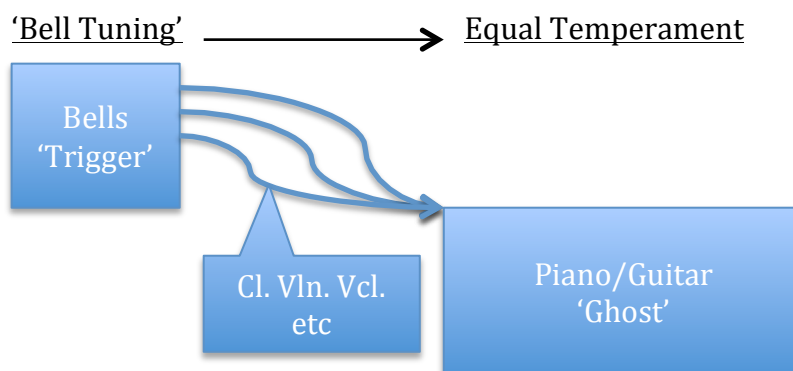


Figure 6.1: Structural concept

'Playing' the bells

This concept relies on the resonance of the bells sustaining long enough for a player to 'tune' to it. It may seem counterintuitive to state that in traditional English change ringing this is not the case. As the bells are swung in a full circle from mouth-upwards to mouth-upwards the clapper comes to rest against the side of the bell and dampens its resonance. The lingering resonance of the bells was essential for the technical practicalities of my initial concept and so I decided that the bells should not be rung full circle as normal, but rather simply 'chimed' with the mouth of the bell always facing

downwards. In this position the clapper does not rest against the bell after striking so the resonances are left to decay naturally. The rhythmic effect of chiming, rather than ‘ringing’, the bells is that they are slow to strike and are harder to control. Consequently the rhythmic profile of the bells is kept sparse and simple throughout the work. In fact when coordinating the bells with the rest of the ensemble the notated rhythms of the bells in the score should be taken as an approximation and the flow of the metered music should halt as little as possible to accommodate the delay between cueing the bells and hearing their sound. This hazy, delayed rhythmic effect is perhaps best seen in the final section of the work (from rehearsal letter G) where bells 3 and 5 are first in dialogue with, and then create a backdrop to, a cello solo which develops melodic phrases based around those bell pitches. As the cello slides between equal temperament and the microtonal bell world the two pitch polarities of the work are blended and amalgamated to create a hazy hinterland.

6.2 Marco-structure

Section Number	1	2	3	4	5	6	7
Type	Flowing Time	Halting Time	Flowing Time	Halting Time	Flowing Time (with interruption)	Halting Time	Flowing Time
Rehearsal Letters	Start-A	A-B	B-C	C-D	D-F (interruption at E)	F-G	G-End
Duration	8 bars (c.53")	c.42"	14 bars (c.1'18")	c.28"	26 bars (c.2'13") [10 bars (c.59")+ 1 bar halting interruption (c.9") + 15 bars (c.1'05")]	c.1'26"	29 bars (c.2'45")
Features	Bell ‘trigger’ Pitch blending between the bells and equal temperament. Piano echo of the bells.	Duration controlled by piano decay. Mobiles and fragments in clarinet, violin and accordion.	Introduction of melodic elements with drones and ‘projections’.	Glissandi ad lib. in cello to blend between the bells and equal temperament.	‘Projections’ in strings as natural harmonics. Drone in violin. Projections in cello and piano.	Duration controlled by guitar decay.	Dialogue between bells and cello blending and passing between the two tuning worlds.

Figure 6.2: Structural map

Proportions and the concepts of 'flowing' and 'halting' time

The relationship between the bells and piano defined the temporality of the work. In the opening section this relationship is expressed most purely as follows:

- The bells trigger the music by chiming briskly down the scale
- The cello finds its note amongst the bells and gradually glissandos back to an equally tempered pitch that is passed to the accordion.
- The piano eventually echoes the bells' gesture and triggers its own phrase that in turn pushes back to the 'bell pitch' world.

In this way the pitches of the bells (G, A, B, C, D, E) are the focus of the opening section of the work but they come in two forms, one at 'bell pitch' and one equally tempered with the piano ghosting the trigger of the bells.

After the first chime of the bells their sound decays naturally in an unmeasured way. On top of that decay, however, time is flowing in a measured way with both time signature and metronome mark. The dichotomy of these two types of time and the 'ghosting' of the bells in the piano prompted the decision to interrupt the flow of the music by allowing the decay duration of the piano to define the length of some sections of the music and thus to structurally articulate the opposing concepts of 'flowing' and 'halting' time.

The success of such a structural principle relies heavily on the proportional relationships between the sections. These were developed intuitively over the course of composing the work to create the right sense of 'static motion' and a balance between suspended animation and forward momentum:

- The 'flowing', or 'metered', time sections grow in a non-linear way over the course of the work:

8 bars \rightarrow 14 \rightarrow 26 (10 + 15) \rightarrow 29

- The 'halting time' sections appear to do the opposite, only to wrong foot that process between rehearsal letters F and G:

42" → 28" → 9" → 1'26"

- Overall the structural is in favour of the 'flowing' time materials. The margin is narrow however and as such there is a delicate balance between the music moving on and being 'stuck'. A fine line is being trodden to create the overall expressive effect of an actively static dream-like soundscape.

6.3 Small-scale procedures and techniques

Harmonic areas in 'flowing' and 'halting' time

Generally speaking sections 1,3,5 and 7 (the 'flowing time' sections) are centred on specific harmonies or sonorities. For example, section 1 is defined by the six 'bell' pitches and their piano 'ghost', whereas section 2 begins focused around the pitch A and then manoeuvres to a point of tension where the sonority of G# against Gb defines the harmonic landscape. During these 'flowing' sections the movement from one harmonic area to another is almost exclusively a smooth and organic process. Drones contribute smoothness to the surface of the music and lend clarity and focus to each harmonic area. Their function as harmonic identity markers is becoming more and more important in my music. They allow the music to define specific harmonic areas and colours without the need to articulate an overt harmonic rhythm. In this way they contribute greatly to the feelings of fragile intensity I so greatly value.

The sections of 'halting' time are defined in a different way. Although they too have central harmonic identities, the movement from one sonority to the next is not a smooth blending; rather the music moves by juxtaposition. When a chord decays to silence it is either repeated or the music simply moves directly to the next harmony. Because these sections interrupt the flow of musical time and, internally, do not move in a linked, developmental way, the 'halting' sections lend the music a feeling of 'active stasis': they are stuck and are, on a deep level, defined by isolated harmonic events.

The below table gives the harmonic scheme for the whole work:


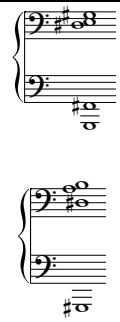




Section	1	2	3	4	5	6	7
Harmonic Centre	Bell pitches and their piano 'ghost': 		A moving to G# and then G#+G		 Settling onto A, coloured by C. After interruption focused on C		Drones in background foreground concerned with A and C from bells being explored by Vcl.. Piano states final chordal harmony: 
Drones	B (natural and quarter sharp)		As above	G (natural and quarter sharp to 'ghost' the bells)	Chordal drone, moving onto A. Following interruption drone moves to high C		F# and G

Figure 6.3: Harmonic scheme

Mobiles and ad lib. Fragments

The feeling of 'active stasis' cultivated by the flexible, decay-controlled durations of the 'halting' time sections is augmented by the use of flexible fragments and sustained pitches over which the performers have varying degrees of control. By allowing the performers a carefully planned amount of control over such features as dynamic, vibrato, pitch and small rhythmic variations the fragility of the musical texture is enhanced and the contrast between the static, decaying piano (or guitar) and the harmonically 'stuck' yet internally active fragments lends the music its 'halting' character.

In section 2, the first 'halting' time section, the clarinet and violin begin with sustained pitches whilst the accordion holds a drone and varies a short rhythmic fragment. Small glissandi and variations in vibrato and dynamic are controlled by the players of the

clarinet and violin while the chordal backdrop decays in the piano. The psychological impact of a section such as this from a performer's perspective is an increase in the importance of listening and communication within the ensemble. The players must continue with their self-determined variations until the piano cues the next 'bar'. Small overhangs of material are permissible but 'holes' left by over-anticipation of the piano cue would undermine the overall effect of the texture. In one of the later 'halting' time sections players are instructed to start playing after another member of the ensemble has begun their fragment, thus heightening further the importance of ensemble communication and contributing to the 'actively static' feeling of these sections and in fact the work as a whole.

'Projections' in strings

The already mentioned 'ghosting' of the bells by the piano is, as we have seen, harmonically important. The principle of 'ghosting' also permeates other layers of the music as rhythmically and gesturally the instruments trigger their own 'ghosts'. A notable example of this process can be seen in section 3 as the clarinet, violin and accordion 'ghost' each other by means of *Klangfarbenmelodie* to evolve a melodic phrase that is the foreground focus of the section:



Figure 6.4: Emerging melody

Section 5 also displays another kind of 'ghosting' as the bowed strings pick out pitches from either the accordion's chordal drone or the melodic elements seen in the piano as natural harmonics. These high 'projections' are normally stated as the fifth or seventh partials of an open string and are thus fourteen and thirty-one cents flat of equal temperament respectively. These tuning discrepancies mirror the differences between the 'bell' pitches and the piano 'ghost' in the opening section but appear in a register that is inaccessible to the bells. These 'projections' are ethereal in sound quality but intense in dynamic profile and have a 'ghostly' sparkle as they project upwards from the drone and melodic elements.

Use of the guitar

The initial structural idea of the work, the triggering of the ensemble by the bells, is reproduced as a 'ghost' by the relationship between the piano and the rest of the ensemble in the 'halting' time sections 2 and 4. In this sense one of the functions of the piano is to act as a 'ghost' of the bells. In section 6 a third step is added to this process as the offstage guitar acts as a 'ghost' of the piano's 'trigger' from sections 2 and 4.

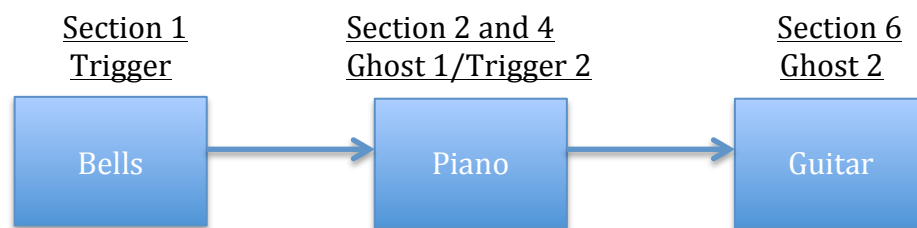


Figure 6.5: Ghosts and triggers

Because of the guitar's shorter decay period each chord of section 6 is repeated twice and there are also more of them: a total of five compared to the two harmonies used in section 2. In section 2 the 'halting time' section begins with a statement of the bell pitches in the piano. The bells trigger section 4 and the cello holds the lowest bell pitch throughout the section. The harmonies used in section 6 are also the furthest removed from the 'bell' pitches of any of the 'halting' time sections. In contrast the 'ad lib.' fragments of section 6 are the most static of any of the 'halting' time sections. The contradiction here is that, whilst the harmony is more varied and rich, the mobile fragments are more static than either section 2 or 4; this dichotomy between stasis and activity is a perfect microcosm of the balance of flowing and halting of the work as a whole.

7. Like Trees in November

7.1 Beginnings

The family of decaying instruments

As a guitarist I have been endlessly fascinated by the decaying resonance of the instrument and the infinite variety of timbral colour achievable by varying the strength and position of attack and the ratio of nail and flesh used by the plucking hand. The piano shares many features with the guitar and its essentially percussive mechanism. The decaying nature of its sounds are directly analogous, but the piano has an advantage over the guitar in creating legato phrasing and connection between sounds by way of the sustain pedal. Although a certain amount of timbral variation is achievable by a highly skilled pianist by use of the *una corda* pedal and the weight and style of attack on the keys I have always felt that the piano lacked the colouristic variety of the guitar. One of the main impulses behind this piece was an attempt to find ways to expand or enhance the timbral palette of the piano as I saw it.

Explorative and expressive territory

As with much of my music I wanted to explore the resonance of the instrument and to experiment with many differing ways of touching the keys to lend textural and timbral variety to the music. I was also keen to incorporate some pedal techniques that I felt were underused or had potential to enhance the expressivity of the music.

Keyboard modes of attack	Movement(s) used	Pedal techniques	Movement(s) used
Boxed notes for emphasis	I, III	'una corda' pedal used as a mute to control decay length	I
Natural harmonics	I, V	'Catching' notes, harmonics or resonance with the sustain pedal	III, V
Sympathetic resonance (by means of prepared silent notes)	III, V	'Crescendo' and 'diminuendo' of the sustain pedal	III, V
Silently retaining notes already resonating to preserve their length	III	Rhythmic pulsing of decaying harmonies created by the sustain pedal	II, IV

Figure 7.1: Keyboard and pedal explorations

Alongside these techniques there are some general compositional trends that aid the music's evocation of its expressive aims. The use of register to activate specific overtones of the harmonic series is particularly important. It is also used to either intensify or dilute the tension and dissonance of intervals such as minor seconds, major sevenths and minor ninths, or to expand or contract the decay length of a certain pitch. Achieving registral and intervallic balance in harmonic objects is essential and adjusting the register of one or more notes within a chord is so often the key to the success or failure of that harmony, both as an individual chord and as part of a harmonic progression. In terms of harmonic progression the intervallic spacing of each chord is critical in creating the patterns of tension and release that are critical to my musical discourse.

Second, my interest in durations controlled by decay lengths is used extensively in this piece. Many sections of movements I, III and V make use of this technique, to govern either the progress of the music from one note to the next or the length and pacing of phrases on a gesture-to-gesture level. Some of the uses of this technique are purely practical and allow the every pitch of a chord or gesture to speak in balance but mostly I have tried to weave the decaying resonance of the piano's nature into the very fabric of the music. These ideas of resonance-controlled duration are balanced in this piece against a more traditional rhythmic language based on pulse and metre. At certain points these two modes of rhythmic organisation exist in juxtaposition, such as in movement III, or in a kind of synthesis, as in movement I and II, or with one eclipsing the other, such as movement IV.

All of these physical and compositional resources were designed to bring out the elusive melancholy of the music that I had in mind and also to reflect the sentiment of the chapter in Richard Adams's *Watership Down* that gave the work its title. In this chapter the travelling rabbits come to a new warren and Fiver, a small prescient rabbit, senses that there is sadness upon it, a deep and burdening melancholy that is intangible to outsiders.

7.2 Large Scale Form and Structure

Movement	I - 'Theme'		II	III		
Internal structure	'A' centred harmony	'G#' centred harmony	Three phrases in homophonic rhythm	Shimmering arpeggios	Decay driven phrases	Shimmering arpeggios
Rhythmic Structure (decay or pulse-driven)	Decay		Pulse	Mixture		
Features developed or varied	'Theme'		Pedal and pulsation	Decay-driven phrase lengths and isorhythmic patterning		

Movement	IV	V			
Internal structure	Cycling of block chords	Resonance 'ghost'	Emerging melody	'Distant wind' scalic gestures with natural harmonics	Apotheosis ending of overtone 'clouds' produced from fragile melody
Rhythmic Structure (decay or pulse-driven)	Pulse	Mixture			
Features developed or varied	Pedal and pulsation	Natural harmonics and overtone resonance			

Figure 7.2: Formal diagram

7.3 Small Scale Gestures and Techniques: Movement I - 'Theme'

Very often in traditional gestures and compositional technique the music increases in volume when it increases in speed. This is a very effective way of creating climax and adding drama to the musical discourse. With decay-controlled rhythmic duration the opposite relationship between volume and rapidity of iteration is inevitable: as the music crescendos the notes get longer as they will decay more slowly and vice-versa. This contradicts one of the basic expressive gestures of Western music and promotes the 'energyless' intensity of which I am so fond. It also delivers non-climax-oriented phrasing and structure in the music. This broadening of the music's surface during crescendo and evaporation when under diminuendo is one of the key expressive features of the first movement and indeed of the whole piece.

Pitch Focus and Harmonic Progression

The 'boxed note emphasis' technique is used throughout this movement to highlight the central pitch A as it moves through the registers (A4, A5, A3) in the first half of the movement and is used to highlight the G# centred second half in the same way (G#5, G#3, G#4). This is a simple way to show the balance of a chord or gesture without the need for many conventional symbols. If the note to be emphasised is one of the internal notes in a chord it can be difficult to show this to the performer without excess use of symbols or text.

7.4 Small Scale Gestures and Techniques: Movements II and IV - 'Pedal and Pulse Development'

On a basic pianistic level it is the action of the player's hands on the keys that create the rhythm and articulate the pulse of a piece of music while the pedal creates and controls the amount of resonance employed at any given moment. These movements go some way towards reversing those roles, putting the rhythmic surface of the music firmly in the feet of the player. In Movement II the sustain pedal is used to create a continuous rhythmic pulsing whilst the hands play a series of chords in a homophonic rhythm. This idea is developed still further in movement IV where the rhythmic variety and pulse based nature of the rhythmic organisation is controlled entirely by the sustain pedal. In terms of register these movements have the least variety and sit firmly in the middle of the keyboard. This provided the optimum resonance to allow the pedal pulsing to come to the foreground of the music and, on another level, ensured that what 'keyboard action' there is in movements II and IV does not distract the listener from the ghostly rhythmic pulsing inside the chords by making wide leaps or disjunct gestures.

A story of balance between the decay-driven durational rhythmic language and a pulse-based organisation is played out across these two movements. In movement II the decay duration of the last chord of every line decides the ultimate length of each phrase. In contrast to this it is only the final chord of movement IV that is subject to a decay-controlled pacing. In this way movement IV is the most pure expression of the pulse

controlled rhythmic approach in the whole piece even though the physical means by which that pulse is established and maintained is the opposite to what is expected.

7.5 Small Scale Gestures and Techniques: Movement III - 'Decay-driven Phrase Length and Pacing'

Shimmering, Shifting Rhythmic Patterns

The outer sections of this movement explore arpeggio patterns that expand and contract across the registers of the piano as the tension and drama of the music ebbs and flows. Rhythmically speaking these sections employ a shifting technique whereby a pattern containing a certain number of notes is placed in a rhythmic framework containing a different number of units. The first pattern contains four pitches and is initially set in a rhythm that divides a quaver pulse into four parts:



Figure 7.3: First four-note cell in rhythmic context

The next four-note pattern is placed in a rhythmic context that divides the same pulse into five parts:

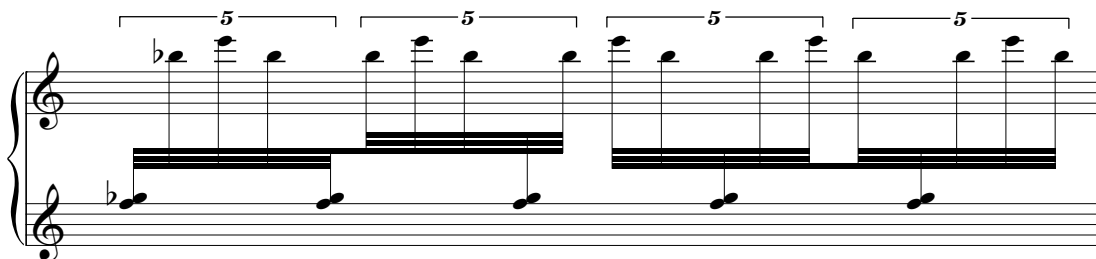


Figure 7.4: Second four-note cell in rhythmic context

This pitch and rhythm combination has a periodicity of ratio 5:4: the pitch pattern repeats five times and the rhythmic unit it is placed in repeats four times before the start of the two patterns coincide. Next comes a shift to a periodicity ratio of 5:6: i.e. a pattern of six notes set in the same quintuplet rhythmic division goes five times round

the set of six pitches, and six times round the set of five rhythmic iterations, before the start of the patterns coincide. Similarly at rehearsal letter A the same process occurs, this time starting with a pattern of three pitch events and three rhythmic events. Essentially both of these phrases undertake an *accelerando* of the surface texture and heighten the drama as each phrase progresses. Alongside this rhythmic process there is a general registral widening as each phrase progresses. Although this adds a dramatic physical virtuosity to the performance, the widening of an interval from, for example, a minor second to a minor ninth and then to a compound minor ninth has the effect of diluting its dissonance and tension-creating properties. The outer sections of this movement hold these expressive concerns and techniques in a delicate balance to create a shimmering texture with an ever-changing, ultimately evaporating surface.

At rehearsal letter B the 'boxed note emphasis' technique from the first movement returns. Here the issue at hand is the pacing of short phrases using the decay period of the boxed A note as a guide to the lengths of each gesture. The performer defines the relative lengths of each individual note or chord within each phrase or gesture by following a general principle of visual spacing on the page, a primitive time-space notation. Expressively, both of these juxtaposed materials reach for a feeling of weightlessness but approach it from differing durational principles. The rhythmic shifting of the outer sections subverts any attachment to an overt downbeat and sense of time signature whilst allowing an engagement with a pulse-based system of rhythmic organisation. In contrast to this the middle section uses the decay-driven principles first seen in movement I to evoke a fragile yet melodic melancholy.

7.6 Small Scale Gestures and Techniques: Movement V - 'Overtones, Natural Harmonics and Sympathetic Resonance'

The opening of this movement focuses on the resonance that is activated when a key is struck and attempts to retain this resonance without necessarily sustaining the C#2 pitch that activated the resonance. The main thread of the opening phrases focuses on differing colourations of C# as it moves through the registers from the 'ghost activator' C#2 to be transformed eventually into C#6 as a natural overtone of the fundamental D2. C#6 is the fifteenth partial of D2 and as such sounds twelve cents flat of equal

temperament. As the music progresses the relationship between this overtone and the keyboard's equally tempered C#6 forms the basis of a melody that begins to emerge from rehearsal letter A. This expands the harmonic content of the music and makes use of many other natural harmonics.

Quite often natural overtones bloom in sound slightly after their inception. In the middle sections of the movement, from rehearsal letter B, this feature is exploited with a succession of short pauses to allow the harmonics time to speak fully. These pauses, and the 'un-pianistic' dynamic shape formed by the crescendo of a sustained note, lend the melody a slightly halting feel and enhance its sense of broken lyricism.

In the final section of the work the idea of a 'broken melody' is expanded, as the threads that hold the melodic lines together are teased further and further apart in a texture made up of single pitches picked out over four silently prepared pitches. Each of the single pitches that make up the pointillistic melody of the upper voice produces a cloud of resonance by activating various overtones of the four silently prepared pitches. These overtones colour the equal temperament of the strike notes played on the keyboard lending this final section an evocative, hazy and ultimately distant beauty.

Prepared Pitch	Strike Notes (as overtones)									
	C5		D5		E5		F#5		G5	
	Partial	Cent Deviation	Partial	Cent Deviation	Partial	Cent Deviation	Partial	Cent Deviation	Partial	Cent Deviation
D3	7	-31	8	0			5	-14		
A2					6	+2			7	-31
G2			6	+2					8	0
D2	14	-31	4	0	9	+4	10	-14		

Figure 7.5: Overtones of silently prepared notes

7.7 Refracted Meditations III - Adaptation to the Guitar

In early 2018 I was asked at very short notice to play one of my 'new' compositions for guitar in a recital. I had not composed for the guitar as a solo instrument since 2011 and so I decided to arrange the first movement of *Like Trees in November* as a short guitar solo.

The resonance of open strings has a different feel and resonating colour from that of fretted notes on the guitar. In music primarily concerned with resonance this is an important practical consideration, as all notes on the piano are 'open strings'. To create this open-string resonance on the opening (written) A4 a capo is placed at fret II of the fingerboard. In the second half of the movement several open strings are needed, as well as natural harmonics with the open strings as fundamentals, and so this capo is removed at the end of the first page. On the third system of the second page in the piano version a low G3 (written pitch) is sustained below a high chord and two repeating cells. In the guitar's standard tuning written G3 is a fretted note and it is not possible to sustain it whilst reaching the higher chord. To avoid this problem I tuned the fifth string down a tone to G3 so that this pitch would resonate and sustain as an open string. It is a curious rule of thumb in guitar composition that one has to be very careful with thick textures: generally speaking the thickness of the texture is inversely proportional to the amount of resonance and legato sustain. The three layers of the bar in question seemed to detract from the resonance of the moment and so for the guitar version I condensed them to two layers by removing the top line and assigning its pitch to the rhythm of the second layer of the texture in natural harmonics.

Arranging or orchestrating one's own works gives a new perspective on the nature of musical material. It serves as a great reminder of the close relationship that must exist between the features of the material and the natural strengths and weaknesses of the instrument being written for. The lack of a sustain pedal and the shorter string lengths of the guitar make for shorter decay times and less overall resonance. This has the impact of compressing the music of this piece both rhythmically and gesturally. To compensate for the compression of the material I widened the timbral palette of the music to incorporate the muted sound of guitar 'pizzicato' technique on both normal notes and natural harmonics and the progressive muting or revealing of harmonics through my 'fake-pizzicato' technique whereby the plucking hand is either positioned slightly off the node of the desired harmonic and progressively moved on to the node or vice-versa.

8. ...on plain air...

8.1 Beginnings

Conceptual inspirations

The main conceptual concerns of this piece began to solidify after attending a rehearsal of the Improviso ensemble, listening to and watching some of their performances. The strength of their ensemble communication and the free-flowing nature of their improvisations, particularly using divisions on ground basses, fascinated me, as did the balance of sound and tuning between the instruments.

It became apparent that the ensemble was very skilled at creating an organic flow of upbeat and downbeat during improvisational passages. The harmonic rhythm of the bass lines clearly assisted this process and helped to articulate the flow of upbeat to downbeat, but I wondered if it would be possible to create a similarly improvised feeling of upbeat and downbeat in the much slower-moving harmonic world my music tends to occupy. I decided to try and explore the nature of this, and other, improvisatory passages in the following ways:

- Creating a scenario whereby an improvised upbeat can be followed by a composed downbeat.
- A composed upbeat leading to an improvised downbeat.
- Improvisatory gestures set against drones.

On a smaller scale I wanted to try and find ways to expand the level of communication between the players that I experienced when attending rehearsals. In my other works this has manifested as passages that require players to match their tuning to non-equally tempered pitches and I wanted to build on this level of aural ensemble interaction.

The relationship between the instruments in the ensemble's traditional repertoire also provided some of the inspiration for the piece. I wanted to manipulate the traditional

roles and hierarchy of the ensemble, especially when performing 'grounds', where the cello and theorbo always held the ground bass line and provided the harmonic context, whilst the melodic divisions and improvisations were given over to the higher melody instruments. I was determined that the cello and theorbo would play more than supporting roles in my piece and would at various points occupy the foreground of the texture, taking the lead in some passages of improvisation.

General Trends

Aside from the inspirations and related aims stated above a number of overriding trends and expressive concerns emerged during the compositional process:

- A desire to structurally activate the theorbo by the gradual widening of its range as the music progresses towards rehearsal letters F and G.
- A continued exploration of the apotheosis ending, a feature common to much of my music, by re-examining a particular harmony from *...but their stillness showed plainly...* and placing it into new rhythmic, gestural and registral contexts.

8.2 Large-scale form and structural relationships

Large Section	1	2	3	4
Rehearsal Letters	Start–E	E–G	G–N	N–End
Length (bars)	24	22 (inc. repeats)	21	15
Subsections	I(b.1), II(bb.2–10), III(bb.11–22), IV(bb.23+24)	V(bb.25–31), VI(bb.32–36)	VII(b.37), VIII(bb.38–40), IX(b.41), X(bb.42–51), XI(bb.52–57)	XII(bb.58–68), XIII(bb.69–72)
Contents	<ul style="list-style-type: none"> • Linear introduction • Two ‘upbeat/downbeat’ passages against drones • Vocal exploration • First instances of movement from horizontal towards vertical relationships between instruments 	<ul style="list-style-type: none"> • Theorbo occupies the foreground of the texture with a five chord cycle • Textural chaconne 	<ul style="list-style-type: none"> • Two kinds of time- ‘decaying time’ and ‘metred time’ • Exploration of equally tempered and natural harmonic drones • Theorbo cadenza 	<ul style="list-style-type: none"> • Pulsing, apothotic coda • Special ‘apotheosis’ harmony • Ornamental theorbo gestures
Improvisatory elements	<ul style="list-style-type: none"> • Pacing of introduction • Recorder creating upbeat to rehearsal letter B • Cello creates upbeat to letter D • Ordering of pitches at letter D • Supporting improvisatory fragments in upbeat creation phrases 	<ul style="list-style-type: none"> • Pacing and balance in textural chaconne • Addition of theorbo bass notes in textural chaconne 	<ul style="list-style-type: none"> • Many ‘ad lib.’ elements in ‘decaying time’ sections – e.g. vibrato, varied repetitions, dynamic swells • Exact pacing of theorbo gestures • Exact pacing of strings and recorder during ‘decaying time’ sections • Elements of ensemble tuning 	<ul style="list-style-type: none"> • Dynamic swelling • Pacing of changes of bow positions

Figure 8.1: Structural map

Above is a diagram of the main structural elements of the piece. The number of bars does not wholly indicate the relative lengths of the sections, or indeed the subsections contained therein: the improvisatory nature of some of the compositional materials means that to obtain a true picture of the structural proportions of the work one must compare the lengths of the main sections in minutes and seconds.

Section	1	2	3	4
Length in Bars	24	22 (including repeats)	21	15
Length in Minutes (approx.)	3:23	1:43	2:54	1:48
% of Total Duration	35%	17%	30%	18%

Figure 8.2: Structural proportions

This reveals a subtler and less linear structure than shown by the number of bars in each section.

8.3 Small-scale techniques and procedures

The elements of this piece that I have termed ‘improvisational’ range from free improvisation upon a given set of pitches or trigger motifs to the free control of the rhythmic pacing of events, to the control of only one or two musical characteristics. All of these musical scenarios were designed to accentuate the need for ensemble listening – this is the heart of the piece and the delicacy and intensity required and created by concentrated inter-ensemble listening is essential to the success of the expressive language of the music.

Section 1

At first the music seems assembled from nowhere as the ensemble ‘plucks it out of the air’. The use of freely paced grace notes in the notation is essential as the players are forced to place their gestures around those of the other players, at their own tempo, whilst ensuring that the compound gesture of the whole ensemble starts and finishes on time. The first drone pitch (B \flat) is introduced in the cello and is taken up by the recorder, at first vocally and then on the instrument in the conventional manner. During the course of subsection II the recorder expands its pitch content and begins to fashion melodic phrases against the cello drone. These phrases eventually become improvised and are intended to contain the most overtly melodic material of the piece. As with all of the improvisatory elements in this and my other pieces there must be a balance between freedom and constraint, a process of showing the performer the soul of the music through composed material before allowing the freedom of shaping the exact

content and gestural direction. On top of this, and almost more importantly, the timbral quality of the cello drone (fourteen cents flat of equal temperament as the fifth partial of the G string) and the interactive and responsive nature of the support provided by the violin give the essential expressive context for the recorder player to work from.

The essential structural function of this improvised passage (bb.9–10) is to create an organic upbeat to the more through-composed downbeat of b.11. As this downbeat subsides the next drone pitch (B \flat) is revealed. Another passage of ‘improvised upbeat’ leading to ‘semi-composed downbeat’ makes up the content of bb.19–22. The nature of the material given to the cello for improvisation in this subsection is less overtly melodic and more gestural in nature than that previously given to the recorder. This avoids creating too definite a trajectory in the improvised materials, as a cycle of ‘melodic improvisation’ leading to ‘composed, textural downbeat’ would very quickly become predictable and unsatisfying for both players and audiences. In works of this kind the balance of freedom and constraint is not only key for the players but should also enhance the listening experience for the audience. Their preconceptions about what ‘improvised materials’ sound like and their perceptions of what is improvised and what is composed can be wrong-footed as part of an intricate and mysterious sound world.

In these opening subsections the theorbo occupies a very high register and its material is entirely linear in nature, with no hint of the natural over-ringing, or ‘campanella’ style, that the instrument achieves so effortlessly. The first ‘downbeat’ of the work at rehearsal letter B allows the theorbo to widen its range somewhat, introduce a new pitch element (G \sharp) and take an active role in the music by freely varying its figuration. Similarly the theorbo plays no role in the upbeat phases leading to rehearsal letter D but, again, over the course of bb.23–24 widens its range, expands the pitch content of the music and, critical to the structural narrative of the music, firmly moves to occupy the foreground of the texture at rehearsal letter E. The use of voices in subsection IV is worthy of special attention. The way in which the music moves into the voices undercover of the second violin, cello and theorbo, is an attempt to create an unexpected moment of sudden sonic shift without altering the thickness or essential

content of the texture. It is a ‘timbral sidestep’ and when the instruments cut away at the end of b.23 an ethereal residue is left behind.

Section 2

The main pitch material of this section is a series of five chords and their associated registrations and voicings.



Figure 8.3: Theorbo chords for section 2

The image shows a musical score for four instruments: A. Rec., Vln., Vlc., and Tho. The score consists of five measures. The A. Rec. staff has notes G4, Bb4, D5, (G)4, and D5. The Vln. staff has notes G4, D5, G4, D5, and G4. The Vlc. staff has notes G2, D3, G2, D3, and G2, with an 8va marking above the second measure. The Tho. staff has chords in G major and D minor as described in Figure 8.3.

Figure 8.4: Chord voicings for ‘Textural Chaconne’

The theorbo takes a central role in underpinning this section. Its range widens further during subsection V and its gestures become progressively more vertical in nature. They are a composed recollection of traditional chordal decorations and grow naturally from the gesture that completes b.24. The other instruments also coalesce as the music progresses in this section. At first their entries are staggered but there is a trend towards each entry sparking the next in closer proximity as time passes until the vertical alignment of rehearsal letter F is achieved.

Textural Chaconne (subsection VI)

In many ways subsection VI forms the heart of the piece. Like a small-scale, very delicate, version of the opening section's 'upbeat/downbeat' concept this is music bordering on stasis. In this passage the players themselves create movement, both harmonic and rhythmic, as they listen and respond to each other. The slightly timid 'moving ahead' and 'catching up' promoted by the lack of visual cues and the need for intense listening and concentration creates an 'actively-static' feeling of beauty and fragility. At the centre of this feeling lie the wider spaced voicings of the harmonies, the way in which string parts cross over the recorder register so that none of the 'melody' instruments (and especially not the recorder) dominate the top line of the texture. This 'textural chaconne' is also the subsection of the work with the greatest amount of harmonic change: in effect it has the fastest harmonic rhythm of the whole piece, and yet it is the most gesturally static; the paradoxical nature of this passage goes a long way towards defining its expressive character.

Section 3

Two ways of controlling the progress of the music and the individual durations of notes and chords form the backbone of this section:

- 'Decaying time' – this is controlled by the decay rate of harmonic gestures played by the theorbo such as those in subsections VII and IX. Above this 'textural glue' the other instruments place drones and fragments with improvisatory features. The players themselves derive the exact durations and rhythms of the recorder and strings by listening to the decaying theorbo chords and responding accordingly.
- 'Metred time' – rhythmic continuity is metred in the standard way and these subsections (VIII, X, XI) are largely defined by linear interplay between the recorder and strings with the theorbo largely absent or contributing linear campanella gestures. In these sections the music slides, by way of pitch-bending

on the recorder, between equally tempered drones and those performed as natural harmonics by the strings.

The vertical coalescence of the 'textural chaconne' evaporates in section 3 as the occurrence of chords vertical diminishes and is replaced by spread, or rolled, harmonic gestures in the theorbo. The rate of harmonic change is also slowed in this section and textural surface of the music moves towards recalling the 'drone and linear gesture' discourse seen in section 1.

The harmonic material for section 3 is derived from two main sonorities, harmonic focus is provided by a shifting series of drones.



Subsection	VII	VIII	IX	X	XI
Rehearsal Letter(s)	G-H	H-I	I-J	J-L	L-N
Type of time	Decaying	Metred	Decaying	Metred	Metred
Sonority	Chord 1 (initial theorbo voicing): 	(Chord 1)	Chord 1	Chord 1 → 2	Chord 2 (theorbo cadenza voicing): 
Drone focus	F# (violin)	F# → F	F (recorder moving to cello)	F (violin) → F (cello)/E (recorder)	E (theorbo)
Notes		Linear transition subsection.		Theorbo introduces E as natural harmonics. Chord 2 sonority introduced in violin.	Theorbo cadenza (letter L) on chord 2 eventually settling onto E pulsing drone.

Figure 8.5: Section 3 harmonic materials

When considered together the contours of sections 1–3 display the underlying structural processes of the work. The contraction of chordal events and the increasing harmonic rhythm in the lead up to rehearsal letter F ('textural chaconne') function as a kind of 'anti-crescendo' where the music intensifies in content but not in surface gesture, thus allowing the music to subtly shift in colour without 'breaking its own

spell'. The paradoxical 'textural chaconne' forms the heart of the work, after which the harmonic rhythm slows and the instances of vertical chordal harmonies spread out as the music moves towards rehearsal letter N.

Section 4

Like the beginning of the 'textural chaconne' at rehearsal letter F, the coalescence of the ensemble at b.58 is one of the few moments of ensemble unison in the work. Structurally this unison is very significant as it marks the start of the final section; an apotheotic coda that explores a transposed version of the 'apotheosis harmony' first defined in *...but their stillness showed plainly...*

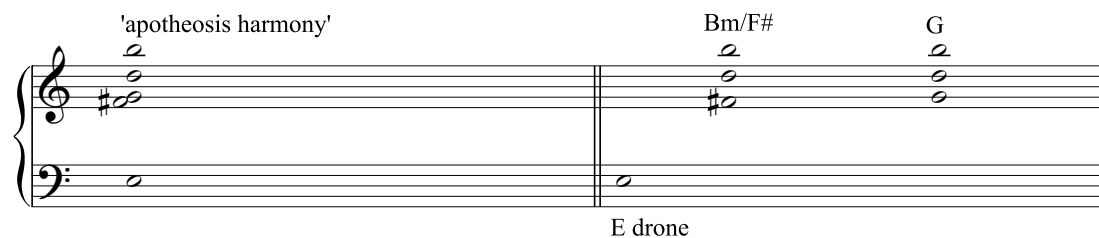


Figure 8.6: Transposed apotheosis harmony

There are several techniques that define the texture and instrumental colour of this final section:

- Tremolo (strings and theorbo). Unmeasured and slightly fragile, especially when between a natural harmonic and an open string (e.g. violin, b.64)
- Variations of bow position and pressure – e.g. cello, b.67.
- 'Dynamic pulsing' (e.g. strings and recorder bb.58–9) – this is an attempt to evoke an 'un-articulated rhythm', to create a concentrated breathing of the ensemble. This heightens the 'togetherness' of the ensemble at this structurally significant moment. It allows the unison to be reinforced without altering its understated nature. This is a not a dramatic, extrovert unison and the gentle pulsing ensures that the music does not 'break its own spell' by become too overt and extrovert.

Many of these are largely absent from the rest of the piece to ensure that the final section retains a slightly different colour from the rest of the work in terms of orchestration and timbral and textural colour. As this section progresses the 'dynamic pulsing' unison becomes unsynchronised as the players are given control of their pulse rates. Pulsing in unison is re-established at rehearsal letter O for the final subsection of the piece.

During section 4 the theorbo begins by articulating the pitch E – the link between the 'apotheosis harmony' and preceding section. As the section progresses the theorbo explores many short campanella gestures based on the pitches of F# and G. These are an attempt to compose some 'ornament-like' gestures loosely based on appoggiaturas, trills, mordents and acciaccaturas. These gestures also explore the variations in colour attainable by playing the same notes on different strings of the theorbo and articulating the rhythms in a variety of ways, such as slurring with the left hand alone, plucking with the right hand, combinations of these two articulations and controlling the amount of 'over-ringing' between the strings: see the theorbo in bb.61–62 and bb.69–72.

9. ...to the same failing light...

9.1 Beginnings

The initial impetus for this work came from an invitation to attend the 2018 Composers+ Summer Academy in Drushkinikai, Lithuania. For this festival I was asked to compose two works, one for solo accordion and the other for accordion with string quartet.

I had written for accordion in my work for the 2017 Thornham Summer Festival, *At the edge of his dreams...*, and wanted to expand on the materials I produced for that piece. During the composition of *At the edge of his dreams...* I had become fascinated with the accordion's potential to produce seemingly endless phrases and its textural capabilities. I had also been impressed by the seamless way in which the accordion could introduce, or eliminate, notes from a sonority, without undue variation in articulation or sonic weight, and yet also maintaining absolute control of the dynamic level.

From the beginning of the compositional process for *...to the same failing light...* I decided to consider the two works as related harmonically and aesthetically: they would share the same basic material and explore similar expressive territory, like viewing the same image from different perspectives. In Lithuania they were to be treated as separate pieces for performing and recording purposes and as such they also had to stand alone as independent musical discourses.

9.2 I ...the space that lies between them...

The inspiration for the solo accordion movement of the work came from the following passage in *At the edge of his dreams...*

Figure 9.1 shows a musical score for an accordion. It consists of four systems of staves. The first system is labeled 'Accordion' and shows two staves with notes and dynamics *p* and *f*. The second system starts at measure 3 and includes dynamics *p sub*, *ff*, *ppp sub*, *pp*, *ff*, and *pp sub*. The third system starts at measure 6 and includes dynamics *p* and *mf*. The fourth system starts at measure 9 and includes dynamic *p*. The score uses various musical notations including slurs, accents, and dynamic markings.

Figure 9.1: Source material from *At the edge of his dreams...*

I took the harmonic content of this passage and expanded it to create three harmonic centres for my new work.

Figure 9.2 shows a single staff of music in bass clef. It contains five notes: B-flat, G, E-flat, D, and C. The notes are connected by a slur, indicating a harmonic area.

Figure 9.2: Harmonic area 1

Figure 9.3 shows a single staff of music in bass clef. It contains five notes: G, B-flat, D-sharp, E, and G. The notes are connected by a slur, indicating a harmonic area.

Figure 9.3: Harmonic area 2

Figure 9.4 shows a single staff of music in bass clef. It contains five notes: G, B-flat, D, E, and F-sharp. The notes are connected by a slur, indicating a harmonic area.

Figure 9.4: Harmonic area 3

The common intervallic threads running through these three areas (primarily the minor ninth, the semitone, the tone and secondarily major and minor thirds, perfect fourths and major and minor sixths) provided the harmonic framework of the music and progress through these areas structures the movement.

Section	1	2	3	4	5
Bar numbers	bb.1-11	bb.12-25	bb.25-35	bb.35-47	b.47-end
Harmonic area		1	1 (+B \sharp)	2	3
Features	Established importance of the pitch A. Fashions the first melodic phrase	Ninths established. Second melodic phrase pushes up to new high point (D \flat 4)		Player choice element.	Final melodic phrase descending to new low point (A2).
Linking pitch			B \flat	B \flat /B \sharp	C

Figure 9.5: Movement I structural plan

These harmonic areas each occupy a relatively compact pitch space and lie very close to each other in register. This allowed me to explore the density of sound possible when both hands of the accordion play in a very confined pitch space (something that is physically more difficult on other keyboard instruments). Much like my archetype phrase from *At the edge of his dreams...* I wanted to make as much use of the bellows as possible and the extremely detailed control of dynamic that they afford without unduly altering the balance of a chord or texture, as the primary method of articulating the music. As such, I viewed the texture of the main body of *...the space that lies between them...* as a kind of ‘stuck’ counterpoint. The voices enter as though they will continue independent melodic lives, only to become frozen in a suspended animation of textural development via the bellows of the accordion: for notable examples see passages starting at b.15, 26 and 37.

The opening section of this movement (bb.1-11) explores a single voice and eventually fashions a rising melodic phrase, descending echoes of which permeate the rest of the

movement, whilst exploring two kinds of ‘attackless emphasis’ created by manipulation of the bellows. These articulatory techniques show the central concern of this music – how not to break the line or phrase and how to evoke a limitless bellow length or ‘breath’ for each phrase.

9.3 IV *...to the same failing light...*

Having established the main expressive agenda of the piece in the opening movement, questions of incorporating the strings, extending my articulatory preoccupations, and reworking the existing harmonic material into something ‘differently similar’, came to the fore.

In this movement two of the central tenets of the first movement were altered as follows:

1. Small tessitura and close voicing of harmonies

became

- 1a. Large tessitura and open spacing of harmonies

and

2. ‘Stuck, floating counterpoint’ texture

became

- 2a. Vertical chordal harmonies

The opening bars of this movement show both of these textural and registral changes with a widely spaced chord utilising the pitches of harmonic area 2 defined above.

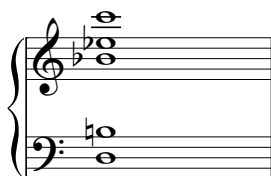


Figure 9.6: Movement IV, chord 1

A variety of different voicings of this chord form the backbone of this movement. Very early in the compositional process I realised that these differing voicings, and the movement of the pitch C through the registers from the top to the bottom of this critical harmony, were at the heart of the music. Underpinning this process is the consistent register of the pitch D.

The image shows five different voicings of a chord, labeled Chord 1 V1 through Chord 1 V3. Each voicing is presented on a grand staff (treble and bass clefs). The notes are: Chord 1 V1 (F4, C5, G4, C5, F4, C5), Chord 1 V2 (F4, C5, G4, C5, F4, C5), Chord 1 V2a (F4, C5, G4, C5, F4, C5), Chord 1 V2b (F4, C5, G4, C5, F4, C5), and Chord 1 V3 (F4, C5, G4, C5, F4, C5). The notes are arranged in a way that shows the movement of the pitch C through the registers from the top to the bottom of this critical harmony.

Figure 9.7: Voicings of 'chord 1'

It is also important to note the way in which these pitches are assigned to the string instruments. I had a strong desire to subvert the traditional hierarchy of the string quartet psyche, both in terms of register and textural 'importance'. For large sections of this movement it is the viola that provides the bass and very often the cello occupies the highest range of the music, with the traditionally dominant violins providing the middle registers. This orchestration, and variations upon it, gives the music a more translucent quality; an ethereal glow that is both luminous and rather fragile, especially when the timbre of the many natural harmonics employed in the strings is taken into account.

The image shows the orchestration of two versions of 'chord 1' for a string quartet. The first version, Chord 1 V1, is played by Violin I and Violin II. The second version, Chord 1 V3 (ending version), is played by Violin I, Violin II, Viola, and Violoncello. The notes are: Chord 1 V1 (F4, C5, G4, C5, F4, C5), Chord 1 V3 (ending version) (F4, C5, G4, C5, F4, C5). The notes are arranged in a way that shows the movement of the pitch C through the registers from the top to the bottom of this critical harmony.

Figure 9.8: Orchestration of two versions of 'chord 1'

The relationship between the accordion and the strings

I was determined to establish a symbiosis between the strings and the accordion and avoid a soloist/accompanist relationship. To this end the accordion often provides much of the texture in this movement as pitches migrate from one string instrument to another via the accordion. A good example of this is the way in which 'Chord 1' is incrementally subsumed by the accordion from the beginning until b.12 where this harmony evaporates from the accordion to leave only the high C in the cello and accordion; this in turn passes to the first violin before rehearsal letter B. One of the few solo accordion passages leads to another of these 'symbiotic', dovetailed moments: the 'textural tremolo' at rehearsal letter F crescendos to a sudden halt in b.49 leaving behind a high, ghostly 'residue' in the strings.

The image shows a musical score snippet for two staves. The top staff is a treble clef with a key signature of one sharp (F#). The bottom staff is a bass clef with a key signature of one flat (Bb). The first measure is labeled 'accordion chord' and contains a chord of F#4 and Bb2. The second measure is labeled 'string residue' and contains a high C4 note in the treble clef and a low C2 note in the bass clef, both marked with a fermata. Above the second measure, there is a small diagram of a string instrument with a sharp sign above the first string and a flat sign above the second string, indicating the pitch of the 'residue'.

Figure 9.9: String 'residue'

As with many of my works this piece attempts to integrate an element of 'performer listening' into the music. Between rehearsal letter G and b.61 the second violin colours the pitch B with varying intensities of vibrato. At first these are indicated in the score before becoming controlled by the performer at b.57. During this passage the accordion player is asked to respond to the shape and intensity of the second violin vibrato by varying the dynamic of the D bass drone. In this way the symbiosis between the accordion and the rest of the ensemble is enhanced.

Developing the relationship between the accordion and strings often involved considering how best to articulate and orchestrate the string parts in order to blend, balance and dovetail most effectively with the accordion. I had found an altered pizzicato technique (rehearsal letter H) that allowed the final version of 'Chord 1' to be articulated in such a way as to provide the apothecic ending that appears in many of

my works. The 'attackless emphasis' techniques utilised in the opening phrases of *...the space that lies between them...* allowed me to find a way of looking at the relationship between the instruments from the other side and incorporating the accordion into the pizzicato texture by again using the bellows to provide all of the articulation – this time by means of a modified 'bellows shake' technique.

Structure and form

Early in the composition process for this movement I had designed the voicings of 'Chord 1' (see above) and crudely linked them together for a preliminary rehearsal. I was pleased with the results on a textural level but it was clear that other harmonic material was needed to create a convincing musical discourse. Referring back to the first movement of the piece I recalled the way in which single pitches provided links and 'wormholes' between the different sections and harmonics areas of the music. In an attempt to expand on this technique I made a Venn diagram of the three harmonic areas to show the potential pitch linkages between them.

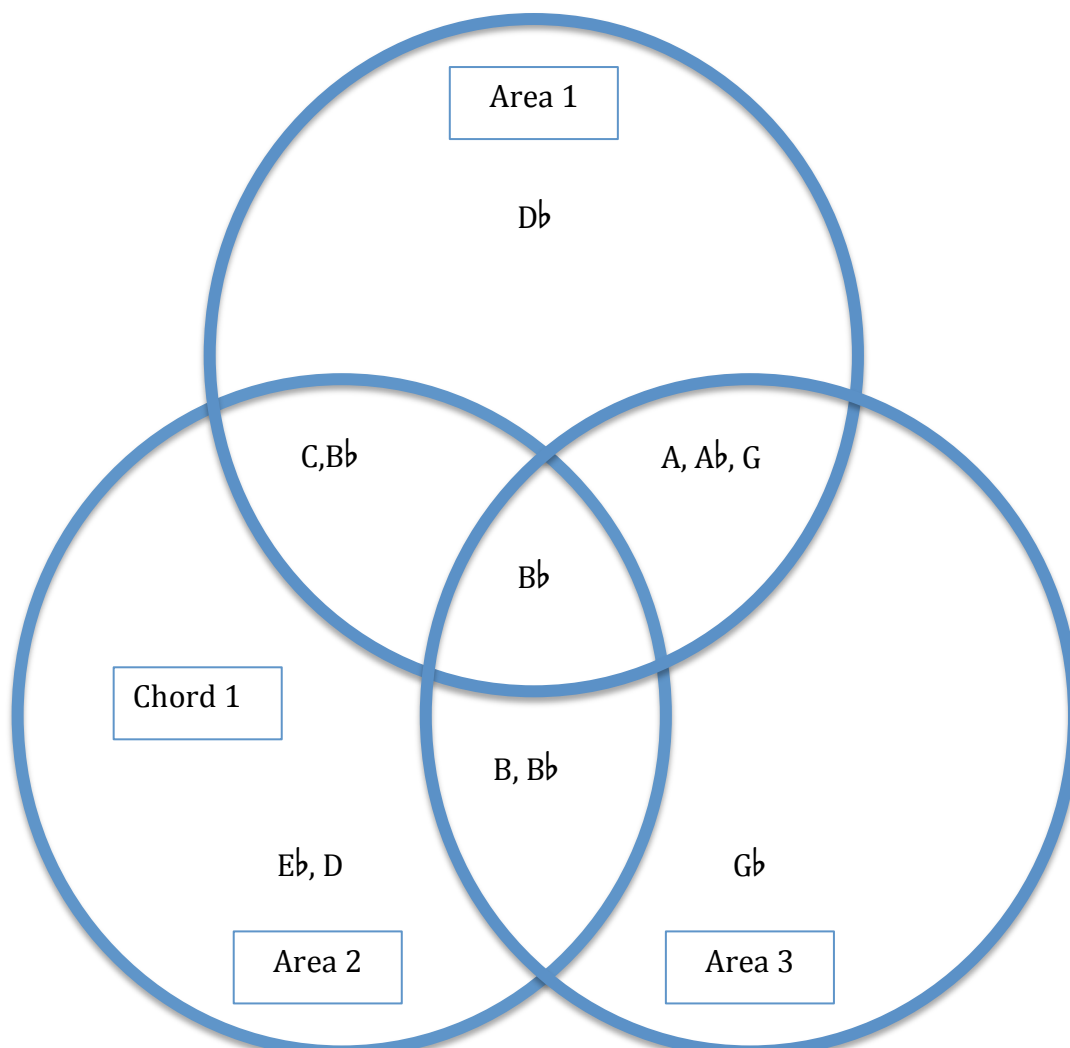


Figure 9.10: Harmonic Venn diagram

Having established the common pitches and cross linkages between the harmonic areas I was able to explore structural possibilities and discover a satisfying formal contour.

Section	1	2	3	4	5
Bar numbers	bb.1-16	bb.17-32	bb.33-42	bb.43-53	bb.54-68
Length (bars)	16	16	10	11	15
Harmonic area	1	2	1	3	1
Linking pitch	C		Bb	B	B
'Chord 1' version	V1		V2 + V2a		V2b +3
Features	Chordal texture. Absorption of string pitches by accordion.	New high point (Db6). Vibrato in accordion. More linear and <i>Klangfarbenmelodie</i> texture.		Accordion 'textural tremolo'.	Vln II and Acc. communication. Pizzicato apotheosis ending.

Figure 9.11: Movement IV structural map

9.4 ...touchless as they sleepwalk... - II, III and macro-architecture

Movements I and IV were rehearsed, performed and recorded in Lithuania before the end of the Composers+ Summer Academy. Upon my return to the UK I wanted to expand on the links between these two movements and decided to compose two more movements that would introduce the strings and formalise the whole work into a four-movement concert suite.

II ...touchless as they sleepwalk...(I)

At the end of the solo accordion movement the player is instructed to 'fall off the end of the glissando', starting on B4. In practice the size of this glissando depends on the

performer and the instrument being used but in almost all cases at least a semitone can be achieved. To dovetail with this glissando I decided that the second movement of the work should begin on B \flat 4. A duo of violins was chosen for this movement as their timbral homogeneity could naturally lead the listener from the sonority of the solo accordion into a musical landscape containing the more overtly expressive sounds of bowed strings. To this end the violinists are instructed to play *senza vibrato* at the start of the second movement to mimic the more static voice of the accordion, with the first hint of 'violin-ness' being the vibrato used in violin I at the end of b.6. To perpetuate the illusion of there still only being one instrument playing, the first and second violins often cross each other registrally in the opening phrases of this second movement. Initially the second violin is above the first, but by the end of the first phrase (b.6) it is the first violin that has taken the higher register; this process happens many times during this movement and enhances the amorphous qualities of the two-violin texture. This movement also introduces the concept of the string instruments playing in unusual registers, an idea that is explored more fully in the fourth movement, as a more traditional instrumentation for this movement would be violin and viola.

To further enhance the links between the first and second movements the first phrase of the second movement (bb.1–7) is based on the right hand of bb.25–6 of the first movement and the second phrase of the second movement (bb.8–13) is based on the left hand of bb.26–29 of the first movement. Gesturally this movement follows the 'stuck counterpoint' model of the first movement and so does not move the music towards the vertical chordal textures heard in the fourth movement. It does, however, expand the tessitura of the work by moving from its starting point of B \flat 4 to B5 and it is this new high point that provides the link to the third movement of the piece.

III ...touchless as they sleepwalk...(II)

This movement also relies on unconventional registral organisation to colour its harmonic sonorities. With the viola entry in b.6 a new high pitch is reached (A \flat 6) and the violin is again found to be occupying the lowest register of the harmony. The viola pushes the music up again in b.7 with another new high point of B \flat 6 with the violin still playing the bass. During these first two phrases of this movement (bb.1–6 and bb.7–11)

the process of passing pitches from one instrument to another by means of dovetailing is established in preparation for the final movement. The B \sharp that joins the third movement to its predecessor is passed into the cello in b.1 and the viola A \flat in b.3 is passed into the cello in b.6.

The third movement also moves the texture towards vertical chordal events in preparation for the final movement. In b.9 the dynamic swell of the viola and cello is vertically coordinated, the first hint of a vertical event in the two string movements. In b.10 the violin joins this swelling as the vertical 'togetherness' hinted at in the previous bar becomes more overt. The downbeat of b.12 is the first vertical chordal 'attack' of the whole work. It is an important chord both in terms of its pitch content and its registral organisation. The viola pushes up yet again to a new high point of B \flat , the cello has moved to the bottom of the chord for this first time and sounds the pitch C (a pitch that is so important in the fourth movement) for the first time in the third movement. The violin is perfectly positioned for the start of the fourth movement as it is playing its starting pitch in the correct register. If we compare the final chord of the third movement with the first chord of the last movement we can see that the viola and the cello, despite already having at least some of their pitch content in place, are at opposite ends of the chords in terms of register.



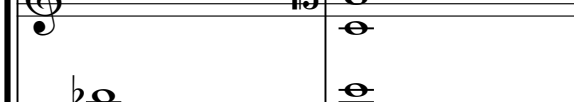

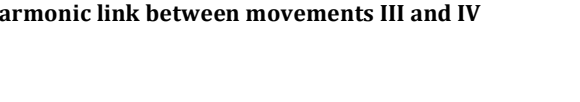
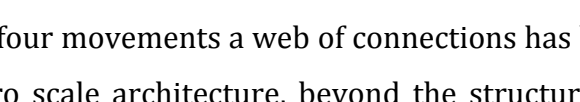
	Mvt. III final chord	Chord 1 V1
Violin II		
Viola		
Violoncello		

Figure 9.12: Harmonic link between movements III and IV

Across the four movements a web of connections has been established that articulates a super-macro scale architecture, beyond the structuring of the individual movements, and that binds the music together.

Movement	I	II	III	IV
Connection		Attacca	Attacca	Break
Linking pitch	B \flat	B	B \flat , B, C	
Texture	'Stuck counterpoint' in close voicings.	'Stuck counterpoint' with widening register.	Emerging verticalisation, further widening of register.	Wide spaced vertical chord sonorities.

Figure 9.13: *...to the same failing light...* multi-movement macro-form

10. ...with magic in my eyes...

10.1 Commission and Beginnings

In 2015 I travelled to Tianjin, China to perform a solo recital and give a masterclass in the Tianjin May Festival. My host was the composer and conductor George Holloway, Dean of Composition at the Tianjin Conservatory at the time. On my final day I went to watch George rehearse the children's choir he was conducting at Tianjin's Grand Theatre. Late in 2018 George commissioned me to write a piece for his own children's choir for a premiere in Tianjin and their subsequent tour of the UK. I had previously composed for children and amateur musicians in some instrumental works in 2011 and 2013 but I had not composed for voices since 2009 and so relished the opportunity of combining these two challenges.

Text Selection

I was writing for children and, given the time constraints of the project, there was not enough time to learn to set Mandarin Chinese, so they would be singing in English, their second language. My piece was to be sung on the choir's trip to the UK and for many members of the choir it would be their first time visiting the country, so I wanted to find a text that was in some way quintessentially English and told a story about, or referred to, some kind of English folklore or myth. When I was young I was extremely fond of the Arthurian legends and having considered several poems retelling many of these classic stories I settled on the following poem by Thomas Hardy (1840–1928):

When I set out for Lyonesse,
A hundred miles away,
The rime was on the spray,
And starlight lit my lonesomeness
When I set out for Lyonesse
A hundred miles away.

What would bechance at Lyonesse
While I should sojourn there
No prophet durst declare,
Nor did the wisest wizard guess
What would bechance at Lyonesse
While I should sojourn there.

When I came back from Lyonesse
With magic in my eyes,
All marked with mute surmise
My radiance rare and fathomless,
When I came back from Lyonesse
With magic in my eyes!

Hardy is a deeply English poet and in this poem he captures the magical feeling of the mythical county of Lyonesse. On a practical level this poem was very suitable for the project. All of the stanzas are the same length and there is quite a lot of repetition between the stanzas in structure and within lines. Looking deeper, the syllabic structure of every stanza is the same, with the lines being 8, 6, 6, 8, 8, 6 syllables in length respectively:

When I set out for Lyonesse, (8)
A hundred miles away, (6)
The rime was on the spray, (6)
And starlight lit my lonesomeness (8)
When I set out for Lyonesse (8)
A hundred miles away. (6)

This repetitive structure aids learning and textural familiarity. My previous experience of vocal writing taught me that it is best to work with the minimum amount of text possible for the length of composition in order to aid word learning. Lines or whole stanzas can be repeated or varied with different vocal textures or differing accompaniments to provide musical interest, reiterate the meaning of the text and

streamline the learning process. This ‘economy of text’ would become even more important when writing for children in their second language and this was a point that George was keen to reiterate during our discussions.

10.2 Macro-form and Structural Features

Section	1	2	3	4	5	6	7
Type	Vocal 1	Transition 1	Vocal 2	Transition 2	Vocal 3	Transition 3	Vocal 4
Length in bars	17(bb.1-17)	2(bb.17-19)	25(bb.19-44)	5(bb.45-50)	22(bb.50-72)	7(bb.73-80)	15(bb.81-96)
Text content	Stanza 1		Stanza 1		Stanza 2		Stanza 3
Staging Position	1 → 2 (fluid)	2 (fixed)	2 (fixed)	→ 3	3	→ 4	4
Musical features	Hummed drones. Single soprano soloist ‘intones’ the first stanza.	Piano solo with descending top line and expanding intervallic content.	‘Weightless’ chords in the piano. Vocal texture moves from single line to first instances of two-part texture.	Piano solo expanding material from ‘transition 1’.	Two-part setting of stanza 2. Melody and accompaniment texture.	More expansive development of ‘transition’ material.	‘Magic’ apothecic harmony explored with vowel sounds and melismatic decoration. Three narrators speak the text of stanza 3.

Figure 10.1: Structural map

The relationship between the lengths of the vocal and transition sections is interesting and provides much of the dramatic contour of the piece. The vocal sections expand and then contract whilst the transition sections only expand. This prevents the vocal sections feeling static or stuck: although each stanza is the same length, with exactly the same number of syllables, the varying texture and vocal setting allows the length of each stanza to vary musically and create a satisfying expressive structure. The linear growth of the transition sections is also important as they smoothly introduce new intervallic and textural content, each vocal section becoming more and more different from the preceding one. These transition sections all develop similar material and provide a unified character that belies their function as ‘introducers’ of new material as the content and dramatic character of each vocal section become more disparate.

10.3 Small-scale Techniques and Procedures

Word setting and vocal writing

I wanted a variety of vocal writing styles and word setting techniques to give the children in the choir a varied and interesting experience. George was also keen to give some more prominent roles to some of his strongest students. I decided to use a single soprano soloist at some points in the piece and a group of narrators at other points. Since the strongest member of the choir would sing the soloist role I decided to give them the most challenging material texturally, dramatically and in terms of 'singability'. The rhythmic content and the progression through the text are partly controlled by the dramatic sensibility of the soloist and thus require an expressive maturity. In terms of pitch content, the slides either side of the hummed drones held by the tutti sopranos and altos need a secure voice to perform convincingly.

Generally speaking, throughout sections three, five and seven the movement of the vocal line is by step to aid practicality. A notable exception occurs in section 5 where a leap of a tritone (see bb.52–53 for the first instance) shapes the line more expressively, emphasises the word 'Lyonnesse', and helps create the languid, mysterious and almost Satie-like harmonic world. The density of the vocal lines also increases across the four vocal sections. In section 7 this process reaches its climax with the division of the altos into three parts. As the highest and lowest parts explore single vowel sounds and outline the main harmony of the section the middle alto part performs various melismas on the line 'with magic in my eyes'. As this section progresses the complexity of these melodic decorations decreases and the textual content is thinned until only the word 'magic' remains. This word is then itself disintegrated in the final phrase of the piece, creating a magical and mysterious ending.

Harmonic and rhythmic processes

The B hummed by the sopranos and altos, articulated by the piano and struck by the Japanese rin, is the central pitch of the whole piece and all of the melodic and harmonic material is grown from this note. In section 1 it is used to create a drone in the tutti

voices that is punctuated by the piano and percussion and the solo soprano line is defined in relation to this drone. The harmonic material of section 3 is grown from this B pitch and is made up of what I have termed ‘weightless’ chords. These are harmonic clusters of alphabetically consecutive notes arranged in certain intervallic spacings to create a feeling of non-centred harmonic suspension. Within these chords any of the notes could be the ‘tonic’ of the chord and it is the vocal line that define the harmonic centre of each chord.

The image shows a musical score for Soprano and Piano. The Soprano part is on a single staff with a treble clef. The Piano part is on two staves (treble and bass clefs) with a brace on the left. Measure 19 shows the Soprano with a single note (B) and the Piano with a cluster of three notes (B, C, D). Measure 37 shows the Soprano with a single note (G) and the Piano with a cluster of three notes (G, A, B). The notes in the piano part are arranged in a specific intervallic spacing, creating a non-centred harmonic suspension.

Figure 10.2: ‘Weightless’ chords

In the above example the voice defines the ‘tonic’ of the first chord as B, the bass notes of the chord, and in the second example, a later instance of the same harmonic content, the ‘tonic’ is defined as G, the middle note of the chord. It is the way in which these chords are harmonically ambiguous and slightly amorphous, until the voice lends them clarity, that makes for the weightless and floating feeling of section 3.

Section 5 is in many ways the most conventional in the piece, particularly in terms of texture. It has a regular accompaniment pattern in the piano and simple, melodic, two-part writing for the voices. Similarly the harmonic content is, on the surface at least, also the most conventional: there are chord progressions that repeat and are varied and developed. Beneath this simple and traditional façade I have tried to evoke and incorporate the spirit of Erik Satie. I admire Satie’s music for its clever use of diatonic chords and its languid expressive mystery. One of the first steps in defining the harmony of section 5 was to take a standard classical chord progression and find a way to make it weightless.

ii – V – i

Could become

V – ii – omit tonic

Or

V – ii – VI

Or

ii – V – iv

Similarly

VI – iv – V – i

Could become

VI – iv – V – iv

In these progressions the dominant–tonic relationship is sidestepped or subverted to avoid the establishment of the clear and unambiguous tonal centre of e minor until the very end of the section at b.72. Consider the following chord progressions.

V ii

What would bechance at Lyonnesse

V ii

While I should sojourn there

VI iv
 No prophet durst declare

V iv
 Nor did the wisest wizard guess

V ii
 What would bechance at Lyonnesse

iv I
 While I should sojourn there.

Beyond this the chords themselves are inverted and extended to further colour the harmonic water and confound the listener's sense of tonal centre. Compare a standard voicing of each chord on the left of the following diagram with the versions of each chord used in the piece.

Chord ii

Chord iv

Chord V7

Chord VI

Figure 10.3: Adaptations to functionally tonal chords

The adaptation of chord V⁷ is possibly the most extreme as the addition of a thirteenth and inverting it to the third inversion creates a real subversion of its dominant properties. The vocal line does much to enhance this functional sidestepping by leaping up a tri-tone at the beginning of b.53 and landing on a D[♯] (not part of the prevailing ii harmony) before falling down to a C[♯]. Similarly the vocal line leaping up to an E at b.59 highlights the use of chord VI in place of the tonic chord as the tonic pitch E is 'mis-harmonised'.

Alongside these harmonic principles, section 5 also employs some rhythmic procedures designed to enhance the discourse beyond its seemingly traditional surface. The accompaniment pattern introduced by the altos in b.52 and established by the piano in b.53 is very simple in its construction, but by shifting the time signature it is possible to 'wrong-foot' the listener as to the location of the downbeat. The passage from bb.54–b.57 shows this most clearly. This is similar to an overarching interest in manipulating the iambic metre of Hardy's poem. In section 1 the soloist is guided towards giving the first syllable of the first line the stress, thereby subverting the iambic metre and superimposing a trochaic stress pattern. Section 3, which has the same text, contrasts this by giving the stress to the second syllable and reverting to an iambic stress pattern.

It is worth noting that the harmonies of section 7 are made up almost exclusively of my special apotheotic harmony transposed into G major, the relative major of the, subverted, tonic key of section 5.

Transition sections

One of the principal functions of the transition sections is to expand the harmonic content of the music. In section 1 the predominant intervals are unisons, octaves and semitones. The first transition section (section 2) slowly transforms these unisons and octaves into minor sevenths whilst maintaining a drone on B in the bass. Indeed all of the transition sections (sections 2,4 and 6) function in this way, although the time it takes for each transition section to move from octaves to minor sevenths, and other intervals, gets progressively shorter. The variety of these other intervals increases as the piece progresses and one of the most important harmonic functions of section 6 is to

introduce the interval of the major sixth, a critical interval in the three part alto writing of section 7. One of the ways that the transitions introduce new harmonic material is through the descending movement of the piano's top line in preparation for the next section.

Section	2	4	6
Top Line Movement (general trend)	B6 → A6 → G5	B6 → A5 → G5 → F#5 → E5	F#6 → E6 → D6 → C6 → B6 → A5 ...D4
Intervallic content	Octaves, minor sevenths	Octaves, minor sevenths, major sevenths	Major seventh, minor ninths, major sevenths, major sixths, perfect fifths

Figure 10.4: Harmonic and registral trends in transitions sections

In terms of rhythmic content the transition sections are built of simple materials with the main gestures consisting of fluttering grace note figures and wide, quasi tremolando, leaps. In section 6 these gestures solidify into cascading semiquaver skips which, as the section progresses, evaporate to pave the way for the apothecic harmonies of section 7.

10.4 Expressive aims and means

The story told by Hardy's poem was the main driving force behind the expressive aims and devices of the piece. The idea of a journey to a magical, mythical place, to undertake a transformative experience and return a changed person, resonated with me personally and in the piece this journey is expressed in the following structural trends:

B centred drone, incantations and 'tonic-less' harmonies → Mysterious and subverted melody and accompaniment → Textural apotheosis

As a small boy I had a deep connection with the legends of King Arthur and the fictional county of Lyonesse features heavily in those legends. In the Arthurian stories Lyonesse bordered Cornwall and sank beneath the sea to rise again at a distant appointed hour. I grew up in Cornwall and moved away to further my studies and career in music. Nowadays Cornwall feels like my own Lyonesse, a place to which I

undertake long journeys to experience its magic and reconnect with the landscape of my youth. The harmonies, gestures and rhythmic content of this piece are all designed to reflect the longing and mystery expressed in Hardy's words and attempt to take the choir and listener on a transformative journey.

Use of Percussion

The rin and the crotales both add extra resonance to the piece and reinforce the central B pitch. Their most important functions, however, are dramatic and ritualistic. Bells and bell like sounds are associated worldwide with transformative rituals and important life-events. In my piece the use of the crotales by the soloist and the narrators evokes the prayer-like and ritualistic use of bells or cymbals seen in many cultures. They focus the listeners' attention at certain key moments and connect to the mystical and transformative aspects of the poem.

Staging

Like the use of the percussion instruments, staging has an important dramatic role as it reflects the journey-based narrative of the poem. As the soloist moves through their three positions in section 1 the first stanza of the poem comes into focus and the 'fluid' form of staging position 2 is a direct evocation of the journeying part of the poetic narrative. In section 7 the removal of the sopranos and the new positioning of the altos and narrators reflect the 'transformed returner' of the final stanza of the poem.

10.5 Writing for Children and Amateur Performers

Some of the compositional decisions made during the writing of this piece were purely practical. Writing for children was a stark reminder that so much of what we do as composers is objectively quite difficult to execute in performance. As composers of 'concert music' or 'art music' we are used to writing for professional players and in many cases professional players who specialise in the performance of music by living composers. This can sometimes lead us to developing compositional habits and fingerprints that are either physically or conceptually difficult to perform. Much of the

harmonic language of many of my pieces is defined by an interest in contrasting the natural overtone series with equally tempered pitches. This is a very difficult thing to explain, notate and rehearse with a group of ten-year-old children who will be singing in their second language. The drones and associated vocal sliding of the first section are an attempt to approximate some of the harmonic colour achieved by my normal predilection for the natural series of overtones. Similarly the subverted functionally tonal chord progressions of section 5 aim to provide a harmonic grounding for the young singers but to maintain the mystic atmosphere of the piece. I mentioned before that the choice of poem was influenced by its structure and that the repetitive nature of the stanzas' lengths and content was an aid to learning for the performers. Similarly when designing many of the vocal lines and the word setting I was conscious of the music's singability and wanted as much step-wise movement as possible to allow the singers to focus on the diction of their second language. In another way the simplicity of much of the vocal writing allowed me to incorporate the percussion and the different stage positions and thus give the children a new experience and create a stronger, more immersive and expressive experience for the listener.

11. Conclusion

Alongside the general technical resources and expressive aims laid out in the introductory chapter, and the more specific trends and details pinpointed by each subsequent chapter, this portfolio charts the course of an attempt to conceive, design, explore and master a unique and personal compositional voice that is technically clear, expressively engaging, and rewarding of close listening. In retrospect it is clear that the number, range and complexity of compositional systems employed in the works represented here diminishes as the portfolio progresses. In the earliest of these pieces there tends to be some systematic control present for the majority of the piece's duration, especially on a rhythmic level. It is possible the diminishing reliance on structural polyrhythms and the like is a reflection of an increasing ability to trust my compositional instincts, a sign that the successful features of those techniques have been assimilated into my intuitive responses to musical material and structural drama.

Perhaps a heightened awareness of the potential for automatic procedure to mask, rather than enhance, precise dramatic pacing, and an increased command of small scale, bespoke technical procedures (as demonstrated in the central chapters of this commentary) also played a part in this shift in technical resources and outlook. I would like to think that I have also managed to cultivate a more refined sense of what the music 'needs', both on a moment-to-moment basis and in terms of large-scale structuring and pacing, allowing me to craft phrases and gestures that contribute to the fabric of music in a technical and expressively active way rather than relying on systematic procedure to facilitate the filling of musical time until the next structurally significant event.

On another, deeply personal, level this portfolio started with an intense wish to re-examine and invigorate my use of pitch and engage directly with the harmonic series. In this way I feel that the creation of this portfolio has been a success and that it is this re-energised engagement with pitch resources in general that has allowed me to define and shape a compositional language that is, if not fully formed, developing in a unique, personal and expressive way.

There are several areas that this portfolio touches on but does not explore in great detail as they were not the focus of my research. These areas are, however, of great interest and I will develop them as part of my language in the next phase of my compositional research. Much of my use of the overtone series has revolved around the fifth and seventh partials, fourteen and thirty-one cents flat of equal temperament respectively, and the evocative effect created by placing them against, around, and in combination with their equally tempered equivalents. I would like to experiment with ways of incorporating higher partials into my music and partials eleven and thirteen particularly attract my attention, being forty-nine cents flat and forty-one cents sharp of equal temperament respectively.

The 'natural leading note' of the fifteenth partial, twelve cents flat of equal temperament, is also a personal favourite that I have yet to integrate into my composition. It is not practical for composers to expect performers to be able to accurately pitch twelve cents below, or in fact above, an equally tempered pitch. Violinists fluent in new music, for example, can easily locate, as a normally fingered note, a quartertone fifty cents below or above an equally tempered pitch. Most could divide that distance in half again to find an eighth tone but it would be a rare specialist performer of microtonal music who could accurately and repeatedly locate a pitch that is sharp or flat by, say, twelve cents. To ensure the accurate performance of these microtonal pitches they are best deployed 'as nature intended' i.e. as natural harmonics on vibrating strings or columns of air.

This in turn gives rise to two scenarios that limit the use of these higher partials: either the pitches produced are in a very high register or, to produce these harmonics in a lower pitch space, only very low register instruments can play them. These scenarios have implications for the kind of ensemble instrumentations that could allow incorporation of these partials in a practical way. There are several possible solutions to this that I would like to explore. One is to expand the use of scordatura seen in this portfolio in pieces such as *...but their stillness showed plainly...* If one were to tune the lowest string (C2) of a cello fifty-five cents sharp and then play the fifth partial the resultant pitch (E4) would be forty-one cents sharp (+55(scordatura)-14(fifth partial deviation) = +41cents). This pitch is identical to the thirteenth partial in the harmonic

series of G#0. In this way it is possible to create the desired partials of a given fundamental in the desired register without the need for the appropriate fundamental to be present or playable on any of the instruments in the ensemble. Other possible solutions to this could involve the use of technology, such as tuning pedals or transposing algorithms, either to synthesise the desired tuning or to augment an acoustic instrument. A more outlandish, yet extremely attractive, solution could involve the use of scordatura pianos to access any pre-ordained microtonal pitch, without the need for natural harmonics or the modifying of existing instruments.

Outside of the realm of the harmonic series I would also like to incorporate other new pitch resources into my work. In *...with magic in my eyes...* I was able to experiment with harmonic progressions dependent on some form of functional tonality and I would like to expand on this, making a thorough appraisal of the role that those kinds of harmonic movement could take in my future music. I have recently become interested in the music of Gerald Barry and would like to undertake some analysis of his music in order to better understand his harmonic language, which seems to contain and combine many disparate elements into a cohesive and expressive whole. In the main I have resisted the use of identifiable harmonic objects, such as the whole-tone scale or overtly functionally tonal chords, as I felt unable to reconcile their innate aural character with the expressive aims of my music. As I move on I feel that I have gained control over the basic technical aspects of my compositional language and have elided them with my expressive aims; I can therefore begin to add other, more disparate, elements into my musical landscape without fear of 'not being able to see the wood for the trees'.

Spatial presentation of performers is something that has bubbled to the surface at least twice in this portfolio and it is something that I would like to expand in future works. I am attracted to the idea of off-stage musicians, as well as mobile performers who move during the course of a work, as I feel that the use of space can greatly enhance the expressive message of a piece. Linking musical material to a physical place rather than a certain instrument or voice, and rearranging the musicians on stage as the story of the music changes their relationship to each other, seems to contain great expressive potential. I would like to explore ways in which the spatial distribution of musicians can become a compositional resource as well as a dramatic presentation tool.

Only one work in this portfolio is specifically for singers but two of them feature voices. The use of the untrained voices of the performers in *...on plain air...* is very attractive to me. It is not something that audiences expect and I would like to experiment with this more often. The idea of an 'extra role' for each performer could in fact be expanded further to incorporate the small mobile percussion instruments seen in *...with magic in my eyes...* or found objects, narration, body percussion or a large number of other possibilities. I would also like to write more for singers and compose again for professional vocal ensemble. One of the overarching literary references and inspirations across this portfolio is the work of David Harsent and I have been lucky enough to discuss my music with him in relation to his poetry. David has given me permission to set his long narrative poem *A Dream Book* from his 2014 collection *Fire Songs* to music. This could be the perfect opportunity to combine the ideas mentioned above, as the structure of the poem is a set of narrative episodes that could be characterised by varying spatial arrangements. It might be possible to conceive of this setting as a vocal ensemble that provides its own instrumental accompaniment via the 'extra roles' discussed above.

In this conclusion I have tried to give a picture of the most significant retrospectively identifiable trends in my musical language and compositional output. I have also tried to elucidate ideas for future work or new pieces that have come as a direct result of composing the pieces presented here. I view my PhD portfolio as a means and not an end. Composing the works and preparing this commentary has opened my eyes to many important features of my musical language, both learned and instinctive, and has enabled me to evaluate and quantify what I think is important when writing music, both technically and expressively. I wrote earlier in this chapter about my diminishing reliance on prefabricated compositional systems as an overarching outcome of my research. I believe this, at its heart, to be due to an enhanced awareness of the link between material and expression and the fact that the expressive potential of a gesture or motif is contained in its germination. I feel that I have become much more skilled at recognising the expressive qualities of a piece of material at a much earlier stage of the compositional process so that the technical resources and the expressive aims have become more closely joined in my music. I aim to ensure the continuation of this

process whilst expanding my knowledge and practice along the lines set out in this chapter.

Bibliography

Adams, R. 1974. *Watership Down*. Suffolk: Penguin Books

Blatty, W P. 2011. *The Exorcist*. United States: Corgi Books

Blatty, W P. 2011. *Legion*. New York City: Tor

Evans, B. 1959. Liner note to *Kind of Blue*. 1997. Compact Disc. Sony Music Entertainment. 01-064935-10

Harsent, D. 2015. *Fire Songs*. London: Faber & Faber

Herbert, F. 2010. *Dune*. London: Orion

Klee, P. 1960. *Pedagogical Sketchbook*. New York City: Praeger

Love, D. Westminster St Stephen's, Rochester Row. Love's Guitar to the Church Bells of Westminster. <http://westminster.lovesguide.com/stephen_rochesterrow.htm>
15/07/2013

Mustill, T. 2014. Harrison Birtwistle: Notes from the end of a Garden.
< <https://www.youtube.com/watch?v=7pzM7Iq4zMs>> 16/10/17

Nettl, B. 1974. *Thoughts on Improvisation: A Comparative Approach*. The Musical Quarterly, 60.1: 1-19

Perry, G. 2014. *Playing to the Gallery*. London: Penguin

Rich, A. 1995. *American Pioneers: Ives to Cage and Beyond*. London: Phaidon

Schiff, D. 1998. *The Music of Elliott Carter*. Ithaca, NY: Cornell University Press

Varèse, E. 1966. *The Liberation of Sound*. Perspectives of New Music, 5.1: 11-19

Appendix 1 – Tuning analysis of St Stephen’s, Rochester Row (see chapter 4.2)¹⁰

Frequencies of main partials (Hertz)

Westminster, St Stephen

Red = flat of true harmonic tuning; blue = sharp; green = optimum

Source: Dickon Love, 21 May 2013

Bell	Hum	Prime	Tierce	Quint	Nom	S'quint	O'nom	Founder
8	152	284	342	437	568	851	1,175	1850 Charles & George Mears
7	178	320	388	520	640	950	1,308	1850 Charles & George Mears
6	199	352	436	583	722	1,079	1,489	1850 Charles & George Mears
5	211	371	462	616	765	1,142	1,570	1850 Charles & George Mears
4	247	403	512	700	849	1,258	1,723	1850 Charles & George Mears
3	278	454	589		966	1,424	1,946	1850 Charles & George Mears
2	309	494	660	871	1,096	1,617	2,199	1850 Charles & George Mears
1	322	539	714	904	1,170	1,726	2,342	1850 Charles & George Mears

Frequencies in terms of note

Freq. in terms of relative intervals from the tenor nominal (cents)

Bell	Hum	Prime	Tierce	Quint	Nominal	S'quint	O'nom.	Hum	Prime	Tier	Quint	Nom	SQ	ON
8	D#(0)-40	Db(1)+42	F(1)-36	A(1)-14	Db(2)+42	Ab(2)+42	D(3)0	-2282	-1200	-878	-456	0	700	1258
7	F(0)+33	Eb(1)+46	G(1)-18	C(2)-12	Eb(2)+47	Bb(2)+33	E(3)-15	-2214	-1201	-865	-360	205	685	1238
6	G(0)+22	F(1)+14	A(1)-18	D(2)-13	F#(2)-44	C#(3)-48	Gb(3)+10	-2234	-1243	-874	-369	414	696	1254
5	Ab(0)+28	Db(1)+5	A#(1)-16	D#(2)-17	G(2)-42	D(3)-50	G(3)+2	-2230	-1253	-873	-375	515	693	1245
4	B(0)-3	G(1)+46	C(2)-39	F(2)+3	Ab(2)+37	Eb(3)+18	A(3)-37	-2140	-1291	-876	-334	695	681	1226
3	Db(1)+2	A#(1)-46	D(2)+3		B(2)-39	F(3)+33	B(3)-27	-2159	-1306	-857		918	673	1213
2	D#(1)-15	B(1)0	E(2)+2	A(2)-19	C#(3)-20	G#(3)-47	C#(4)-15	-2195	-1380	-878	-399	1138	673	1205
1	E(1)-43	C(2)+50	F(2)+38	A(2)+47	D(3)-7	A(3)-34	D(4)-5	-2236	-1343	-855	-447	1251	673	1201

Variations from established scales

Bell	From Mean			From Tenor		
	Equal Temp	Just Tuned	Mean Tone	Equal Temp	Just Tuned	Mean Tone
8	4	3	0	0	0	0
7	3	-3	6	5	1	12
6	6	17	15	14	28	28
5	1	-1	-8	15	17	12
4	-25	-32	-28	-5	-7	-2
3	-8	2	-5	18	34	28
2	6	11	15	38	50	55
1	13	4	5	51	51	51

¹⁰ Love, D. Westminster St Stephen’s, Rochester Row. Love’s Guitar to the Church Bells of Westminster. <http://westminster.lovesguide.com/stephen_rochesterrow.htm> 15/07/2013

***'MY LUNGS TASTE THE AIR OF TIME
BLOWN PAST FALLING SANDS...'***

(2015)

**FOR PICCOLO, VIOLIN, CELLO, HARP AND PIANO
C.7-9'**

SAM CAVE (B. 1987)

Instrumentation:

Piccolo
Violin
Violoncello
Harp
Piano

Score in C with the usual octave transpositions

Duration: c.7-9 minutes

Conductor:

From rehearsal letter C until the end of bar 63, hold each chord in the piano and harp until the 'harmonic identity' of the chord is no longer audible.

Strings:

Natural harmonics are notated at approximate fingered pitch with the desired resultant pitch shown in parentheses. The string to be used has often been indicated and should continue to be used until a new indication supersedes it.

Scordatura:

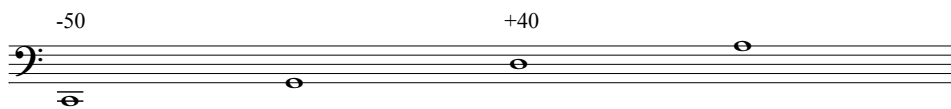
Violin



Deviations from equal temperament are shown in cents.

The full size violin staff shows the fingered pitch and the 'cue-size' staff shows the resultant sounding pitch when playing on the G# string. Cent deviations are not shown in the 'cue-size' staff and therefore the score shows fingered pitches when playing on the scordatura strings.

Cello



Deviations from equal temperament are shown in cents.

The score shows fingered pitches when playing on the scordatura strings.

'My lungs taste the air of Time
Blown past falling sands...'

Sam Cave
(b.1987)

♩ = 70

Piccolo

Violin

Violoncello

ppp very very high, almost unpitched, 'D'-like 'white noise'

Harp

E♭F#G#A♭
B♭C#D#

accents only slight

mp

ppp

3

3

Piano

accents only slight

mp

ppp

3

3

4

Picc.

Vln.

Violin (sounding)

ppp

sul G sul D sul A

Vc.

Hp.

Pno.

(5)

(8)

6

Picc. *non vib.*

Vc. *ppp*

Hp. *ppp*

Pno. *ppp*



12

Picc. *pp*

Vln. *sul G sul D sul A* *ppp* *ppp* *p*

Vc. *ppp*

Hp. *mp* *ppp*

Pno. *ppp*

17 *sul A* **A**

Vln. *pp*

Vc. *(f5)*

Hp. *pp*

Pno. *p* **A** *ppp* *loco*

(8) *p* *ppp*

23 *vib. un poco* *non vib.*

Picc. *pp* *5* *5* *sfpp*

Vln. *sul D* *gliss. on natural harmonics* *sul A* *15^{ma}* *ppp* *very very high, almost unpitched, 'C#'-like 'white noise'*

Vc. *loco* *sul D* *(5^{ma})* *pp*

Hp. *p* *ppp*

Pno. *pp*

4

29 (15)

Vln.

Vc.

Hp.

Pno.

mf

pp

mf

pp

mf

pp

mf

pp

pp



35

Picc.

vib. → non vib.

Vln.

Vc.

Hp.

Pno.

mf

pp

mf

pp

mp

mf

pp

ppp

pp

40 **B** start sharp and gliss. down add vib. → non vib gliss. up to match Vln.

Picc. *ppp* < *p* < *pp* *p*³

Vln. *mf* *p* *mp* *ppp*
 (#5) loco sul D gliss. natural harmonics gliss. natural harmonics sul G

Vc. *mf* gliss. natural harmonics *p*

Hp. accel. through gliss. let ring *f* *p sub.* let ring *p*
p sub. let ring

Pno. *f* let ring *pp* emphasise G₂ emphasise D₄
p

half-damp with pedal



46

Picc. *p*³ *p*³ *p*³ *p*³ *p*³

Vln. flaut. sul E sul D non vib. *p*

Vc. pizz. sul A *p*

Hp. *pp* *p*

Pno. *ppp* *p* *mp*

50

Picc. *mp* *p* *pp*

Vln. *p* *mp* *pp*
sul D gliss. to match Pno. sul A sul E gliss. behind nut to match Pno.

Vc. arco *p*
sul A

Hp. *mp* *pp*
E \flat F#G#A \flat
B \flat C#D#

Pno. *p* *pp* *pp* *pp*
loco



55

Picc. *mp* *pp* **C** pause until the harmonic identity of each chord is inaudible

Vln. *p* *ppp*
sul A sul G
repeat until conductor cues next bar

Vc. *pp* *p* *ppp* *p*
sul D sul D sul D
repeat until conductor cues next bar

Hp. *pp* *p* G \sharp

Pno. *ppp* *p* *pp* *p*
ppp *pp* *pp*

Picc. $\text{♩} = 84$ $\text{♩} = 70$ $\text{♩} = 70$ a tempo vib. molto

mp *mp* *p*

repeat until conductor cues next bar

Vln. sul D, A and E (mix ad lib.) sul G enter after Vc. enter after Picc. sul D

pp *pp* *mp* *mp*

Vc. sul pont. enter after Vln. sul pont.

mp *mp* *p*

Hp. *pp* *mp* *mf*

$B\flat$ $E\sharp F\sharp G\sharp A\flat$ $B\flat C\sharp D\sharp$

try not to sync with the Pno.

Pno. $\text{♩} = 84$ $\text{♩} = 70$ $\text{♩} = 70$ a tempo emphasise D

p *mp* *mp* *mf* *mp*

pedal sim.

try not to sync with the Hp.

65 **D**

Picc. *mf* *pp* < > *pp*
 play each time
 Pno. plays high C#

Vln. *mf* *pp* *mf*
 gliss. natural harmonics
 sul D 8va
 play each time
 Pno. plays high d

Vc. *mf* *mf* *pp* < > *pp*
 sul C
 swell each time Pno.
 plays middle C

Harp. *f*
 as each pitch becomes inaudible, reiterate it at progressively lower volume levels

Pno. *p* *f*
 as each pitch becomes inaudible, reiterate it at progressively lower volume levels
 8^{sub}
f pedal down until the end

69

Vln. accents only very slight, all notes slightly separated *pp* ^{8^{va}} sul E ₃

Vc.

Hp. accents only very slight *pp* stop reiterating pitches

Pno. stop reiterating pitches



74

Vln. ⁽⁸⁾ *pp* ₃

Hp. *pp* ₃

Pno. pizz. accents only very slight ^{8^{va}} ord. *pp*

ppp _{8^{vb}}

79 (8)

Vln. *sul D*

Hp.

Pno.

pizz *pppp*
8^{ub}



85 (8)

Vln.

Pno.



91 (8)

Vln.

Pno. *ppp*

ring until silent...

...TO IMPRISON THE WIND

(2017)

**FOR PICCOLO, CELLO AND GUITAR
C.7-8'**

SAM CAVE (B.1987)

...to imprison the wind is an arrangement of my larger 2015 work *My lungs taste the air of time Blown past falling sands...* and was premiered at the Coronet Print Room in London on the 25th October 2017 by the Octandre Ensemble as part of the Coronet International Festival.

Instrumentation:

Piccolo

Violoncello

Guitar

Score in C with the usual octave transpositions

Duration: c.7-8 minutes

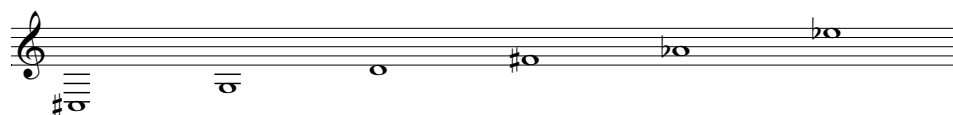
General:

From rehearsal letter C until the end of bar 59, hold each chord in the guitar until the 'harmonic identity' of the chord is no longer audible, and then repeat it. Once the second sounding is inaudible the guitar cues the next bar. During these bars the piccolo and the cello should repeat their fragments until cued by the guitar to move on.

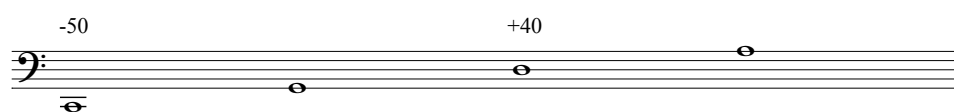
Natural harmonics for the cello are notated at approximate fingered pitch with the desired sounding pitch shown in parentheses. Natural harmonics for the guitar are notated at sounding pitch with string numbers and fingerboard position markers.

Scordatura:

Guitar



Cello



Deviations from equal temperament are shown in cents.

Score shows fingered pitches when playing on the scordatura strings.

...to imprison the wind

Sam Cave
(b.1987)

Tempo: ♩ = 70

Piccolo

Violoncello

Guitar

ppp very very high, almost unpitched, 'D'-like 'white noise'

mp *pp*



5

Picc. non vib.

Vc.

Gtr. RH

ppp *pp*

(15)

9

Picc.

Vc.

Gtr.

ppp

(15)

V ①



13

Picc.

Vc.

Gtr.

pp

ppp

(15)



17

Picc.

Vc.

Gtr.

pppp

(15)

8^{va}

loco

A

A

22

Picc. *vib. un poco* *pp* *sfpp* *non vib.*

Vc. (15)

Gtr. ⑥ ③ ③ ③ ③ ④ V *mp*



26

Vc. *loco* *sul D* (15^{ma}) *pp* *mf* *pp*

Gtr. ③ ③ ③ *mp* *p*



30

Vc. *sul D* *pp*

Gtr. ① *pp*

32

Picc. vib. $\xrightarrow{\hspace{2cm}}$ non vib.
mf $\xrightarrow{\hspace{2cm}}$ *pp*

Vc. $\xrightarrow{\hspace{2cm}}$ *mf* sul D $\xrightarrow{\hspace{2cm}}$ *pp*

Gtr. $\xrightarrow{\hspace{2cm}}$ *mf* $\xrightarrow{\hspace{2cm}}$ *pp*



35

Picc. **B** match guitar $\xrightarrow{\hspace{2cm}}$ add vib. $\xrightarrow{\hspace{2cm}}$
ppp $\xrightarrow{\hspace{2cm}}$ *p* $\xrightarrow{\hspace{2cm}}$ *pp*

Vc. gliss. natural harmonics
mf $\xrightarrow{\hspace{2cm}}$ *p* $\xrightarrow{\hspace{2cm}}$ *pp*

Gtr. XII **B** ① ② ⑤ V
mf $\xrightarrow{\hspace{2cm}}$ *f* $\xrightarrow{\hspace{2cm}}$ *p*



39

Picc. non vib. gliss. up to match Vc.
p $\xrightarrow{\hspace{2cm}}$ *p*

Vc. sul D gliss. natural harmonics sul G $\xrightarrow{\hspace{2cm}}$ pizz. sul A
p $\xrightarrow{\hspace{2cm}}$ *ppp* $\xrightarrow{\hspace{2cm}}$ *p*

Gtr. $\xrightarrow{\hspace{2cm}}$ *p*

42

Picc.

Vc.

Gtr.



46

Picc.

Vc.

Gtr.



50

Picc.

Vc.

Gtr.

6

54 **C**

Picc. $\text{♩} = 84$ *pp* *vib. sim.*
 pause until Gtr. cues next bar *sim.* repeat until Gtr. cues next bar

Vc. *ppp* *sul G* repeat until Gtr. cues next bar *sul D* $\text{♩} = 84$ *p* *3* *3* pause until Gtr. cues next bar

Gtr. *pp* $\text{♩} = 84$ *p* *3* *3*
 repeat when inaudible, cue next bar when repeated chord inaudible



57 $\text{♩} = 70$ *enter after Vc.* $\text{♩} = 70$ in tempo *vib. sim.*
mp *3* *3* *3* repeat until Gtr. cues next bar

Vc. *mp* *sul G* repeat until Gtr. cues next bar *sul G* *enter after Picc.* *mp* repeat until Gtr. cues next bar

Gtr. $\text{♩} = 70$ $\text{♩} = 70$ in tempo *mp* *3* *3* *3* *3* X3

60 **D** sul C (•) swell each time Gtr. plays low C#

Vc. *mf* *mf* *pp* *pp*

accents only very slight

Gtr. **D** pont. RH ① *mf* ④ ⑥

repeat boxed notes with LH as they fade out

tune C# to D

63

Picc. -

Vc. Repeat ad lib. until guitar returned gliss. natural harmonics accents only very slight all notes slightly separated *p* pont. ③

Gtr. *p* ③ ③ ③ ③ ④ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③

pont. LH

66 accents only very slight

Picc. *p* ③ ③ *p*

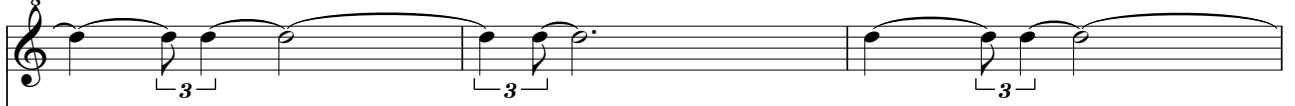
Vc. ③ ③ ③ ③ ③

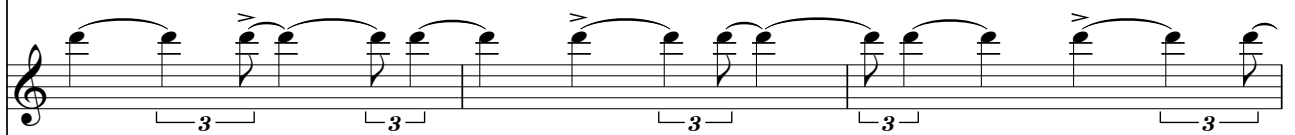
Gtr. ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③ ③

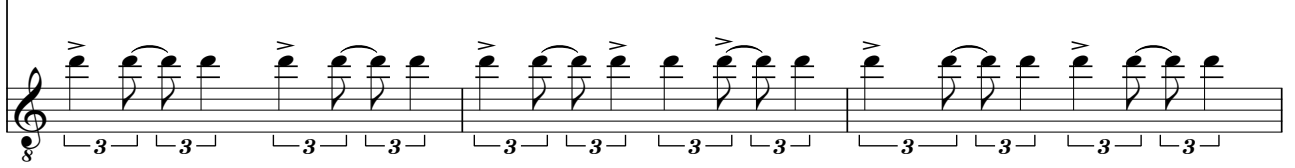
still pont. with a slight vib. ①

LH

69


Picc. 

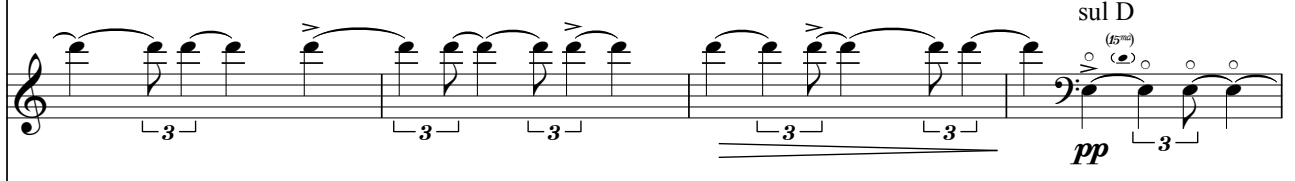
Vc. 

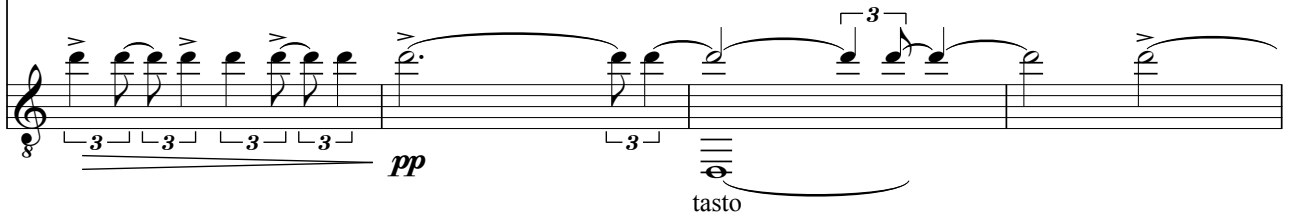
Gtr. 



72


Picc. 

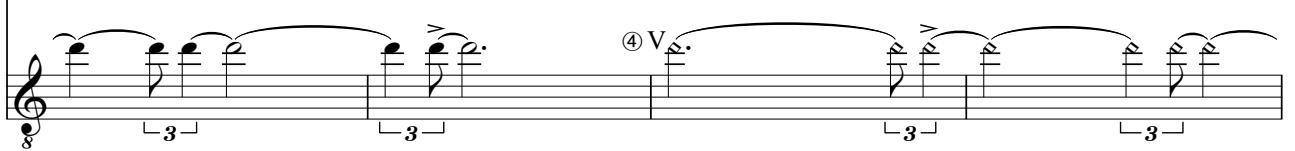
Vc. 

Gtr. 




76

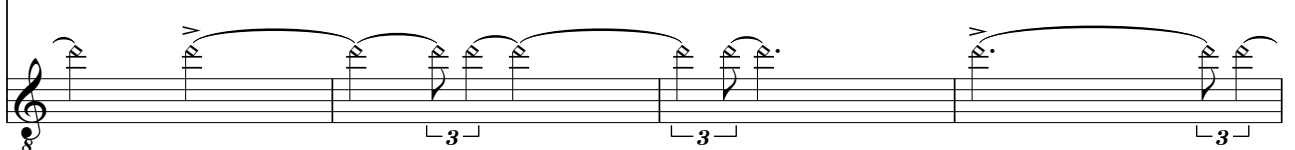
Vc. 

Gtr. 





80

Vc. 

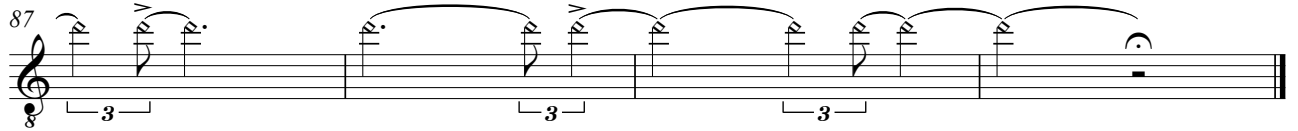
Gtr. 

84

Vc. 
 Gtr. 



87

Gtr. 

CURVED LINES 'GAINST SQUARE GLASS
(2015-16)

**FOR SOLO THEORBO
C.9'**

SAM CAVE (B. 1987)

Score at fingered pitch, written a minor-ninth above sounding pitch.

Duration: c.9 minutes

Programme note:

An attempt to capture and inhabit the melancholy of a moment and the resonance of the theorbo were the major inspirations for this work. The way in which the instrument can be inactive yet restless and intense, seemingly weightless and still produce sounds of great gravitas proved endlessly fascinating to me during the composition of the piece. *Curved lines* 'gainst square glass was written, with great admiration, for Johan Lofving.

S.C. (London, February 2016)

Curved lines 'gainst square glass was premiered by Johan Lofving on the 27th January 2017 at Brunel University, London.

Performance Directions:

Natural decay - rhythmically speaking, several sections of this piece are governed by the natural decay of the instrument's strings. Any note marked with a 'square' fermata should be held until inaudible, any ongoing trills/tremolo/repeating figuration should continue undisturbed during this decay period.

Boxed pitches/figures/trills/tremolo – continue the boxed 'event' for the duration of the arrow. Boxes which contain a pitch and a rest should be repeated 'ad. lib' to produce a slightly stuttering effect.

Vibrato – there are three levels of intensity, shown by the relative thickness of the black wavy lines. 'Intensity' in this work is not necessarily indicative of the speed of vibration, but rather the amount of pitch shift generated.

Left-hand pizzicato - several pitches are to be plucked with the left hand and are marked with a '+'.

Harmonics - in the treble stave these are notated at sounding pitch. In the bass stave the sounding pitch is given with a diamond note-head and the fundamental open string is shown with a standard note-head.

Curved lines 'gainst square glass

Theorbo

♩=50 slow, delicate

Sam Cave (b.1987)

replay ad. lib. as chord decays

mp hold until silent

wider vib

pp

norm. ① ② ③ ④

vib ① ② ③

① ② ③ ④

cresc un poco mp

damp all strings

let all sympathetic resonance ring, except where marked

A

① ② ③ ④ ⑤ ⑥

pp

pp sim.

① ② ③ ④ ⑤ ⑥

wide, slow vib.

mf

① ② ③ ④ ⑤ ⑥

pp

mix fingerings ad. lib, intersperse the semitone occasionally... start pp

cresc. as resonance builds...

pp thumb brush allow to decay to silence before playing next bass note

sim.

mp

sim

faster progress through bass notes, build the resonance...

p

pp LH trill

LH trill

pp

ff

p

ff

cresc. and accel...

mute strings sequentially leaving ① alone

pp

pp

C

mp short pauses, allow some over-ringing

+ LH pizz.

mp

p

ff

cresc.

D ($\neq 50$)

pp

start to move on.... build over-ringing

RH tambour

slow LH brush

hold until just audible

mute strings sequentially leaving 3 alone

pp

LV sempre, especially in scales, except where marked

ff

LH trill

p <

mf

p

pp

mp

mf

p

pp slow thumb brush

p

position norm.

p *mp* *f* *p*

ff *mf* *cresc. molto*

secco LV

mp *p* *dim.*

decel. tremolo harm XII

brush with thumb
LV sempre

pp *molto legato* *J=44*

allow all resonances to ring

rit. un poco, dying away *art. harm.*

REFLECTIONS ON BLUE
(2016)

FOR NINE PLAYERS
C.18'

SAM CAVE (B. 1987)

Instrumentation:

Two wind trios and a 'rhythm section' tuned and arranged as follows:

Soprano Recorder [+40 cents] (doubling Ride Cymbal played with one hot rod)

Oboe [+20 cents] (doubling Hit-Hat played with one foot)

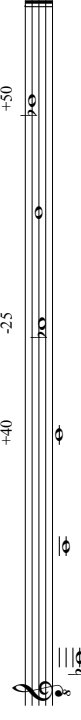
Alto Flute [-30 cents] (doubling Hit-Hat played with one foot)

Flute (doubling Ride Cymbal played with one hot rod)

Soprano Saxophone (doubling Hit-Hat played with one foot)

Clarinet in Bb (doubling Hit-Hat played with one foot)

Guitar, tuned as follows:



Piano

Double bass

Conductor

Score in C with the usual octave transpositions. The basic tuning of the microtonal wind trio and the microtonal strings of the guitar are not shown on the score, in this sense the score shows 'fingered pitch' for these instruments and sounding pitch for the others and the equally tempered strings of the guitar. Natural harmonics for the guitar are notated at sounding pitch and for the double bass they are notated at approximate fingered pitch with the desired sounding pitch shown in parentheses.

Duration: c.18 minutes

Programme Note

Reflections on Blue is an attempt to capture the spirit, outlook and acquired instinct of improvising jazz musicians. Many of the materials for each instrument were improvised 'by my hand' whilst sketching the work and these disparate characters are unified by a common harmonic and rhythmic structure underpinned by the rhythm section of the guitar, piano and double bass. *Reflections on Blue* owes much to the spirit and aesthetic outlook of the 'modal jazz' movement of the late 1950s and early 1960s and is particularly inspired by Bill Evans' liner notes to the seminal *Kind of Blue* album.

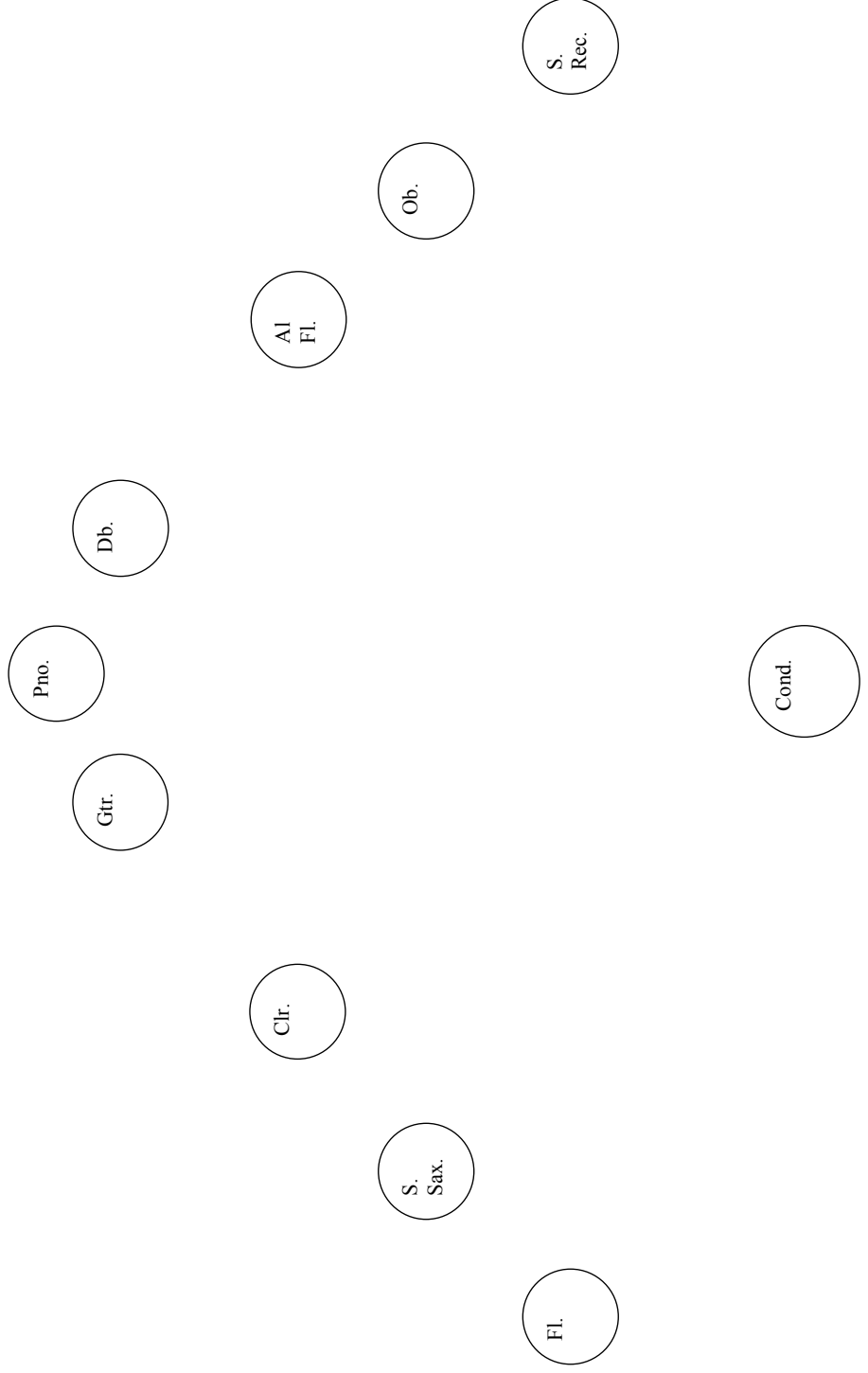
“There is a Japanese visual art in which the artists is forced to be spontaneous. He must paint on a thin stretched parchment with a special brush and black water paint in such a way that an unnatural or interrupted stroke will destroy the line or break through the parchment. Erasures or changes are impossible. These artists [sic] must practise a particular discipline that of allowing the idea to express itself in communication with their hands in such a direct way that deliberation cannot interfere. The resulting pictures lack the complex composition and textures of ordinary painting, but it is said that those who see will find something captured that escapes explanation. The conviction that direct deed is the most meaningful reflection.” Bill Evans, liner notes from Kind of Blue (1959)

Performance Directions:

Role of the conductor

Aside from the usual responsibilities the conductor should communicate with the pianist to decide when to move to the next ‘bar’ in the decay controlled sections of the piece (such as rehearsal letter B. The conductor should also keep track of the length of the improvised section at b.192 and synchronise the ensemble for the start of rehearsal letter M.

Arrangement of the ensemble



Reflections on Blue

Sam Cave (b.1987)

♩ = 60 lyrical and warm, yet distant and veiled

Soprano Recorder

Oboe

Alto Flute

Flute

Soprano Saxophone

freely

Clarinet in B \flat

pp

ppp

pp

p

mp

ppp

Guitar

Piano

♩ = 60 lyrical and warm, yet distant and veiled

Double Bass

7 Cl. *pp* *pp* *pp* *ppp*



13 Fl. Cl. *pp*

A appear from clarinet



17 Fl. *mp* *pp*

roll flat



21 Fl. *pp* *mf mp sub.*



25 Fl. Cl. *p* *pp sub.* *pp* *p* *pp*

drift slightly sharp

gloss.

C ♩=70 in tempo
 35 Soprano Recorder

S. Rec.									
Hi-Ht.									
A. Fl.									
Fl.									
Sop. Sax.									
Cl.									
Gtr.									
Pno.									
Db.									

To Ob.
pp

pp

Alto Flute

ord.
 pre bend and release

① pizz.
p

① pizz.

C ♩=70 in tempo

Pno.

C ♩=70 in tempo

Db.

S. Rec. Ob. A. Fl. Fl. Sop. Sax. Cl. Gtr. Pno. Db.

trmm

trmm

gentle pitch bend

pizz.

ord. ① ②

pre bend and release ① ②

p

mp

tasto

pizz.

pp

pizz.

pp

sul E arco

increase bow pressure

sul E arco

D 'In Glorious Shadow'

The musical score is arranged in a system with ten staves. The instruments and their parts are as follows:

- S. Rec.:** Remains silent throughout the piece.
- Ob.:** Remains silent throughout the piece.
- A. Fl.:** Features a melodic line starting with a *pp* dynamic, including a *trmn* (trill) and a triplet.
- Fl.:** Remains silent throughout the piece.
- Sop. Sax.:** Remains silent throughout the piece.
- Cl.:** Features a melodic line starting with a *p* dynamic, including a triplet and a *To Hi-Ht.* instruction.
- Gtr.:** Features a melodic line starting with a *p* dynamic, including a *pont.* (pizzicato) instruction, triplets, and a *tasto* instruction.
- Pno.:** Features a melodic line starting with a *p* dynamic, including triplets and a *pp* dynamic.
- Db.:** Features a melodic line starting with a *mp* dynamic, including a *pizz.* instruction, a *Sul E arco* instruction, and a *pp* dynamic.

The score includes various musical notations such as triplets, trills, and dynamic markings (*pp*, *p*, *mp*) to guide the performer.

E

56

S. Rec. Ob. A. Fl. Fl. Sop. Sax. Cl.

pp p slightly more focussed sound
mp

Gtr. Pno. Db.

roll slowly
tr tr tr

ord. ① ③ ④ ⑤ ⑥ ⑤ ③ ⑤

mp p mp mp mp

pizz. arco arco

pp p p p p

sul E arco sul E arco

63

S. Rec.

Ob.

A. Fl. *mf sub*

Fl.

Sop. Sax.

Cl.

Gtr. *tr* *vib. molto* *mp* *p* *pp*

Pno. *p* *pp* *pizz.* *p*

Db. *p* *mp*

S. Rec.	Ob.	A. Fl.	Fl.	Sop. Sax.	Cl.	Gtr.	Pno.	Db.
								
								
								
								

81

S. Rec. —

Ob. mf $>$ mp trill b sfz

A. Fl. —

Fl. —

Sop. Sax. f trill 3 mf $<$ 5

Cl. —

Gtr. f ord. f trill 3 b mf bend up trill 3 mp 3 p trill 3 mp trill 3 p trill 3 mp trill 3 p trill 3 mp

Pno. f trill 3 mf trill 3 p trill 3 mp trill 3 p trill 3 mf trill 3 p

Db. f pizz. arco sul E mf trill 3 mf trill 3 mf trill 3 pizz. mf trill 3 mf

S. Rec.

Ob.

A. Fl.

Fl.

Sop. Sax.

Cl.

Gtr.

Pno.

Db.

trm

p

f

pp

3

3

3

3

3

3

6

3

p

mf

f

3

p

trm

ord. (4)

3

mf

vib. tasto

2

mp

3

p

p

3

mf

ord. (2)

mf

3

string bend

mf

f

3

4

mf

trm

trm

trm

trm

mp

mf

mp

3

arco

p

sul E pont.

p

pizz. ord.

f

arco

sul D

arco

p

f

G pause until the first piano chord of each 'bar' is inaudible

S. Rec.
 mp dim. cont. and vary ad lib.
 pp
 vary dynamics ad lib.
 breathe when necessary

Ob.
 gentle pitch bends
 pp sim.
 breathe when necessary

A. Fl.
 gentle pitch bends
 p sim.
 vary dynamics ad lib.
 breathe when necessary

Ride Cym.
 pp
 breathe when necessary

Sop. Sax.
 mp
 gentle pitch bends
 pp
 repeat as necessary
 breathe when necessary

Hi-Hat
 p
 breathe when necessary

Gtr.
 mp
 repeat when inaudible
 XII
 pp
 repeat ad lib.
 ① XII
 pp
 ②
 p
 ④
 ⑤
 ③
 sim.

Pno.
 mp
 repeat when inaudible
 8^{va}
 repeat when inaudible
 p
 loco
 mp
 arco
 pp
 repeat as necessary
 pizz.
 mp
 repeat when inaudible

Db.
 mp
 repeat as necessary
 p
 repeat when inaudible

103

System 1:

- Ride Cym.:** *mp*, *p*, *pp*. Includes instruction: "To S. Rec.".
- Ob.:** *pp*, *p*, *pp*. Includes instruction: "same as in b. 103".
- A. Fl.:** *p*, *mp*. Includes instruction: "gentle pitch bends".

System 2:

- Ride Cym.:** *p*. Includes instruction: "To Fl.".
- Sop. Sax.:** *mp*, *mp*, *pp*, *p*, *pp*. Includes instruction: "cont. and vary ad lib.". Boxed annotation: "same as in b. 105".
- Hi-Ht.:** *mp*, *mp*, *p*. Includes instruction: "To Hi-Ht.".
- Gtr.:** *mp*, *p*, *pp*. Includes instruction: "repeat when inaudible".
- Pno.:** *mp*, *p*, *pp*. Includes instruction: "repeat when inaudible".
- Db.:** *mf*, *p*. Includes instruction: "pizz.", "repeat when inaudible", "no repetition".

♩=70 in tempo again, bright and metallic

107

S. Rec. *f* *p* *mf* *p* *p sub* *mf*

Ob.

A. Fl. *f* *mf* *p* *mp*

Fl. *f* *p* *f* *mf* *f* *p sub*

Sop. Sax.

Hi-Ht. *f* *mf* *p*

Gtr. *f* *mf* *mf* *mf*

Pno.

Db.

Hi-Hat *mf*

bright and pont.

① ③ ④ ⑤

115
pause until
silent

The musical score is arranged in a standard orchestral layout with the following parts from top to bottom:

- S. Rec.:** Snare Drum. Includes a 'Ride Cymbal' part with dynamics *mf*, *mp*, and *f*.
- Hi-Ht.:** Hi-Hat. Dynamics *mp* and *f*.
- Fl.:** Flute. Dynamics *f*, *ff*, and *mf*. Includes a 'To A. Fl.' instruction.
- Sop. Sax.:** Soprano Saxophone. Dynamics *f*, *mf*, and *pp*.
- Cl.:** Clarinet. Dynamics *f*, *mf*, and *pp*.
- Gtr.:** Guitar. Dynamics *mf*, *p*, and *mf sub. mp*. Includes circled numbers 1 through 6.
- Pno.:** Piano. Dynamics *f*, *mp*, and *p*. Includes a circled number 3.
- Db.:** Double Bass. Dynamics *mf*, *mp*, *sfp*, and *p*. Includes instructions 'ord. pizz.', 'arco sul E', and 'moltissimo pont.'

The score contains various musical notations including accents, slurs, ties, and articulation marks. Dynamics range from *pp* (pianissimo) to *sfp* (sforzando). Performance instructions include 'To A. Fl.', 'arco sul E', and 'moltissimo pont.'

Ride Cym. 119 To S. Rec. *p*
Hi-Ht. To Ob. *p*
Hi-Ht. *p*

Fl. To Ride Cym. *pp*

Sop. Sax. *p*
Cl. To Hi-Ht. *pp*

Gtr. *mp* *f* *pp* *pp*

Pno. *pppp* *pizz.* *ord.* *p*

Db. *mp*

Soprano Recorder *f* *p*
Oboe *f*
Alto Flute *f*

Ride Cymbal *p*

Hi-Hat *p*

Annotations:
* pause until silent
* pause for one breath
* hold for one long breath try to end together before continuing
vary dynamics and plucking point ad lib.
vary dynamics and speed of trem ad lib.
vary dynamics and bow position ad lib.
as before

pause for one breath

125

S. Rec. *mp* To S. Rec.

Ob. *mf* To Ob.

A. Fl. *p* To A. Fl.

gentle pitch bends

mp *mf* *p* *mf* *mp*

* To Ride Cym.

* To Hi-Ht.

* To Hi-Ht.

Ride Cym. *mf*

Sop. Sax. *mf* take over from S. Rec.

Hi-Ht. *p*

Flute *mf* *mf* *p*

Clarinet in Bb *pp*

Gtr. *p* *cresc. and accel.*

Pno. *p* *cresc. and accel.*

Db. *p* *cresc. and accel.*

mf *mp* *p* *mf* *p* *f* *mf* *p*

arco molto pont. → ord.

pizz.

134 I

S. Rec. *f* *mf*

Ob. *mp* *pp*

A. Fl. *pp* *p*

Fl. *f*

Sop. Sax. *mf*

Cl. *mp* *p* *sf* *p* 3 5 string bend *mp*

Gtr. *p* *p* *f* *p* *loco* *p* *5* *tr* *6* *5* *tr* *8va* *5* *5* *5*

Pno.

Db. *p sub.* *p* *mp* *pp* *mf* *mf* *pp* *pp* *pp* *pp* sul D ^(8va) (♯) (♯) *pp*

145

137

S. Rec. *f*

Ob. *mp* *3*

A. Fl. *mp*

Fl. *f* *mp*

Sop. Sax. *mf* *mp* *3* *5*

Cl. *p* *mp*

Gtr. *mp* *mf* *5* *4* *3* *4* *5* *8va*

Pno. *f* *p* *pp* *no pedal*

Db. *mf* *mp* *3* *5* *8va* *no pedal* *sul E* *sul D*

141

S. Rec. Ob. A. Fl. Fl. Sop. Sax. Cl. Gtr. Pno. Db.

The musical score for page 141 consists of the following parts and markings:

- S. Rec.:** *mf* (measures 141-142), *p* (measure 143), *mf* (measure 144).
- Ob.:** *mf* (measures 141-142), *pp* (measure 143), *mf* (measure 144).
- A. Fl.:** *mf* (measures 141-142), *mp* (measure 143), *mf* (measure 144).
- Fl.:** *p* (measures 141-142), *mf* (measure 143), *p* (measure 144).
- Sop. Sax.:** *p* (measures 141-142), *mf* (measure 143), *pp* (measure 144).
- Cl.:** *p* (measures 141-142), *mp* (measure 143), *p* (measure 144).
- Gtr.:** *p* (measures 141-142), *p* (measure 143), *mp* (measure 144).
- Pno.:** *pp* (measures 141-142), *pp* (measure 143), *pp* (measure 144).
- Db.:** *mp* (measures 141-142), *mf* (measure 143), *mp* (measure 144).

Additional markings include triplets (3), sixteenth notes (16), and dynamic hairpins throughout the score.

J

145

S. Rec.

Ob.

A. Fl.

Fl.

Sop. Sax.

Cl.

Gtr.

Pno.

Db.

The musical score is arranged in a standard orchestral format with ten staves. The instruments are: S. Rec., Ob., A. Fl., Fl., Sop. Sax., Cl., Gtr., Pno., and Db. The score contains various musical notations including dynamics (e.g., *sfp*, *f*, *pp*, *mp*, *p*, *mf*, *sfz*), articulations (accents, slurs), and performance instructions such as *tr* (trill), *ord.* (order), *pizz.* (pizzicato), *arco* (arco), and *sul D* (sul D). There are also specific performance markings like *arco slow gliss.* and *sul D* with a circled 'D'. The score includes complex rhythmic patterns, including triplets and sixteenth-note runs. A section marked 'ord.' (order) is indicated for the guitar part. The piece concludes with a double bar line and a final dynamic marking of *sfp*.

149

S. Rec. *ff* *mf < f* *mp < ff* *ff*

Ob. *mf* *mp* *pp* *f*

A. Fl. *p* *p <* *D/Db ad lib.* *tr*

Fl. *ff* *mf < f* *ff* *tr* *mf >*

Sop. Sax. *p* *pp* *tr*

Cl. *p* *tr*

Gtr. *mp* *p* *p* *ff* *mp* *loco* *8va* *tr* *mp*

Pno. *p* *ff* *mp* *tr* *mp* *8va*

Db. *pizz.* *sul D arco* *ruvido* *ord.* *ff* *p* *mp* *f* *tr* *mp* *pizz.* *sul D arco* *8va* *f*

153

S. Rec.

Ob.

A. Fl.

Fl.

Sop. Sax.

Cl.

Gtr.

Pno.

Db.

Musical score for page 28, measures 153-162. The score includes parts for S. Rec., Ob., A. Fl., Fl., Sop. Sax., Cl., Gtr., Pno., and Db. It features various musical notations such as dynamics (*ff*, *mf*, *f*, *p*), articulation (accents, slurs), and performance instructions like "B/C ad lib.", "string bend", "arco ruvido", and "pizz.". Fingerings and breath marks are also present throughout the score.

K energetic and metallic

156

S. Rec. *f* *mf* *p* *p* *mf* *p* *p* *ppp*

Ob. *p* *p* *pp*

A. Fl. *ppp*

To Hi-Ht.

Fl. *f* *mf*

Sop. Sax. *pp* *p* *pp*

Cl. *pp* *p* *pp*

To Hi-Ht.

Gtr. *p* *p* *pp* *pp* *f* *mf*

Pno. *pp*

Db. *mp*

tasto and vib.

slow wide vib.

pizz.

pont. sempre

K energetic and metallic

calmer and more expansive

161

S. Rec. *f* *f sub.* *p*

Ob.

A. Fl. *p* *tr*

Fl. *p* *f* *p*

Sop. Sax.

Cl. *p* *tr* *pp*

Gtr. *f* *mp sub.* *warm and tasto* *p* *mf* *p*

Pno. *mf* *p*

Db.

calmer and more expansive

energised and metallic again

165

S. Rec. *f* *pp sub.* *p* *mf* *p sub.* *p sub.*

Ob.

A. Fl. *mf* *pp*

Fl. *ff mf sub.* *p mf* *f* *p mf* *p*

Sop. Sax.

Cl.

Gtr. *mp* *f* *mf* *p* *f* *mf*

Pno. *mf* *pp*

Db.

energised and metallic again

To Ride Cym. shadowy and darkly rich

170

S. Rec. *p* *mf* *pp*

Ob.

A. Fl. *pp* *p*

Fl. *mf* *mp* *pp*

Sop. Sax.

Cl.

Gtr. *p* 5 *pp* tambour

Pno.

Db. *pp* shadowy and darkly rich

174

S. Rec.

Ob.

A. Fl.

Fl.

Sop. Sax.

Cl.

Gtr.

Pno.

Db.

mf

dim.

trem.

mf

178

L

Ride Cymbal
p
 unsynchronised with other percussion

Hi-Hat
p
 unsynchronised with other percussion

S. Rec.

Ob.

A. Fl.

ppp

pp

Fl.

Sop. Sax.

Cl.

pp

Gtr.

pp

ord.
p
 string bend

mp

pp

pp

string bend

Pno.

pp

ppp

L

Db.

Ride Cym. Hi-Ht. A. Fl. Fl. Hi-Ht. Cl. Gtr. Pno. Db.

tr *ppp* *mp* *pp* *pp* *mf* *p* *pp* *pizz.* *p* *mf*

To Hi-Ht. To Hi-Ht.

L. V. unless marked L. V. unless marked

Ride Cym. Hi-Ht. A. Fl. Fl. Hi-Ht. Cl. Gtr. Pno. Db.

Hi-Hat *ppp*

f *mp* *ppp* *ppp*

p *f* *ppp* *ppp*

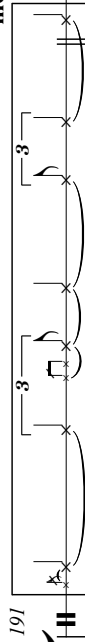
mf *p* *vib. molto* *mp*

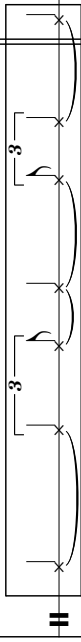
mf *p* *mf* *p*

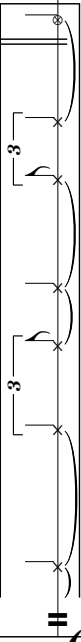
p *mf sub.* *p*

modal improvisation c.a. 40secs - 1minute

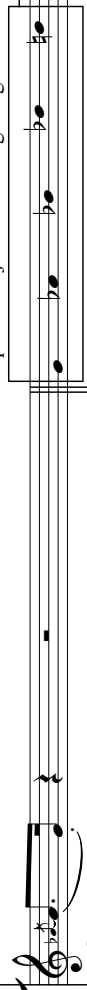
191

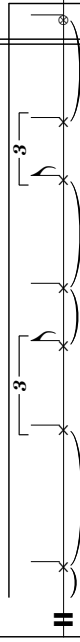
Ride Cym.  repeat the boxed rhythm to accompany flute solo, ornament the rhythm in response to the rhythm section (Gtr. Pno. Db.)

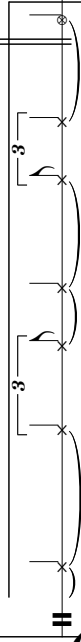
Hi-Ht.  repeat the boxed rhythm to accompany flute solo, ornament the rhythm in response to the rhythm section (Gtr. Pno. Db.)

Hi-Ht.  repeat the boxed rhythm to accompany flute solo, ornament the rhythm in response to the rhythm section (Gtr. Pno. Db.)

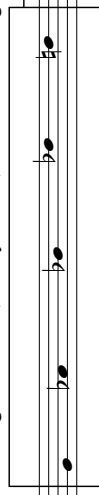
improvised 'jazz' solo using the given 'mode', make use of ideas given from rehearsal letter L

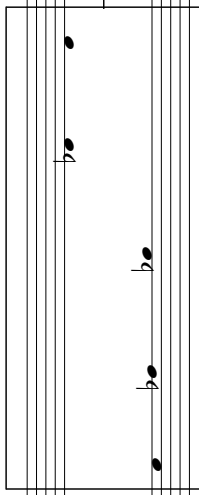
Fl. 

Hi-Ht.  repeat the boxed rhythm to accompany flute solo, ornament the rhythm in response to the rhythm section (Gtr. Pno. Db.)

Hi-Ht.  repeat the boxed rhythm to accompany flute solo, ornament the rhythm in response to the rhythm section (Gtr. Pno. Db.)

use the given 'mode', in any octave, to form a backing for the flute solo with the piano and double bass, make use of material given from rehearsal letter L, respond to the other players as in a jazz quartet

Gtr. 

Pno. 

modal improvisation c.a. 40secs - 1minute

use the given 'mode', in any octave, to form a backing for the flute solo, make use of material given from rehearsal letter L to fashion a 'walking bass', respond to the other players in the manner of a jazz quartet

Db. 

M =50 from another place, searching

193

The musical score is divided into two systems. The first system includes three percussion staves: Ride Cym., Hi-Ht., and Hi-Ht. The second system includes a Fl. staff (labeled 'To Ride Cym.' and 'Ride Cymbal'), two Hi-Ht. staves, a Gtr. staff, a Pno. staff, and a Db. staff. The Gtr. staff has two parts: one with 'tasto' and 'mp' markings, and another with 'pnt.' and 'tasto' markings. The Pno. staff has 'rich, warm sound' and 'p ped. sempre' markings. The Db. staff has 'pizz. sempre' and 'vib.' markings. Dynamics include *p*, *mp*, and *pnt.*. Articulations include *tasto*, *pnt.*, and *vib.*. Rhythmic patterns include triplets and sixteenth notes.

M =50 from another place, searching

pizz. sempre

mp

199 $\text{♩} = 60$

Ride Cym. *mp*

Hi-Ht. *mp*

Hi-Ht. *mp*

Ride Cym. *mf*

Hi-Ht. *mf*

Hi-Ht. *mf*

Gtr. *mf* *p* *p* *tasto a XII sempre*

Pno. *mp* *p* *ped. sempre P*

Db. $\text{♩} = 60$ *mp* *mf* *mp* *sul A arco (pmp)*

Ride Cym. Hi-Ht. Hi-Ht.

mf *p*

Ride Cym. Hi-Ht. Hi-Ht.

p *p*

Gtr. Pno.

mp *ppp*

Db.

f *mp* *mf sub* *p*

slowly change ad lib. until end
tasto -> ord. -> pont.

Ride Cym. Hi-Ht. Hi-Ht. Ride Cym. Hi-Ht. Hi-Ht. Gtr. Pno. Db.

211

Piano: *luminous* *p*

Double Bass: *mp*



217

Piano: *pp*

Double Bass: *pp possible*

ring until silent...

...BUT THEIR STILLNESS SHOWED PLAINLY...
(2017)

**FOR CLARINET IN B^b, VIOLIN, VIOLA AND VIOLONCELLO
C.9'30"**

SAM CAVE (B.1987)

Instrumentation

Clarinet in Bb

Violin

Viola

Violoncello

Notational Considerations

Score in C with the following exceptions:

- Natural harmonics for the strings are notated at approximate fingered pitch with the desired sounding pitch of each harmonic shown in parentheses at its first occurrence.
- Notes played on the retuned D string of the violin and G string of the viola are notated at fingered pitch on the main stave with the sounding pitch of each note shown on a small subsidiary stave at its first occurrence.

Duration: c.9 minutes 30 seconds

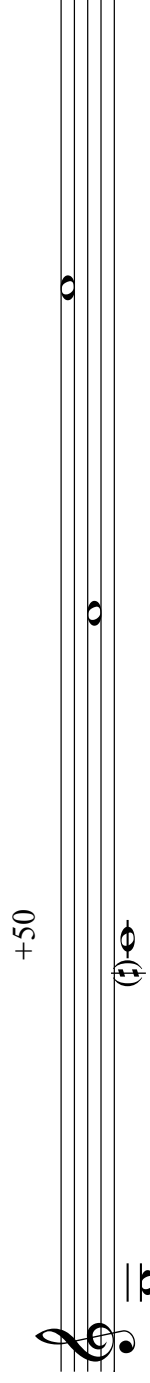
Other notational considerations

Clarinet in Bb

Straight lines between pitches indicate pitch bending between the two notes. The exact amount of pitch bend is often intended to pre-empt or match a pitch from one of the other instruments, which instrument to match pitches with is often indicated in the score and a desired amount of pitch movement is often indicated in cents. Strength of vibrato (when specified) is shown by the relative thickness of the black wavy line. When no indication of the nature of the vibrato is given, less is better than more – especially when no vibrato can be heard in the string parts (e.g. when they are playing harmonics).

Violin

Scordatura:

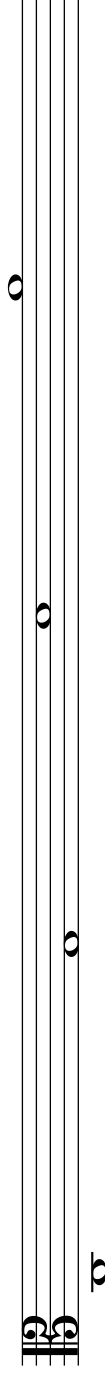


Deviations from equal temperament are shown in cents - the D string is retuned to C 50 cents sharp. Strength of vibrato (when specified) is shown by the relative thickness of the black 'wavy' line. When no indication of the nature of the vibrato is given, less is better than more. Glissandi on natural harmonics should be performed in a slow, smooth and ethereal manner. The dotted crescendo and decrescendo markings are intended to be a guide as to varying amounts of bow pressure, it is intended that this variation will bring out different partials and harmonics. The left hand tremolo between a harmonic and the open string should be fast and unmeasured creating a hushed, fluttering effect.

Viola

Scordatura:

-20



Deviations from equal temperament are shown in cents – the G string is retuned to a G 20 cents flat. Strength of vibrato (when specified) is shown by the relative thickness of the black ‘wavy’ line. When no indication of the nature of the vibrato is given, less is better than more. The ‘bow on bridge’ instruction at b.123 should produce an indeterminate, quiet, very high ‘white noise’. The left hand tremolo between a harmonic and the open string should be fast and unmeasured creating a hushed, fluttering effect. Left hand pizzicato is indicated with a ‘+’ and the string should be plucked near the halfway point to give a sweet sound.

Violoncello

Strength of vibrato (when specified) is shown by the relative thickness of the black wavy line. When no indication of the nature of the vibrato is given, less is better than more. Glissandi on natural harmonics should be performed in a slow, smooth and ethereal manner. The dotted crescendo and decrescendo markings are intended to be a guide as to varying amounts of bow pressure, it is intended that this variation will bring out different partials and harmonics. The left hand tremolo between a harmonic and the open string should be fast and unmeasured creating a hushed, fluttering effect. Left hand pizzicato is indicated with a ‘+’ and the string should be plucked near the halfway point to give a sweet sound.

...but their stillness showed plainly... was written for the Distractfold Ensemble for their visit to Brunel University in May 2017.

...but their stillness showed plainly...

Sam Cave
(b.1987)

Clarinet in Bb: $\text{♩} = 44$, lip bend, $(\text{♩} = 50)$, sim, pp , p

Violin: non vib, sul C pont, pp , norm, gliss, sul G, mp , p

Viola: pp , p

Violoncello: sul C, pp , p

Viola (sounding): pp , p

Cl.: 8, match violin pitch, $(\text{♩} = 50)$, mp , sul D, pp , a little vib. now and again, norm-sul G, sul D, p

Vln. (sounding): mf , sul D, mf , sul A, p , gliss natural harmonics, sfp , p

Vla.: sul D, p , sul A, p

Vc.: mf , sul A, p

A

15 match violin pitch
(c=50)

Cl.

Vln. *p*

Vla. con sord non vib match fade of clarinet *pp*

Vc. con sord senza sord sul tasto

B

19

Cl. con sord non vib match fade of viola *pp*

Vln. senza sord *mp* sul D *f*

Vla. senza sord sul pont *p*

Vc. norm molto pont *mf* varying amounts of excessive bow pressure to activate harmonics

match viola

24

Cl. *mf*

Vln. *f* sul D *f* sul G *p* sul A *pp* sul E *f* sul D *f* sul D *f* sul E *f*

Vla. *p* norm sul G *p* sul A *p* sul pont *norm* *sfp*

Vc. *mf* *p* *mf* *f* jete sul pont *norm* → sul pont *tr* *mf* *p* *f* norm sul G → molto pont sul pont *f*

28

Cl. *mp* *p*

Vln. *mf* *p* sul pont → norm sul D *mf* *p* *very slow gliss*

Vla. *p* *p*

Vc. *p*

D

Musical score for measures 33-38, featuring four staves: Clarinet (Cl.), Violin (Vln.), Viola (Vla.), and Violoncello (Vc.).

- Cl.:** Measures 33-35 feature a triplet of eighth notes with a dynamic of *p*. Measure 36 has a triplet of eighth notes with a dynamic of *mp*. Measure 37 has a triplet of eighth notes with a dynamic of *mp*. Measure 38 has a triplet of eighth notes with a dynamic of *mp*. Annotations include "very slow bend" and "slow gliss".
- Vln.:** Measures 33-38 feature a sustained note with a dynamic of *p*. Annotations include "sul G" and "make 8ve with viola".
- Vla.:** Measures 33-38 feature a sustained note with a dynamic of *mf*. Annotations include "sul C" and "sul G".
- Vc.:** Measures 33-38 feature a sustained note with a dynamic of *p*.

E

Musical score for measures 39-44, featuring four staves: Clarinet (Cl.), Violin (Vln.), Viola (Vla.), and Violoncello (Vc.).

- Cl.:** Measures 39-44 feature a sustained note with a dynamic of *p*. Annotations include "norm" and "sul D".
- Vln.:** Measures 39-44 feature a sustained note with a dynamic of *mp*. Annotations include "vary bow pressure to bring out harmonics", "sim", "sul D", "jete sul pont", "mf", "sfp", "norm", and "sul D".
- Vla.:** Measures 39-44 feature a sustained note with a dynamic of *p*. Annotations include "norm" and "sul pont".
- Vc.:** Measures 39-44 feature a sustained note with a dynamic of *f*. Annotations include "norm" and "sul pont".

44

Cl. *mp* fast, unmeasured tremolo

Vln. *p* sul D → sul tasto

Vla. *p* sul C slow warm vib

Vc. *pp* increase vib with dynamic swells

mp increase vib with dynamic swells

norm sul G

sul tasto

mp sul pont → sul tasto

p → sul pont

sim

49

Cl. *p* **F** $\text{♩} = 50$

Vln. *mf* → sul tasto

Vla. *p* quite long pause, but still within 'memory' of the violin e

Vc. *p* norm, no vib at all

mf

sul tasto

p

mf

52

Cl. *p*

Vln. *mf* sul tasto *p* *pp* *norm* *p*

Vla. *pp* *mp*

Vc. *pp* *norm* *gliss natural harmonics* *pp sub*

56

Cl. *p* *pp* *p* *a little vib now and again* *p*

Vln. *pp* *a little vib now and again* *p*

Vla. *p* *a little vib now and again* *p*

Vc. *p* *a little vib now and again*

G

60

Cl.

Vln.

Vla.

Vc.

absolutely no vib

p

mp > p

p

absolutely no vib

p

absolutely no vib

p

66

Cl.

Vln.

Vla.

Vc.

slow bend

mf

mp

f

mp

f

mp

f

mf

sfp

sfp

sfp

sul pont

H

69

Cl.

Vln.

Vla.

Vc.

76

Cl.

Vln.

Vla.

Vc.

82

Cl. grace notes not too fast

Vln. sul D sul A sul E (-50) (-50) sul A only *f* *p* *p*

Vla. left hand 'ad lib' trem by bouncing at the harmonic node *p* *mf* *p*

Vc. sul G *sfpp* *p*

88

Cl. *pp* match cello (3.1) *p*

Vln. sul tasto sul G slow warm vibrato *p*

Vla. sul C sul G sul tasto sul tasto sul pont sul tasto *sfz*

Vc. *sfz*

107 **K** $\text{♩} = 44$

Cl. *pp*

Vln. *pp*

Vla. *pp*

Vc. *pp*

gliss on natural harmonics

sul pont

sul tasto

sul tasto

sul pont sul D

sul pont sul D (gr)

sul tasto

114

Cl. *p*

Vln. *pp*

Vla. *pp*

Vc. *ppp*

accents only very slight

sul D sul tasto

sul tasto

sul tasto

sul tasto

norm sul D

sul G

sul tasto

L

121

Cl.
Vln.
Vla.
Vc.

sul tasto
sul pont
pp
bow on bridge
left hand pizz
left hand pizz

128

Cl.
Vln.
Vla.
Vc.

pp
molto pont
pp
hold until silent...

...BUT THEIR STILLNESS SHOWED PLAINLY...
(2017)

**VERSION FOR STRING QUARTET
C.9'30''**

SAM CAVE (B.1987)

Instrumentation

Violin 1
Violin 2
Viola
Violoncello

Duration: c.9 minutes 30 seconds

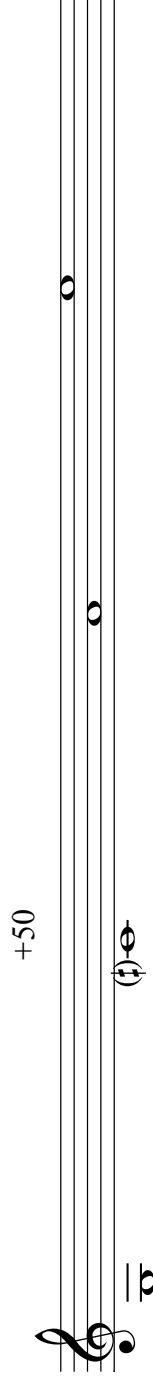
Notational Considerations

Score in C with the following exceptions:

- Natural harmonics for the strings are notated at approximate fingered pitch with the desired sounding pitch of each harmonic shown in parentheses at its first occurrence.
- Notes played on the retuned D string of the violin and G string of the viola are notated at fingered pitch on the main staff with the sounding pitch of each note shown on a small subsidiary staff at its first occurrence.

Violins I and II

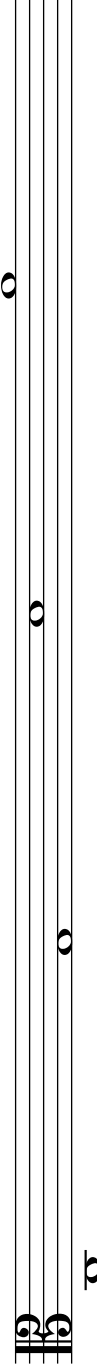
Scordatura:



Deviations from equal temperament are shown in cents. For example, the D string is retuned to C 50 cents sharp. Specific string indications should be observed. Strength of vibrato (when specified) is shown by the relative thickness of the black 'wavy' line. When no indication of the nature of the vibrato is given, less is better than more. Glissandi on natural harmonics should be performed in a slow, smooth and ethereal manner. The dotted crescendo and decrescendo markings are intended to be a guide as to varying amounts of bow pressure, it is intended that this variation will bring out different partials and harmonics.

Viola

Scordatura:



Deviations from equal temperament are shown in cents. In the case of the viola the G string is retuned to G 20 cents flat. Specific string indications should be observed. Strength of vibrato (when specified) is shown by the relative thickness of the black 'wavy' line. When no indication of the nature of the vibrato is given, less is better than more. The 'bow on bridge' instruction at b.123 should produce an indeterminate, quiet, very high 'white noise'. The left hand tremolo between a harmonic and the open string should be fast and unmeasured creating a hushed, fluttering effect. Left hand pizzicato is indicated with a '+' and the string should be plucked near the halfway point to give a sweet sound.

Violoncello

Specific string indications should be observed. Strength of vibrato (when specified) is shown by the relative thickness of the black wavy line. When no indication of the nature of the vibrato is given, less is better than more. Glissandi on natural harmonics should be performed in a slow, smooth and ethereal manner. The dotted crescendo and decrescendo markings are intended to be a guide as to varying amounts of bow pressure, it is intended that this variation will bring out different partials and harmonics. The left hand tremolo between a harmonic and the open string should be fast and unmeasured creating a hushed, fluttering effect. Left hand pizzicato is indicated with a '+' and the string should be plucked near the halfway point to give a sweet sound.

...*but their stillness showed plainly...* was written for the Distractfold Ensemble for their workshop at Brunel University in May 2017. This version for String Quartet was written for the Manon Quartet in anticipation of their recording day at Brunel in June 2017.

...but their stillness showed plainly...

version for string quartet

Sam Cave
(b.1987)

Violin 1: $\text{♩} = 44$, sul G, gliss. ⁽⁻²⁰⁾, sim., sul A, *pp*

Violin 2: non vib. sul C point, *pp*

Viola: norm., gliss. sul G, *pp*, *mp*, Viola (sounding) *p*

Violoncello: sul C, *pp*

Violin 1: 8 match violin 2 pitch ⁽⁻⁵⁰⁾, *mp*, a little vib. now and again, *pp*

Violin 2: sul D, *mp*, sul A, sul G, sul D, norm., *pp*, gliss natural harmonics, *sfp*

Viola: sul D, *p*

Violoncello: sul A, *p*

A

15 sul A, match violin 2 pitch
(c#5)

Violin 1

Violin 2

Viola

Violoncello

con sord.

non vib.

match fade of violin 1

pp

con sord.

senza sord. sul tasto



B

19 non vib. con sord. match fade of viola

Violin 1

Violin 2

Viola

Violoncello

senza sord.

sul D

Violin 1 (sounding)

f

mp

sul pont

p

norm.

molto pont

mf

varying amounts of excessive bow pressure to activate harmonics

24 **3**

Vln. 1 sul D *f* sul A *mf*

Vln. 2 match viola ⁽²⁰⁾ *pp* sul G *f* sul D *f* sul E

Vla. sul G norm. *pp* sul A *p* sul pont. → norm. *sfp*

Vc. jete sul pont. → norm. *mf* → *p* → *mf* → *f* sul pont. *f* norm. sul G ^(8*) *f*



28 **C**

Vln. 1 *mp* *p*

Vln. 2 sul pont. → norm. *mf* *p*

Vla. sul D *pp* *p* very slow gliss.

Vc. *p*

D

Musical score for measures 33-38, featuring Violin 1, Violin 2, Viola, and Violoncello. The score includes various performance instructions and dynamics.

- Violin 1:** Measure 33: *p*, trill (3), *mp*, *mp*, *mp*. Measure 34: *p*. Measure 35: *mp*. Measure 36: *p*. Measure 37: *p*. Measure 38: *p*.
- Violin 2:** Measure 33: *p*. Measure 34: *p*. Measure 35: *p*. Measure 36: *p*. Measure 37: *p*. Measure 38: *p*.
- Viola:** Measure 33: *p*. Measure 34: *p*. Measure 35: *p*. Measure 36: *p*. Measure 37: *p*. Measure 38: *p*.
- Violoncello:** Measure 33: *p*. Measure 34: *p*. Measure 35: *p*. Measure 36: *p*. Measure 37: *p*. Measure 38: *p*.

Annotations: "very slow gliss." (Violin 1, measure 33), "make 8ve with viola" (Violin 1, measure 33), "slow gliss." (Violin 2, measure 34), "sul G" (Violin 1, measure 33), "sul C" (Violin 1, measure 35), "sul G" (Violin 1, measure 35), "jete sul pont" (Violin 1, measure 39).



E

Musical score for measures 39-44, featuring Violin 1, Violin 2, Viola, and Violoncello. The score includes various performance instructions and dynamics.

- Violin 1:** Measure 39: *p*. Measure 40: *mf*. Measure 41: *mf*. Measure 42: *mf*. Measure 43: *mf*. Measure 44: *mf*.
- Violin 2:** Measure 39: *p*. Measure 40: *mf*. Measure 41: *mf*. Measure 42: *mf*. Measure 43: *mf*. Measure 44: *mf*.
- Viola:** Measure 39: *p*. Measure 40: *mf*. Measure 41: *mf*. Measure 42: *mf*. Measure 43: *mf*. Measure 44: *mf*.
- Violoncello:** Measure 39: *p*. Measure 40: *mf*. Measure 41: *mf*. Measure 42: *mf*. Measure 43: *mf*. Measure 44: *mf*.

Annotations: "Sul D jete sul pont" (Violin 1, measure 39), "Sul D" (Violin 1, measure 40), "Sul D" (Violin 1, measure 41), "Sul D" (Violin 1, measure 42), "Sul D" (Violin 1, measure 43), "Sul D" (Violin 1, measure 44), "vary bow pressure to bring out harmonics" (Violin 1, measure 40), "norm. sul D" (Violin 1, measure 42), "sim." (Violin 1, measure 42), "sfp" (Violin 1, measure 42), "sul D" (Violin 1, measure 43), "norm. sul D" (Violin 1, measure 43), "sul D" (Violin 1, measure 44), "norm." (Violin 2, measure 40), "sul pont" (Violin 2, measure 40), "norm." (Violin 2, measure 41), "f" (Violin 2, measure 44), "mp" (Violin 2, measure 44).

fast, unmeasured tremolo between strings

44

Vln. 1
sul A
pp
increase vib. with dynamic swells
mp

Vln. 2
sul D
norm sul G
increase vib. with dynamic swells
p

Vla.
sul C
slow warm vib.
p

Vc.
sul ponto → sul tasto
mp<
sul ponto → sul ponto



49

Vln. 1
F J=50

Vln. 2
sul tasto
mf
quite long pause, but still within 'memory' of the violin e
p

Vla.
p
norm, no vib. at all

Vc.
sul tasto
p

52

sul tasto *mf* sul G *p* norm. *pp* *p*

Vln. 1

Vln. 2

Vla.

Vc.

gliss. natural harmonics norm. *pp* *mp* *pp sub*



56

a little vib. now and again *pp* *p* a little vib. now and again *p*

Vln. 1

Vln. 2

Vla.

Vc.

a little vib. now and again *p* a little vib. now and again

G

60

Vln. 1

absolutely no vib.

p

mp > p

Vln. 2

absolutely no vib.

p

Vla.

absolutely no vib.

p

Vc.



66

Vln. 1

slow gliss.

mf

mp

f

Vln. 2

mp

f

Vla.

mp

f

Vc.

sfp

mf

sfp

sul pont

sfp

f

H

69

Violin 1: sul G

Violin 2: sul pont sul E

Viola: sul C

Violoncello: jete norm. *ff* *pp subito* *p* sul pont sul C sul G

left hand ad lib. trem. by bouncing at the harmonic node



76

Violin 1: *mf*

Violin 2: sul D *p*

Viola: sul pont *mp* *p*

Violoncello: *mf* *p* *mp* *p* sul D

left hand ad lib. trem. by bouncing at the harmonic node

gloss. natural harmonics

molto pont during trem.

82

9



88

94

Vln. 1 *mf* *p* *mf*

Vln. 2 *norm.* *mf*

Vla. *norm.* *sul G* *mf*

Vc. *sul tasto sul G* *p*



101

Vln. 1 *sul pont sul E* *mf* *norm.* *sim* *sul tasto* *mf*

Vln. 2 *match viola* *(14)* *sfz* *norm.* *sul pont* *mf* *f ruvido au talon* *sim* *mf*

Vla. *sul C* *mf* *norm.* *sul G* *mf* *f ruvido au talon* *sim* *mp*

Vc. *sul G* *molto pont* *mp* *mp swell with Vln. 2*

108

Vln. 1

Vln. 2 sul pont sul D *pp*

Vla. sul pont sul D (pizz) *pp*

Vc. sul tasto → gliss on natural harmonics



115

Vln. 1 accents only very slight

Vln. 2 sul D sul tasto sul G *pp*

Vla. sul tasto sul pont *ppp*

Vc. norm. sul D *ppp*

122 sul G sul tasto sul pont sul tasto ppp

Vln. 1

Vln. 2 sul tasto sul E pp

Vla. left hand pizz

Vc. left hand pizz

129 molto pont

Vln. 1

Vln. 2 bow on bridge

Vla. left hand pizz

Vc. left hand pizz

136

Vln. 1 sul tasto ppp

Vln. 2 pp

Vla. pp

Vc. pp



143

Vln. 1 molto pont

Vln. 2 pp

Vla. pp

Vc. pp

149

Vln. 1 molto pont

Vln. 2 pp

Vla. pp

Vc. pp

hold until silent...

AT THE EDGE OF HIS DREAMS...
(2017)

**FOR CLARINET IN B^b, VIOLIN, VIOLONCELLO, GUITAR, ACCORDION, PIANO
AND OPTIONAL CHURCH BELLS IN G
C.8-10'**

SAM CAVE (B.1987)

Instrumentation

Clarinet in Bb

Violin

Violoncello

Guitar (off-stage)

Accordion

Piano

Score in C with the usual octave transpositions

Duration: c.8-10 minutes

At the edge of his dreams... was commissioned by Corentin Chassard for the Thornham Summer Festival 2017 and was premiered on July 22nd 2017 at Thornham Magna, Suffolk by the festival ensemble conducted by Jon Hargreaves.

Bells

These can only be included when the church has a ground floor ring of 6 bells in G. The bells are only chimed in this piece – not rung ‘up’ and full circle. They are numbered from 1 (highest pitch, the treble) to 6 (lowest pitch, the tenor). The rhythms given to the bells should not be attempted accurately – they are to show the musical function of the bells (e.g. an upbeat, a background ‘wash’). There will likely be a delay between cueing the bells and hearing them sound in the church – the conductor should take account of this. When chimed in this way church bells are rhythmically imprecise – this is to be embraced and is part of the expressive fabric of this piece.

Clarinet in Bb

Straight lines between pitches indicate pitch-bending between the two notes. The exact amount of pitch bend is often intended to pre-empt or match a pitch from one of the other instruments. Strength of vibrato (when specified) is shown by the relative thickness of the black wavy line. When no indication of the nature of the vibrato is given, less is better than more – especially when no vibrato can be heard in the string parts (e.g. when they are playing harmonics).

Violin

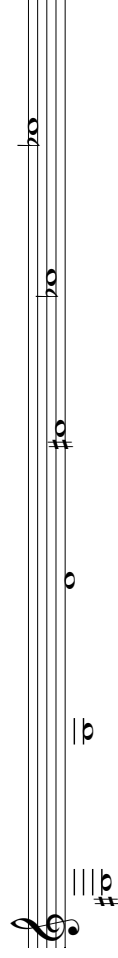
Natural harmonics are notated at approximate fingered pitch with the desired sounding pitch shown in parentheses. Specific string indications should be observed, especially for harmonics. Strength of vibrato (when specified) is shown by the relative thickness of the black wavy line. When no indication of the nature of the vibrato is given, less is better than more. Glissandi should be performed in a smooth and ethereal manner.

Violoncello

Harmonics are notated at approximate fingered pitch with the desired sounding pitch shown in parentheses. Specific string indications should be observed, especially for harmonics. Strength of vibrato (when specified) is shown by the relative thickness of the black wavy line. When no indication of the nature of the vibrato is given, less is better than more. Glissandi on natural harmonics, and in general, should be performed in a slow, smooth and ethereal manner. The dotted crescendo and decrescendo markings are intended to be a guide as to varying amounts of bow pressure, it is intended that this variation will bring out different partials and harmonics.

Guitar (off-stage)

Scordatura:



The guitar functions like a ghost of the piano. Its chords are held until they are inaudible to the player; they are then repeated and held again, the guitarist then moves to the next chord. Over these chords there are repeating fragments that continue until the guitar changes chord. The conductor may help indicate when the guitar has changed chords but must not beat time or emphatically cue players during this section of the piece (rehearsal letters F-G)

Accordion

Strength of vibrato (when specified) is shown by the relative thickness of the black wavy line. When no indication of the nature of the vibrato is given, less is better than more – especially if no vibrato can be heard in the other parts at that moment (e.g. when the strings are playing harmonics). The glissando in bar 37 can be performed in any practical way – for example, it could begin as a chromatic scale in the left hand and then become a ‘normal’ glissando as the pitch moves to the right hand.

Piano

In some moments the pianist is required to cue the rest of the ensemble to continue the piece. At the points indicated the piano should hold its chord until the sound becomes inaudible. At this moment the player cues the ensemble and conductor to continue the next bar ‘a tempo’. During the held chords there are usually repeated and varying fragments played by some of the other instruments – these are played ‘free time’ and continue until the piano cues the next bar. It does not matter if the final iterations of the fragments overlap into the following ‘a tempo’ bar

At the edge of his dreams...

Sam Cave
(b. 1987)

♩=54 fragile yet intense

The musical score is arranged in a system with seven staves. From top to bottom, the staves are: Bells, Clarinet in B \flat , Violin, Violoncello, Guitar (off stage), Accordion, and Piano. The Bells staff begins with a *ff* dynamic and a fermata. The Violoncello staff includes instructions for *ord.*, *sul pont.*, *match pitch of bell*, *ppp*, *f*, *ord.*, *small gliss.*, *slow gliss.*, and *sfp*. The Accordion staff features *ppp* dynamics and a tremolo effect. The Piano staff concludes with a *f* dynamic and a fermata. The score is written in 4/4 time and includes various performance markings such as dynamics, articulation, and glissando.

A

Cl. part: *lip bend*, *pp*, *p*. *gentle vib. and pitch (lip) bend, cont. ad lib. until piano cue, breathe when necessary*. *vary dynamics ad lib. never more than *mp**

Vln. part: *sfpp*. *gentle vib. and pitch gliss, cont. ad lib. until piano cue*. *vary dynamics ad lib. never more than *mp**

Vc. part: *wait for piano to cue the next bar*

sparsely repeat and vary ad lib. until piano cue

Accord. part: *hold until piano cue*. *p*

A

Pno. part: *ff*, *mf*, *p*, *mp*, *p*. *cue next bar when chord inaudible*

B a tempo ♩=54

10

Cl.

repeat and vary ad lib. until piano cue

mp *sim* *pp*

as previous 'bar'

Vln.

start from pp

Vc.

wait for piano to cue the next bar

ord. → sul pont. → molto pont.

p *f*

varying amounts of excessive bow pressure to activate harmonics

sparsely repeat and vary ad lib. until piano cue

Accord.

p

hold until piano cue

Pno.

wait until inaudible

cue next bar when chord inaudible

mf *mp* *f*

a tempo ♩=54

Cl. *mf* > *f*

Vln. *mp* *f* *sfp* *ord.* *ord. sul D sul D* *p* *f* *p*

Vc. *sul pont.* *sul A* *f* *sfp* *ord.* *ord. sul D sul D* *p* *f* *p*

Accord. *p* *mf* *pp* *mf* *p*

Pno. *let all ring* *pp* *mf* *p*

Detailed description: This page of a musical score features five staves. The Clarinet (Cl.) staff has a melodic line starting with a dynamic of *mf* and a crescendo to *f*. The Violin (Vln.) and Violoncello (Vc.) staves are paired with a *mp* dynamic, followed by a *f* dynamic, and then a *sfp* dynamic. Both have performance instructions for *sul pont.* and *sul A*. The Violoncello staff also includes *ord.* and *ord. sul D sul D* markings. The Accordions (Accord.) staff has dynamics of *p*, *mf*, *pp*, *mf*, and *p*. The Piano (Pno.) staff has a *let all ring* instruction and dynamics of *pp*, *mf*, and *p*.

This musical score page contains five systems of staves for different instruments. The first system includes a bass clef staff and a Clarinet (Cl.) staff. The Cl. staff begins with a *pp* dynamic, followed by a *f* dynamic, and ends with a *p* dynamic. The second system includes Violin (Vln.) and Violoncello (Vc.) staves. The Vln. staff has a *p* dynamic and includes a *sul pont.* instruction with a wavy line. The Vc. staff has a *ff* dynamic and includes an *ord.* instruction with a wavy line. The third system is for the Accord. (Accordion) and features a treble clef staff with a *p* dynamic and a *f* dynamic. The fourth system is for the Piano (Pno.) and includes a treble clef staff with a *ff* dynamic, a *mp* dynamic, and a *p* dynamic. It also features a bass clef staff with a *ff* dynamic and a *mp* dynamic. The Pno. staff includes triplet markings (3) and a 7-measure rest.

C

Cl.

wait for piano to cue the next bar

f *ff* *sfp* *ff*

Detailed description: The Clarinet part begins with a dynamic of *f*. It features a triplet of eighth notes marked with a '3' and a fermata. This is followed by a half note with a fermata, then a quarter note with a fermata. The dynamics increase to *ff*, then decrease to *sfp*, and finally return to *ff*. A rehearsal mark 'C' is placed above the first measure.

Vln.

Vc.

wait for piano to cue the next bar

p *ff* *ff* *mf* *p*

ord. *mf* *p*

cont. until piano cues next bar

gloss. between pitches ad lib.

Detailed description: The Violin and Violoncello parts are written in a grand staff. The Violin part starts with a tremolo marked *p*, then a *ff* section. The Violoncello part starts with a *ff* section, then a *molto pont.* section with a wavy line, followed by a *ff* section. A rehearsal mark 'C' is placed above the first measure. A box highlights a section with the instruction 'gloss. between pitches ad lib.' and dynamics *mf* and *p*. The text 'ord.' is written above this section. A long line with a fermata spans across the bottom of the page, with the instruction 'cont. until piano cues next bar' written above it.

Accord.

wait for piano to cue the next bar

ff

Detailed description: The Accordions part consists of a single measure with a dynamic of *ff*. A rehearsal mark 'C' is placed above the measure.

Pno.

wait until inaudible

cue next bar when final chord inaudible

mf *ff* *mp* *mp*

Detailed description: The Piano part begins with a dynamic of *mf*, followed by a *ff* section. It includes a triplet of eighth notes marked with a '3'. The dynamics then decrease to *mp*. A rehearsal mark 'C' is placed above the first measure. The text 'wait until inaudible' and 'cue next bar when final chord inaudible' is written above the *mp* section.

D a tempo $\text{♩} = 54$

27

Cl.

Vln.

lunge through the note
sul D ^(6th) ff

sim.

lunge through the note
sul A ^(6th) ff

sim.

sim.

sfpp ff

ff

ff

ff

Vc.

Accord.

p

$< f$

p sub.

ff ppp sub.

pp

pp sub.

p

D a tempo $\text{♩} = 54$

mp

f

mp ff

mp let all ring

32

5 5 5 5 5 5 5

Cl.

lunge through the note

Vln.

Vc.

sul G

sul A

sul D

Accord.

sim

sul pont.

Pno.

sul D

sul A

Pno.

37 **E** $\text{♩} = 84$

Cl.

Vln. *f* $\text{♩} = 84$
swell dynamics ad lib
(never less than forte)

Vc. *sempre sul pont.* *ff*
sul D *sul G* *sul D* *sul A*
sim

Accord. *ff*
short pause
gloss.
pppp

Pno. *ff* $\text{♩} = 84$

♩=60

42

Cl.

Musical score for Clarinet (Cl.). The staff shows a melodic line starting with a half note G4, followed by quarter notes A4, Bb4, and C5. The dynamics are marked *p* and *mf*. A slur covers the first four notes.

Vln.

Musical score for Violin (Vln.). The staff shows a melodic line starting with a half note G4, followed by quarter notes A4, Bb4, and C5. The dynamics are marked *mf* and *mp*. A slur covers the first four notes. The instruction "sul pont." is written above the staff.

Vc.

Musical score for Violoncello (Vc.). The staff shows a melodic line starting with a half note G4, followed by quarter notes A4, Bb4, and C5. The dynamics are marked *pp* and *ff*. The instruction "sul D" is written above the staff.

Accord.

Musical score for Accordions (Accord.). The staff shows a melodic line starting with a half note G4, followed by quarter notes A4, Bb4, and C5. The dynamics are marked *pp* and *ff*. The instruction "sul A" is written above the staff.

Pno.

Musical score for Piano (Pno.). The staff shows a melodic line starting with a half note G4, followed by quarter notes A4, Bb4, and C5. The dynamics are marked *pp* and *ff*. The instruction "sul D" is written above the staff.

♩=60

47

Cl.

Cl. part of the musical score. It features a treble clef and a key signature of one flat. The music begins with a dynamic marking of *p*. The notation includes several measures with slurs and accents. A triplet of eighth notes is marked with a '3' and a bracket, with a dynamic marking of *mf sub* below it. The piece concludes with a dynamic marking of *mf*.

molto pont.

Vln. Vc.

Violin (Vln.) and Violoncello (Vc.) parts of the musical score. Both parts are written in treble clef. The Vln. part includes a dynamic marking of *p* and a 'sul D ord.' instruction. The Vc. part includes a 'sul pont.' instruction and a dynamic marking of *p*. Both parts feature long, sustained notes with slurs.



Accord.

Accordio part of the musical score. It is written in treble clef and begins with a dynamic marking of *p*. The notation shows a few notes with a slur.

Pno.

Piano (Pno.) part of the musical score. It is written in treble and bass clefs. The notation shows a few notes with a slur.

52 **F** (♩=60)

Cl. *p* enter after accordion

Vln. *ppp* sul G repeat until guitar changes chord

Vc. *ppp* sul D (6th) repeat until guitar changes chord

Gtr. *ppp* repeat when inaudible, cue next chord when *pp* repeated chord inaudible

Accord. *ppp* repeat until guitar changes chord

Pno. *ppp* repeat until guitar changes chord

(♩=84) (♩=60)

sul D, A and E (mix ad lib.) *pp* sim.

pp sim

p repeat until guitar changes chord

p repeat until guitar changes chord

ppp repeat until guitar changes chord

(♩=84) (♩=60)

G a tempo ♩=60

57

Cl. a little vib. now and again #2

repeat until guitar changes chord

sul D (♯) sul E ord.

enter after accord.

pp

ff

ff

ff

pp

ff

pp

mp

mp

mp

ff

8^{sub} pedal down until the end

62

3 5 3

Cl.

Vln.

Vc.

Accord.

Pno.

ord. sul G

sul C

sul tasto sul C

mp

p

mf

p

pp

8^{va}.....]

Detailed description: This page of a musical score covers measures 62 to 82. It features five staves: Clarinet (Cl.), Violin (Vln.), Viola (Vc.), Accordions (Accord.), and Piano (Pno.). The Clarinet part begins with a triplet of eighth notes (3, 5, 3) and includes a dynamic marking of *p*. The Violin and Viola parts are heavily marked with *mp* and *p*. The Viola part includes the instruction 'sul tasto sul C' and a triplet of eighth notes. The Violin part includes 'ord. sul G' and 'sul C'. The Piano part features a triplet of eighth notes and a dynamic marking of *pp*. The score concludes with an 8va (octave) marking and a fermata.

67

3 5 3

Cl.

Musical notation for Clarinet (Cl.) in G major, featuring a melodic line with a trill and a fermata.

Vln.

Vc.

Musical notation for Violin (Vln.) and Viola (Vc.) parts. Includes performance instructions: *sul pont.*, *gliss nat. harmonics sul C*, *sul A*, and *sul C*. Dynamics include *ff* and *mf*.

Accord.

Musical notation for Accordions. Includes performance instructions: *sul g*, *sfp*, *f*, *mf*, *f*, and *pp sub.*. Dynamics include *ff* and *mf*.

Pno.

Musical notation for Piano (Pno.) part. Includes performance instructions: *8va*, *mf*, *p*, *mf*, *ff*, and *pp sub.*. Dynamics include *ff* and *mf*. Includes a 5-measure rest.

chime 3,5 now and then until the end

72 3 5

Cl. match fade of Vln. #2

Vln. sul D mp

Vc. sul C pp

Accord.

Pno. p

73 74 75

norm

sul C sul A

3 3

77

Cl. *match fade of Cl. # sul E* *sul pont.*

Vln. *pp* *mp*

Vc. *sul tasto flautando* *pp* *ord. sul D*

Accord. *ff*

Pno. *3* *3*

Detailed description: This page of a musical score contains five systems of staves. The first system shows the Clarinet (Cl.) staff with a treble clef and a key signature of one sharp (F#). It begins with a measure of rest, followed by a note on E4 marked 'match fade of Cl. # sul E'. The second system continues with the Clarinet staff, showing a long note on E4 marked 'sul pont.'. The Violin (Vln.) and Viola (Vc.) staves are introduced in the second system. The Violin part starts with a long note on E4 marked 'pp', followed by a measure of rest, and then a note on E4 marked 'mp'. The Viola part starts with a note on D3 marked 'pp', followed by a measure of rest, and then a note on D3 marked 'mp'. The third system continues with the Violin and Viola parts. The Violin part has a note on E4 marked 'pp', followed by a measure of rest, and then a note on E4 marked 'mp'. The Viola part has a note on D3 marked 'pp', followed by a measure of rest, and then a note on D3 marked 'mp'. The fourth system shows the Accordion (Accord.) staff with a treble clef and a key signature of one sharp (F#). It begins with a measure of rest, followed by a note on F#4 marked 'ff'. The fifth system continues with the Accordion staff, showing a long note on F#4 marked 'ff'. The Piano (Pno.) staff is introduced in the fifth system. It begins with a measure of rest, followed by a triplet of notes on F#4, G#4, and A4 marked '3'. The second system of the Piano part continues with a triplet of notes on F#4, G#4, and A4 marked '3'.

82

Cl.

Vln. *pppp* *bow on bridge*

Vc. *sul pont.*

Accord. *air sound*

Pno. *mp* *pp* *ppp*

Detailed description: This page of a musical score covers measures 82 to 85. It features five staves: Clarinet (Cl.), Violin (Vln.), Viola (Vc.), Accordion (Accord.), and Piano (Pno.). The Clarinet staff contains a whole note chord. The Violin staff has a long note with a 'pppp' dynamic and a 'bow on bridge' instruction. The Viola staff has a long note with a 'sul pont.' instruction. The Accordion staff has a long note with an 'air sound' instruction. The Piano staff has a complex accompaniment with dynamics ranging from 'mp' to 'ppp'. A large bracket on the left side of the page spans all staves from measure 82 to 85.

LIKE TREES IN NOVEMBER

(2016-18)

VARIATIONS FOR SOLO PIANO

C20'

SAM CAVE (B.1987)

Score in C

Like Trees in November explores the resonance of the piano in five movements. All of the, sometimes disparate, elements of the piece are united by their preoccupation with decaying resonance and bell-like sounds. Like much of my music this piece is searching for a fragile intensity, a meditative 'otherness' that seeks to hint at a world built entirely of sound.

This piece employs many moments of intricate pedaling. Some sustain certain pitches whilst others decay or to 'catch' the fleeting resonance of a natural harmonic. In movements II and IV the pedal is used to create a internal rhythm within the decaying resonance of chords. All essential pedalling instructions are included on the score. Where no pedal marks are given the use of the pedal is at the discretion of the performer.

Several kinds of pauses are used in this piece. Unless specified otherwise in the score the general convention is as follow:



- allow the note(s) to decay to silence before continuing



- medium length, 'standard' pause - exact length determined by the performer



- short pause - exact length determined by the performer

Like Trees in November was commissioned by Nikolai Varma. I am, as ever, hugely grateful for his support.

Like Trees in November

I

Sam Cave
(b.1987)

Piano

pause until harmonic is inaudible

ppp
una corda

mf
Ped.

sim.

pppp
Ped.

tre corde

hold strike notes until inaudible

sim.

mf

A

repeat when inaudible

sim.
(♩=45)

p

mp

pp

mp
una corda

sim.
hold until inaudible, bring out boxed notes

hold until harmonic is inaudible

hold G# until inaudible

sim

ppp *mf*

Ped. *mf*

tre corde

B

repeat when inaudible

sim. (♩=45)

p

mp *mp* sim.

hold until inaudible, bring out boxed notes

Ped. una corda

repeat when inaudible

(♩=45)

(♩=45)

pp

mp

p *mf* *p*

hold until harmonic inaudible

sim.

ff *ppp*

tre corde una corda

sim.

pp *f* *ppp*

una corda

Ped. tre corde

II

$\text{♩} = 55$ hold until silent

f

cont. until end of bar

* λ λ λ λ

2 sim.

mf

pedal sim.

4

mp

* only damp a very small amount of resonance with each lift of the pedal

III

$\text{♩} = 180$ shimmering, slightly fragile

The first system of music consists of two staves. The upper staff is a treble clef with a key signature of two flats (B-flat and E-flat) and a 3/4 time signature. It contains a continuous sixteenth-note arpeggiated pattern. The lower staff is a bass clef, mostly silent, with a few notes and rests. Dynamics include *pp* in the upper staff and *Red. sempre* and *pp* in the lower staff.

The second system continues the sixteenth-note arpeggiated pattern in the upper staff. The lower staff has a few notes and rests, including a dotted quarter note and a half note.

The third system features the sixteenth-note arpeggiated pattern in the upper staff, with five-fingered chords indicated by the number '5' above the notes. The lower staff has a bass line with eighth notes. Dynamics include *cresc. un poco*.

The fourth system continues the sixteenth-note arpeggiated pattern in the upper staff with five-fingered chords. The lower staff has a bass line with eighth notes. Dynamics include *a poco*.

The fifth system continues the sixteenth-note arpeggiated pattern in the upper staff with five-fingered chords. The lower staff has a bass line with eighth notes.

6 *rall.* 5 5

hold until silent

8 **A** a tempo (♩=180) *ppp* 3 3 3 3 3 3 3

9 *p*

10

11 3 3

6

12

Musical score for measures 6-12. The system consists of two staves. The upper staff is in treble clef and contains a sequence of chords, each marked with a '5' above a bracket, indicating a fifth finger fingering. A flat (b) is placed below the first chord. The lower staff is in bass clef and contains a sequence of eighth notes.

13

Musical score for measures 13-18. The system consists of two staves. The upper staff is in treble clef and contains a sequence of chords, each marked with a '5' above a bracket. A flat (b) is placed below the first chord. The lower staff is in bass clef and contains a sequence of eighth notes.

14

Musical score for measures 14-15. The system consists of two staves. The upper staff is in treble clef and contains a sequence of chords, each marked with a '5' above a bracket. A flat (b) is placed below the first chord. The lower staff is in bass clef and contains a sequence of eighth notes. A vertical dashed line is placed between measures 14 and 15. The dynamic marking *mf* is placed below the lower staff at the start of measure 15. Below the lower staff, there is a circled section of notes with the dynamic marking *mp* and the label *8^{vb}*.

16

Musical score for measures 16-21. The system consists of two staves. The upper staff is in treble clef and contains a sequence of chords, each marked with a '5' above a bracket. The lower staff is in bass clef and contains a sequence of eighth notes.

17

Musical score for measures 17-22. The system consists of two staves. The upper staff is in treble clef and contains a sequence of chords, each marked with a '5' above a bracket. The lower staff is in bass clef and contains a sequence of eighth notes. The dynamic marking *v* is placed below the lower staff at the end of measure 21.

rall.

silently retain 'A' with finger

B fragile, hushed yet intense

sim.

.....
gradually release pedal
to leave 'A' alone

complete each gesture before the boxed guide tone becomes inaudible

Musical score for measures 8-10. The piece is in G major (one sharp). Measure 8 features a half note G4 with a fermata and a slur over a half note B4. Measure 9 contains a triplet of eighth notes: G4, A4, B4. Measure 10 contains a triplet of eighth notes: G4, F4, E4. The tempo is marked as quarter note = 44.

Musical score for measures 11-13. Measure 11 has a half note G4 with a fermata and a slur over a half note B4. Measure 12 features a half note G4 with a fermata and a slur over a half note B4. Measure 13 contains a half note G4 with a fermata and a slur over a half note B4. The piece concludes with a double bar line. Dynamics include *f* (forte) and *p* (piano). A box containing a fermata symbol is present above the staff. The instruction "move on immediately" is written above the final measure.

C nearly tempo primo (♩=140), more unstable than before, wilder

Musical score for measures 21-22. Measure 21 features a piano (*p*) accompaniment with a steady eighth-note bass line and a treble line consisting of five-measure rests followed by eighth-note chords. Measure 22 continues this pattern. The tempo is marked as quarter note = 140.

Musical score for measures 23-24. Measure 23 features a piano (*p*) accompaniment with a steady eighth-note bass line and a treble line consisting of five-measure rests followed by eighth-note chords. Measure 24 continues this pattern. The tempo is marked as quarter note = 140. The instruction "p sub." is written below the staff. A fermata is placed over the final measure, with the instruction "f" (forte) written below it.

23

p *ff* *f* *ff*

24

f *3*

25

ff *p sub* *ff tr*

repeat and gradually become two trills

.....
gradually depress pedal again

28

10

29

Ped. *accel.*

30

silently depress pitches shown in box

hold until silent...

.....
gradually release pedal to leave final chord

IV

$\text{♩} = 82$

mp

* ♩ ♩ ♩ ♩ cont. given rhythm until end of bar ♩ ♩ pedal sim.

3

5

7

9

* only damp a very small amount of resonance with each lift of the pedal

12

11

13

15

17

19

21

hold until silent

cont. until silent

V

sounding pitch

Pno.

ring until silent

sim

mp

catch resonance 'ghost' with pedal

silent prep.

$\text{♩} = 70$ -----

$\text{♩} = 70$ -----

p

3

3

sim.

Musical score system 1. Treble clef: $\text{♩} = 70$ tempo marking, followed by an 8-measure rest. Bass clef: $\text{♩} = 70$ tempo marking, followed by a triplet of eighth notes, then a half note. Dynamics: *p* (piano), *pp* (pianissimo), and *f* (forte). A bracket labeled "catch harm. with pedal" spans the *pp* and *f* sections. A fermata is placed over the final note of the *f* section. A dotted line with a fermata symbol is shown below the bass clef.

Musical score system 2. Treble clef: $\text{♩} = 70$ tempo marking, followed by an 8-measure rest. Bass clef: $\text{♩} = 70$ tempo marking, followed by a triplet of eighth notes, then a half note. Dynamics: *pp* (pianissimo), *f* (forte), *p* (piano), and *ff* (fortissimo). A dotted line with a fermata symbol is shown below the bass clef.

Musical score system 3. Treble clef: Section A, $\text{♩} = 62$ tempo marking. Bass clef: Section A, $\text{♩} = 62$ tempo marking. Dynamics: *pp* (pianissimo), *f* (forte), *pp* (pianissimo), and *f* (forte). A dotted line with a fermata symbol is shown below the bass clef.

Musical score system 4. Treble clef: *p* (piano) dynamic marking. Bass clef: *p* (piano) dynamic marking. A triplet of eighth notes is indicated in the bass clef.

System 1: A three-staff musical score. The top staff is empty. The middle staff contains a melodic line with a key signature of one flat (B-flat) and a common time signature. It features a sequence of eighth notes with slurs and accents, including a trill-like figure. The bottom staff is empty.

System 2: A three-staff musical score. The top staff is empty. The middle staff contains a melodic line with a key signature of one sharp (F#) and a common time signature. It features a sequence of eighth notes with slurs and accents, including a triplet of eighth notes. The bottom staff contains a bass line with a dynamic marking of *f* and a fermata over a note.

System 3: A three-staff musical score. The top staff is empty. The middle staff contains a melodic line with a key signature of one sharp (F#) and a common time signature. It features a sequence of eighth notes with slurs and accents, including a triplet of eighth notes. The bottom staff contains a bass line with a dynamic marking of *f* and a fermata over a note.

System 4: A three-staff musical score. The top staff is empty. The middle staff contains a melodic line with a key signature of one sharp (F#) and a common time signature. It features a sequence of eighth notes with slurs and accents, including a fermata. The bottom staff contains a bass line with a dynamic marking of *mf* and a fermata over a note.

* pause just long enough to allow harmonic to speak before continuing

sim. and grow from previous harmonics

pp *mp* *p*

This system shows a piano part with a tremolo in the right hand and a melodic line in the left hand. The right hand starts with a tremolo marked *pp* and then transitions to a melodic line marked *mp* with a triplet of eighth notes. The left hand has a few notes, including a triplet of eighth notes marked *p*.

pp

This system features a piano part with a melodic line in the right hand and a bass line in the left hand. The right hand has a melodic line with a slur and a fermata, marked *pp*. The left hand has a few notes, including a triplet of eighth notes.

p

This system shows a piano part with a complex melodic line in the right hand. The line starts with a slur and a fermata, marked *p*. It then features several groups of notes with slurs and fermatas, including a quintuplet (5), a triplet (3), a sextuplet (6), and another triplet (3).

mp

8^{vb}

at least 10"

(8)-----

after at least 5"

5" 4" 2" 8"

pp

pp mp

0.5" 1" 1"

pp

mp ppp

♩=40

p

3

This system contains the first two measures of the piece. The first measure features a quarter note G4, a quarter rest, and a quarter rest. The second measure features a quarter rest, a quarter note A#4, and a quarter rest. A triplet bracket is placed under the quarter note A#4. The bass staff is empty.

3

This system contains the third and fourth measures. The third measure features a quarter note G4, a quarter rest, and a quarter rest. The fourth measure features a quarter rest, a quarter note A4, a quarter note G4, and a quarter rest. A triplet bracket is placed under the quarter notes A4 and G4. The bass staff is empty.

3 3 3 3 3

This system contains the fifth and sixth measures. The fifth measure features a quarter note G4, a quarter note F#4, a quarter note G4, and a quarter rest. Triplet brackets are placed under the quarter notes G4, F#4, and G4. The sixth measure features a quarter rest, a quarter note A4, a quarter note G4, a quarter note F#4, a quarter note G4, and a quarter rest. Triplet brackets are placed under the quarter notes A4, G4, and F#4. The bass staff is empty.

3 3 3

This system contains the seventh and eighth measures. The seventh measure features a quarter rest, a quarter note G4, a quarter note F#4, a quarter note G4, and a quarter rest. Triplet brackets are placed under the quarter notes G4, F#4, and G4. The eighth measure features a quarter rest, a quarter note A#4, a quarter note G4, and a quarter rest. A triplet bracket is placed under the quarter notes A#4 and G4. The bass staff is empty.

3 3

This system contains the ninth and tenth measures. The ninth measure features a quarter rest, a quarter note G4, a quarter note F#4, and a quarter rest. A triplet bracket is placed under the quarter notes G4 and F#4. The tenth measure features a quarter note G4, a quarter note F#4, a quarter note G4, and a quarter rest. A triplet bracket is placed under the quarter notes F#4 and G4. The bass staff is empty.

Musical notation for the first system, featuring a treble clef staff with four measures of music. Each measure contains a triplet of eighth notes. The notes in the first measure are G4, A4, and B4. The second measure has G4, A4, and B4. The third measure has G4, A4, and B4. The fourth measure has G4, A4, and B4. The bass clef staff is empty.

Musical notation for the second system, featuring a treble clef staff with four measures of music. The first measure is a whole rest. The second measure contains a triplet of eighth notes: G4, A4, and B4. The third measure contains a triplet of eighth notes: G4, A4, and B4. The fourth measure contains a triplet of eighth notes: G4, A4, and B4. The bass clef staff is empty.

Musical notation for the third system, featuring a treble clef staff with four measures of music. The first measure contains a triplet of eighth notes: G4, A4, and B4. The second measure contains a triplet of eighth notes: G4, A4, and B4. The third measure contains a triplet of eighth notes: G4, A4, and B4. The fourth measure contains a triplet of eighth notes: G4, A4, and B4. The bass clef staff is empty.

*allow resonance to decay naturally,
then release prepared notes...*

REFRACTED MEDITATIONS III

(2018)

**FOR SOLO GUITAR
C3'**

SAM CAVE (B. 1987)

Score in C with the usual octave transpositions

Duration: c.3 minutes

Programme Note

'Refracted Meditations' is an unfinished set of short meditative pieces for solo guitar. The first of these was written for the Swedish guitarist Johan Lofving in 2008 and I have added two more in the following decade. Decaying resonance controls most of its rhythms and gestures and I have attempted to explore the timbral possibilities of natural harmonics and muted pizzicato plucking by altering the point of contact with the string. These inspirations are gathered together, filtered through my harmonic language, and tempered by my love for the intimate and evocative nature of the guitar – an instrument that is simultaneously beguilingly fragile and deeply intense.

SC

Notational Considerations

The pauses in the top stave at rehearsal letters A and B indicate a short delay between the striking of the decaying chord in the bottom stave and the commencement of the repeating fragment in the upper stave. In practice the delay should be minimal and the varying lengths of pause should be tempered by the performers discretion having taken into account the resonance of the instrument and the hall.

'Fake pizz' is achieved by plucking an artificial harmonic with the usual right hand technique but positioning the right hand a short distance away from the harmonic node, like an artificial harmonic 'done badly'. Very often in this piece the 'fake pizz' gradually morphs into a standard artificial harmonic by moving the plucking point of the right hand closer and closer to the harmonic node.

Refracted Meditations III is an arrangement of the first movement of my 2016-2018 variations for solo piano *...like trees in November...* and was first performed at Brunel University on March 2nd 2018 by Sam Cave. *Refracted Meditations III* also features on the 2019 CD *Refracted Resonance* by Sam Cave (Metier, msv 28586)

⑤ = G
capo at II

Refracted Meditations III

Sam Cave
(b.1987)

pause until harmonic is inaudible

⑤
pizz
ppp ————— *mf*

sim
fake pizz ————— norm art. harm
pppp —————

'fake pizz' is created by plucking an art. harm slightly away from the harmonic node

hold strike notes until inaudible

③
mf

A repeat when inaudible B sim lh (♩=45)
① ② rh
p *mp* *pp*
② lh ④ lh
⑤ rh sim
hold until inaudible, bring out boxed notes

2

remove capo
hold until harmonic is inaudible

hold until
G# inaudible

fake pizz *ppp* → norm art. harm *mf*

C

repeat when inaudible

p *mp* *mp sim*

hold until inaudible, bring out boxed notes

(♩=45) repeat when inaudible

'tap' rh in fast unmeasured trem

mp *pp* *p* *mf* *p* *mp*

hold until harmonic inaudible

⑥ norm art. harm

ff → fake pizz *ppp*

② hold until harmonic inaudible

norm art. harm

fake pizz

pp *f* → fake pizz *ppp*

mix ⑥ and ④ harms

...ON PLAIN AIR...

(2017-18)

**FOR ALTO RECORDER, VIOLIN, CELLO AND
THEORBO
C.10'**

SAM CAVE (B.1987)

Instrumentation

Alto recorder

Violin

Violoncello

Theorbo

Score in C at modern concert pitch with the theorbo written one octave above sounding pitch. This piece was intended to be performed at baroque pitch on period instruments with A=415hz. This piece can, however, be performed at A=440hz on a modern recorder and modern string instruments with the therbo tuned to A=440hz.

Duration: c.10 minutes

Notational Considerations: All performance instructions are given 'in situ' on the score.

Theorbo tuning: The tuning of the theorbo is standard except for the seventh string, which should be tuned to G#.

Programme Note

...on plain air... takes inspiration from David Harsent's poem 'Bowland Beth' which, in part, describes the inexplicable yet mesmerising swoops, twists, and turns of a hen harrier in the sky. I was fascinated by the idea of watching Beth in the sky and wondering about the motivations behind her movements – is she 'skydancing' for pleasure, out of instinct, or is she compelled to by an instruction from her mate or peers? In turn I wondered how the ambiguity in the motivations of Bowland Beth might be transferred to the interplay between 4 musicians watched by an audience who in turn wonder about the impetus for their actions – when are they improvising, when are they instinctively responding to each other and when are they playing fully scored material?

...on plain air... was written for Improviso and premiered by them on 1st February 2019 at Brunel University, London. I am extremely grateful to them for their enormous skill and fearless boldness as a period instrument ensemble engaging with new music.

...on plain air...

Sam Cave
(b.1987)

Alto Recorder

Violin

Violoncello

Theorbo

⑦ = G#

2

A

$\text{♩} = 50$

singing with 'a' vowel sound

p

mf take recorder

pitch bend

A. Rec.

ah

ah

Vln.

p

p

Vc.

ppp *mp*

mf

mf

fp *p*

ord.

Tho.

mp

p

mf

5

make unison with cello (-14)

*3

p

p

mp

mp

sul G *2

A. Rec.

Vln.

Vc.

Tho.

* bar 1. Grace notes are unsynchronised, not too fast but generally even within each performer's individual 'tempo'. Silences for this bar given in seconds

*2 natural harmonics for bowed strings are notated at approximate fingered pitch with desired sounding pitch shown in parentheses

*3 intensity and width of vibrato is indicated by the relative thickness of the black wavy line

2

20-30" improvise phrases based on material in b.6-9

8

A. Rec. create upbeat for b.11

Vln. *flautando sul G* 20-25" support recorder by varying boxed material
follow recorder for upbeat to b.11

Vc. 20-30" follow recorder for upbeat to b.11

Tho. 20-30" follow recorder for upbeat to b.11

11 **B**

A. Rec. *f*

Vln. *ord.* *mp* *f* *pp*
sul G sul tasto

Vc. *sul A* *mp* *f* *fp*
sul C (8^{va}) (6^{va})

Tho. *f*
trem. not too fast
cont. and vary figuration

f *mf*

13

A. Rec. *mp/mf*

Vln. *mp* *mf* *mp*
make unison with cello (-31)

Vc. *mf* *mp* *f*
**3*

Tho.

* see page one note on vibrato

*2 natural harmonics for the theorbo are notated at sounding pitch with a diamond notehead

*3 dotted crescendo/diminuendo indicates excessive amounts of bow pressure

16 play and vary boxed haripin now and then in response to Vln. vibrato → 3

A. Rec.

Vln. *cont. varying vibrato ad lib. no variation in dynamic*

Vc.

Tho.



19 **C**

A. Rec.

Vln. *non vib.*

Vc. *sul C sul pont. sul A*
pp < mf > mp
sim. mf

Tho.



22 15-25" - hairpin now and then again in response to rise and fall of cello gestures

A. Rec. *mp/mf* follow cello for upbeat to b.23

Vln. 30-35" vary vib. again in response to rise and fall of cello gestures follow cello for upbeat to b.23

Vc. 30-35" connect and develop gestures from b.19-21 create upbeat for b.23

Tho. 30-35" follow cello for upbeat to b.23

D 10" 5"

4 23 $\text{♩} = c.80$ repeat changing order ad lib. very light, breathy sound

A. Rec. *pp sub* *cresc.* *mf* *pp* singing with 'e' vowel sound

Vln. $\text{♩} = c.100$ sul pont. repeat changing order ad lib. very light finger and bow pressure *pp sub* *cresc.* *f*

Vc. $\text{♩} = c.75$ sul pont. repeat changing order ad lib. very light finger and bow pressure ord. finger pressure *pp* singing with 'o' vowel sound *cresc.* *mf* oh

Tho. $\text{♩} = c.70$ 8^{va} repeat changing order ad lib. very light touch, lots of slurs *pp sub.* *cresc.* *mf* loco *2 *pp* singing with 'a' vowel sound ah

24 hold until theorbo cues the next bar, breathe where necessary

A. Rec. ee change vowel sound slowly oh

Vln. hold until theorbo cues the next bar, breathe where necessary

Vc. oh change vowel sound slowly ah

Tho. ah change vowel sound slowly ee *ppp*

E $\text{♩} = 60$

25

A. Rec.

Vln. sul C *p* *p*

Vc. *mp*

Tho. ① ⑤ ⑦ ② ③ ④ ⑤ ④ ② ⑤

* pass the note to your voice *2 repeat when inaudible

28

A. Rec.

Vln.

Vc.

Tho.



30

A. Rec.

Vln.

Vc.

Tho.



32

F (♩=60)

breathe where necessary

A. Rec.

Vln.

Vc.

Tho.

* rehearsal letter F-G: Textural Chaconne. Each bar should be held for the approximate duration and until one player decides to move to their next note(s). Upon hearing a player change pitche(s) the others must move to their next note(s) to catch up. This 'moving ahead' and 'catching up' should be unsynchronised and performed without the players giving visual cues to one another. Occasional vibrato and dynamic fluctuations ad lib.

6 37 **G**

A. Rec.

Vln. *sul D* (*8^{va}*) *p* \langle *mf* \rangle \langle *mf* \rangle \langle *mf* \rangle cont. sim. varying dynamic until Tho. cues next bar

Vc. *sul pont.* *sul D* \langle *f* \rangle \langle *f* \rangle \langle *f* \rangle cont. sim and vary ad lib.

Tho. hold boxed chords until inaudible before moving on *mp* \langle *mf* \rangle

A. Rec.

Vln.

Vc. ord. \langle *f* \rangle

Tho. $\textcircled{3} \textcircled{2}$ VII \langle *f* \rangle

38 **H** $\text{♩} = 35-40$ make unison with cello (-14)

A. Rec. *p* \langle *mf* \rangle *p* *sfp* \langle *mf* \rangle *p* *mp*

Vln.

Vc. *jete* \langle *f* \rangle

Tho.

* rehearsal letter G-H: the decay of the theorbo chords controls the rate of progress through the section. All rhythmic durations show relative lengths of notes using a general 'timespace' principle in relation to the decaying theorbo chord

40

A. Rec. *f* *p* *f* *p* *mf*

Vln. *smf* sul A

Vc.

Tho. *mf*

* I 7



A. Rec. *p*

Vln.

Vc. sul G *f*

Tho. *p*



A. Rec.

Vln. sul G *f* *p*

Vc. *p* *f* *pp*

Tho. *f* *mf*

jete sul pont. ord. pont.

*rehearsal letter I-J. See page 6 note on section G-H

mp

8

42 **J** ♩=40-45

A. Rec. *make octave with violin (-31)*
p *mf*

Vln. *gliss nat. harm.* *sul A* *sul pont.*
f *pp < p*

Vc. *molto pont. breaking up* *ord. sul G*
ff *f*

Tho. *continue figuration* *ord. sul G*
ff *f* *③ VII 8va*

45

A. Rec. *mf*

Vln. *ord.* *sul pont.* *pont.*

Vc. *sul pont.* *3*
f *f* *f*

Tho. *8va* *V ②* *pont.* *② XII 8va loco* *3*
f

47 **K**

A. Rec. *ff* *mp* *p*

Vln. *tasto* *ff* *ord. jete sul G*

Vc. *f < sffp*

Tho. *p* *f* *mf*

50

A. Rec.

Vln. ord. sul A ^(8^{va}) _(#) *pp* *molto pont.*

Vc.

Tho.



52

L

A. Rec.

Vln.

Vc.

Tho. *pp* energetically, with accel. and rall. ad lib. *ff* *p*

⑥ *pont.* → *ord.* fast unmeasured trem. (ord.)

③ ① ②



53

M (♩=40)

A. Rec.

Vln. ord. sul A

Vc. *p* *swell ad lib.* sul A ^(5^{va}) _(#)

Tho. ② XII *f* *p* *ff* *p* *pont.* → *ord.*

56

A. Rec. *mf* *p* *ff*

Vln. *mf* *p* *ff*

Vc. *mf* *p* *ff*

Tho. *mf* *p*

Annotations: *3*, *sul D* (*5th*), *3*, *8*



* **N** ♩=60

58

A. Rec. *p* breathe where necessary

Vln. *p* *sul E_o* *sul G_o*

Vc. *p* *ord.* *sul pont.*

Tho. *trem. not too fast* *mp* *mp* *p*

Annotations: *accel/decel. dynamic swelling ad lib. until b.69*

* rehearsal letter N. Strings and recorder. Swell dynamic in the given rhythm so that the apex of the swell acts as the 'attack' of each rhythmic unit. Swell only between *p* → *mp*

61

A. Rec.

Vln.

Vc.

Tho.

→ accel/decel. dynamic swelling ad lib. until b.69
sul tasto sul pont. sul A

sul E

fast unmeasured trem.

mf

mf

mp

mp

③ ⑤ ③ ③

② XII ④ ⑤

3

64

A. Rec.

Vln.

Vc.

Tho.

molto pont.

ord.

ord.

sul D

fast unmeasured trem.

LH only ②

mp

mp

p

⑤ ④ ③ ②

③ ③

67

A. Rec.

Vln.

Vc.

Tho.

ff

molto pont.

fff

⑤ V ①

ppp

12

*
O

69

A. Rec. *pp*

Vln. *pp*
sul E

Vc. *pp*
sul D

Tho. *p*



71

A. Rec.

Vln.

Vc.

Tho. *ppp*

let ring until silent . . .

* rehearsal letter O. Strings and recorder. Swell dynamic in given rhythm as before only where indicated

...TO THE SAME FAILING LIGHT...
(2018)

FOR ACCORDION AND STRING QUARTET
C.15'

SAM CAVE (B.1987)

Instrumentation

Accordion

Violin I

Violin II

Viola

Violoncello

Score in C

Duration: c.15 minutes

Notational Considerations: All performance instructions are given 'in situ' on the score.

Programme Note:

'Here the accordion and each instrument of the string quartet are considered as parts of a larger whole, a 'super instrument'. The opening solo accordion movement searches for a purity of voice that is then taken up and augmented by a growing string ensemble in the second and third movements. In the final movement the quintet moves through textures that weave, layer, join and transcend the individual parts of the ensemble. As the music rises and falls, halts, moves and changes perspective, it strives for point of distant yet intense fragility.

I am extremely grateful to Simas Tankevičius, Konrad Levicki, Ugnė Petrauskaitė, Ignė Pikalavičiūtė, Irina Serotyuk, Michele Bianco, Mandhira de Saram, Anna Brigham and Corentin Chassard for their wonderful playing, and for bringing my music to life in the various concerts and recording sessions that formed the development of this piece.'
S.C.

...the space that lies between them... was written as part of the Composer + Summer Academy and was recorded on June 23rd 2018 at 'Egles' sanatorija, Druskininkai, Lithuania by Michele Bianco (accordion) with sponsorship from the Lithuanian World Arts Council.

...touchless as they sleepwalk... I and II were recorded at LSO St Luke's, London, UK on November 11th 2018 by Mandhira de Saram (violin), Anna Brigham (violin and viola) and Corentin Chassard (cello) with support from LSO Soundhub.

...to the same failing light... was written as part of the Composer + Summer Academy and was performed on June 22nd 2018 recorded on June 23rd 2018 at 'Egles' sanatorija, Druskininkai, Lithuania by Simas Tankevičius (violin), Konrad Levicki (violin), Ugnė Petrauskaitė (viola), Ignė Pikalavičiūtė (cello) and Irina Serotyuk (accordion) with sponsorship from the Lithuanian World Arts Council.

...to the same failing light...

I ...the space the lies between them...

♩ = 60 a little freely
wispy and distant

Sam Cave
(b.1987)

Left Hand
M.M

Accord. 

Accord. 

Accord. 

a little slower (♩=50) and more strictly in tempo

Accord. 

Accord. 

Accord. 

Accord. 

*1 'attackless' emphasis with bellows performed by RH gently tapping on side of keyboard. Sound of main note continuous.

*2 'attackless' emphasis with bellows performed by LH pushing the bellows. Sound of main note continuous.

2

24

move on in this bar

3

sfpp

p

mp

Accord.

27

suspended animation again

no variation in dynamic until marked

3

3

Accord.

30

3

3

3

Accord.

33

3

3

3

Accord.

36

3

p

mf

p

f

3

3

3

Accord.

39

no variation in dynamic until marked

mf

swap and overlap B and Bb between hands ad lib.

3

3

3

Accord.

continue swapping and overlapping B and Bb between LH ad RH ad lib.

42

Accord.

45

Accord.

* break the sound as little as possible

Left Hand molto legato

48

Accord.

52

Accord.

rhythmically free

55

Accord.

strict rhythm

58

Accord.

'fall off' the end of gliss.

attacca...

II ...touchless as they sleepwalk...(I)

♩=40
non vib.
pp

Violin I

Violin II

non vib.
pp

4

Vln. I

Vln. II

6

Vln. I

Vln. II

A ♩=50 a little faster non vib. again

sul D *2

p

10

Vln. I

Vln. II

sul D

mp

14

B non vib. sub.

*3

Vln. I

Vln. II

p

*slur as much as possible throughout. Change bow as little as possible *3 use first finger quasi glissando for lower voice until end

*2 intensity and width of vibrato is indicated by the relative thickness of the black wavy line

The musical score consists of two systems, each with two staves: Violin I (Vln. I) and Violin II (Vln. II).
System 1 (Measures 17-19):
- Vln. I: Measure 17 has a triplet of eighth notes marked 'sim.' and 'sul D'. Measure 18 has another triplet of eighth notes marked '3'. Measure 19 has a half note with a fermata, marked 'gentle warm vib. until end' and 'mf'.
- Vln. II: Measure 17 has a half note marked 'sul D'. Measure 18 has a half note marked with an asterisk '*'. Measure 19 has a half note marked 'sul A'.
System 2 (Measures 20-22):
- Vln. I: Measure 20 has a half note marked 'p' and a triplet of eighth notes marked '3' and 'mp'. Measure 21 has a whole rest. Measure 22 has a half note with a fermata.
- Vln. II: Measure 20 has a half note marked 'mp' and 'pp'. Measure 21 has a half note. Measure 22 has a triplet of eighth notes marked '3' and a half note with a fermata, followed by the instruction 'attacca...'.
Dynamics include *mf* and *p*. Performance instructions include 'sul D', 'sul A', 'sim.', and 'gentle warm vib. until end'.

* textural bow tremolo. Create tremolo effect by sustaining D string whilst alternating between G and A strings. Change bow as little as possible. Tremolo not too fast and with a slightly uneven and ad lib. feel.

III ...touchless as they sleepwalk...(II)

Violin II $\text{♩} = 50$ *pp* *p* *ppp*

Viola *ppp*

Violoncello *pp* *mp*

Violin II: *sul D*, triplets, **2*

Viola: *sul G*, *sul pont. ** (*8^{va}*)

Violoncello: *sul G*, *sul pont. ** (*8^{va}*)

Vln. II *mp* *pp sub.* *gliss. during trem.*

Vla. *mf* *pp sub.* *mf* *sul tasto, non vib.*

Vc. *pp* *ord.*

Vln. II: *mp*, *pp sub.*, *gliss. during trem.*

Vla.: *mf*, *pp sub.*, *mf*, *sul tasto, non vib.*

Vc.: *pp*, *ord.*

Vln. II: **3*

Vln. II *mfp* *pp* *mp*

Vla. *p* *mp*

Vc. *mp*

Vln. II: *sul D*, *pp*, *mp*

Vla.: *sul C* (*8^{va}*), *p*, *mp*


Vc.: *mp*

Vln. II: **4*

* natural harmonics notated at approximate fingered pitch with desired sounding pitch shown in parentheses

*2 bow tremolo, see note on page 5 | *4 ord. LH tremolo

*3 intensity and width of vibrato is indicated by the relative thickness of the black wavy line

10 ** * non dim. sul A 7

Vln. II *mp* *p* *pp*

Vla. non dim. sul G (8^{va}) *pp*

Vc. non dim. ord. sul G *pp* *mp*

mp *p* sul C *pp**2 *mp*

13 non cresc.

Vln. II *mf*

Vla. *mf*

Vc. *p* *mf*

* see page 6 note on vibrato | *2 see page 6 note on harmonics | *3 bow tremolo, see note on page 5

IV ...to the same failing light...

$\text{♩} = 50$ fragile yet static

Accordion

draw as little attention to the entry as possible

pp

Violin I

pp non vib, con sord.

Violin II

pp non vib.

Viola

p non vib.

Violoncello

p sul D (f5th)



4

Accordion

pp

Vln. I

pp

Vln. II

pp

Vla.

p sul D

Vc.

p sul D

* natural harmonics notated at approximate fingered pitch with desired sounding pitch shown in parentheses

A

7

Accord.

M.M.

Vln. I

* senza sord.

p >

Vln. II

Vla.

3

Vc.

sul pont.

pp sub.

mp



11

Accord.

3

3

f

Vln. I

Vln. II

Vla.

Vc.

sul tasto

sul pont.

f

* intensity and width of vibrato is indicated by the relative thickness of the black wavy line

14

Accord.

Vln. I

Vln. II

Vla.

Vc.

sffp *f* senza sord.

increase bow pressure excessively

ff

B

♩=65

17

Accord.

Vln. I

Vln. II

Vla.

Vc.

ff *f*

ff *p* sul D ^(5^{na}) *2

sfp *ff*

pp *mp* sul D ^(5^{na}) *2

pp *p* sul C

molto pont.

sfp

* see page 9 note on vibrato *2 see page 8 note on harmonics

20

Accord.

mp pp *f* *f* *ff* *p*

non vib

Vln. I

Vln. II

Vla.

Vc.

sul tasto
sul A ^(4^{ma}) \sharp

mp

ff *mp*

sul tasto
sul A ^(15^{ma}) \sharp

mp

23

Accord.

f *p* *mf*

Vln. I

Vln. II

Vla.

Vc.

sul pont.

f

sul A ^{*} \sharp

p *mf*

p *mf*

sul pont.

sul A

f *fp*

* see page 8 note on harmonics

26

Accord. *mf mp* *p f*

Vln. I ord. *fp* *f* *gliss.* *mp*

Vln. II *mp* *f* *mp*

Vla. *p < mp* *3*

Vc. ord. sul A *p* *f* *molto sul pont.* *ord.* sul C (8va) *p* *f* *mp*



29

Accord. *mp* *mp f* *sf*

Vln. I *f mp sub.* *p* *mp*

Vln. II sul pont. *f mp sub.* ord.

Vla. sul C (8va) *p*

Vc. sul tasto *p* sul pont. *f*

32

♩=50

Accord.

p *f*

Vln. I

non cresc. *f sub* *non vib.*

Vln. II

pp *quasi slow trem.* *cont. gentle accents ad lib.*

Vla.

ff *ff* *mp* *fast but gentle trem.*

Vc.

mp *ord. sul G* *fast but gentle trem.*



35

Accord.

pp *mp* *ppp*

Vln. I

cont. sim.

Vln. II

add accents ad lib.

Vla.

Vc.

38 **E**

Accord.

pp *p*

sul G with vib. sul D sim.

irregular trem. across the two strings

Vln. I *p* *pp* *mp* *pp* *p*

quasi very slow trem. cont. sim.

Vln. II ord. *pp*

Vla.

Vc.



41

Accord.

pp *p*

Vln. I

Vln. II *pp*

Vla.

Vc.

44

Accord.

Vln. I

Vln. II

Vla.

Vc.

mf



F

variable speed 'textural tremolo' - approximate rhythms show relationship of LH and RH tremolo speeds

45

Accord.

Vln. I

Vln. II

Vla.

Vc.

p sub

5:4

5:4

46 continue varying tremolo speeds, never becoming faster than demisemiquaver

Accord.

Vln. I

Vln. II

Vla.

Vc.

49 fast, unmeasured tremolo

Accord.

Vln. I

Vln. II

Vla.

Vc.

* see page 9 note on vibrato

Accord.

Vln. I

Vln. II

Vla.

Vc.

mf *pp*

p *mf*

p/mp/mff

sul G flautando

pp sempre

sul pont.

no dynamic variation until marked



55 add RH during swells ad lib.

Accord.

Vln. I

Vln. II

Vla.

Vc.

sfpp *f*

sul C ^(8va)

cont. varying amounts of vib. now and then

58

Accord.

Vln. I

Vln. II

Vla.

Vc.

mf



61

Accord.

Vln. I

Vln. II

Vla.

Vc.

mf

ord. \flat \bar{e}

63 **H**

Accord.

Vln. I

Vln. II

Vla.

Vc.

pizz. half pizz. - 'bounce' RH index and/or middle fingers on string to produce 'ghost' Eb

p *pppp*

half pizz. - 'bounce' RH index and/or middle fingers on string to produce 'ghost' D

ppp *pppp*

64

cont. same rhythm

Accord.

Vln. I

Vln. II

Vla.

Vc.

pppp

pppp

half pizz. - 'bounce' RH index and/or middle fingers on string to produce 'ghost' B

pppp

65

Accord.

Vln. I vary speed of 'bouncing pizz. trem.' ad lib. rhythmic as before

Vln. II vary speed of 'bouncing pizz. trem.' ad lib. rhythmic as before

Vla. vary speed of 'bouncing pizz. trem.' ad lib. rhythmic as before

Vc. cont. same rhythm

pppp

half pizz. - 'bounce' RH index and/or middle fingers on string to produce 'ghost' C



67

Accord.

Vln. I vary speed again but generally slowing down to the end....

Vln. II vary speed again but generally slowing down to the end....

Vla. vary speed again but generally slowing down to the end....

Vc. vary speed again but generally slowing down to the end....

...WITH MAGIC IN MY EYES...

(2019)

**FOR CHILDREN'S CHOIR, PIANO AND
PERCUSSION
C.5'**

SAM CAVE (B.1987)

Instrumentation

Children's Choir (soprano and alto voices with one soprano soloist and three narrators taken from the choir)

Piano

Japanese Rin (tuned to B5 and played by the conductor, either by striking or 'stirring' the mallet around the outside of the bowl, these 'stirrings' can also be performed as a tremolo using the inside of the bowl if preferred)

Crotales (to be played by the soloist and each narrator in turn. A strung together pair of crotales tuned to B6 is ideal; if unavailable any pair of small prayer cymbals, such as tingshas, will suffice)

Score in C

Duration: a little under 5 minutes.

Programme Note

Lyonnesse is a fictional county that, according to Arthurian legend, bordered Cornwall before sinking beneath the ocean. All through my childhood growing up in Cornwall I was in awe of the beauty and majesty of the landscape, I was also fascinated by the many hundreds of tales of Pixies, witches, magic and myth that originate from that special county. Nowadays Cornwall has become like my own Lyonnesse – a place to which I undertake long journeys in order to experience its magic and recapture my connection to the landscape. In this piece I have tried to capture some of the longing and mystery expressed in Hardy's words as well as attempting to take the choir and listener on a transformative journey.

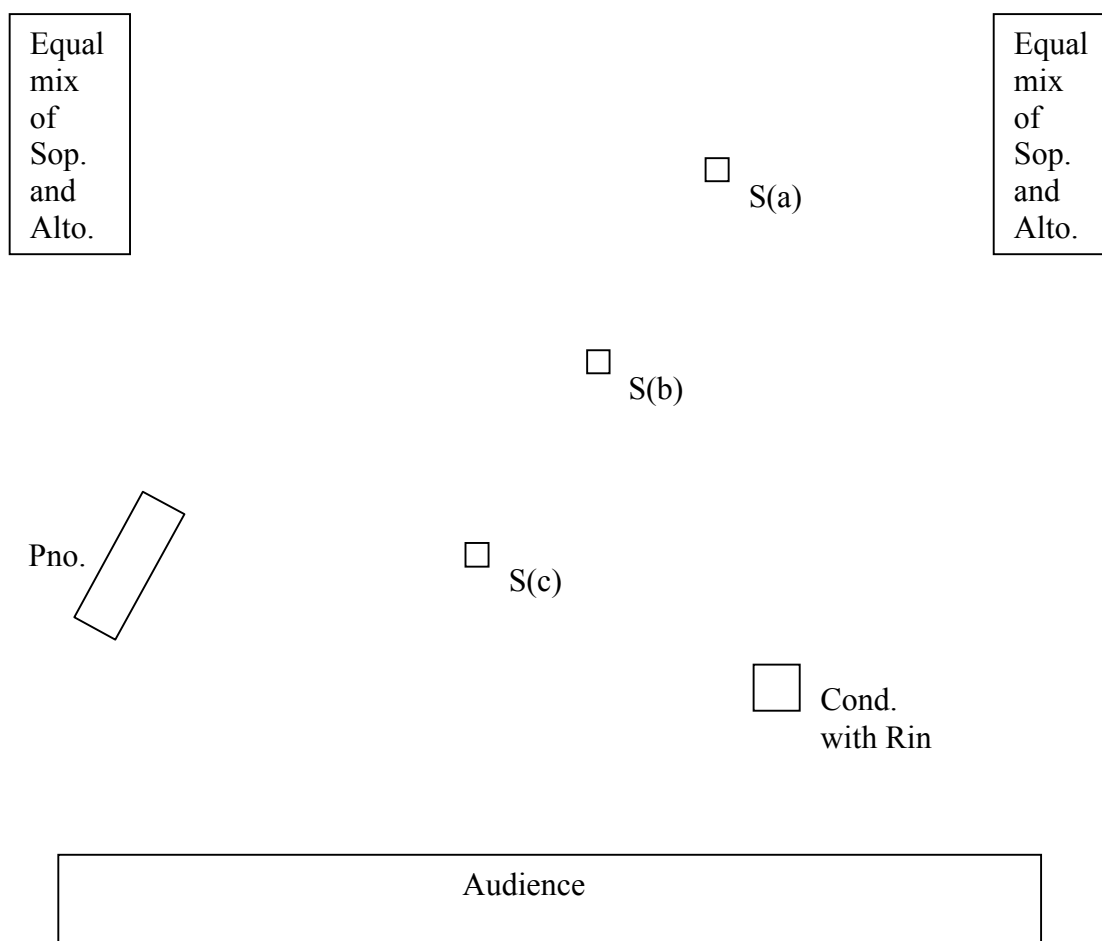
Sam Cave (London, UK, February 2019)

'...with magic in my eyes...' was commissioned by George Holloway and the Holloway Children's Choir (Tianjin) and was premiered by them on March 17th 2019 at the Cathay Future Concert Hall in Tianjin, China.

Stage Positions

There are four stage positions for the choir and soloists- when to adopt each position and when to move to the next position are shown in boxed text on the score.

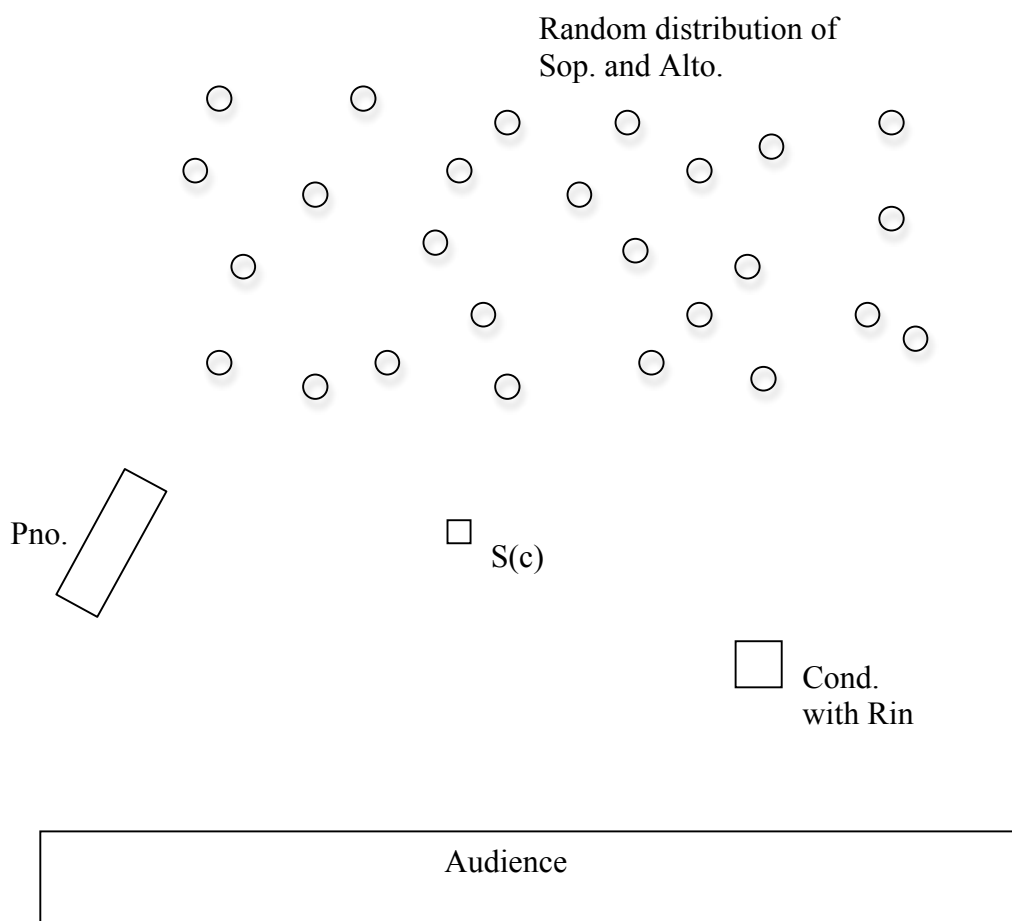
Position 1



Notes on Position 1:

- S = soprano soloist. Soloist carries the crotales to all three positions.

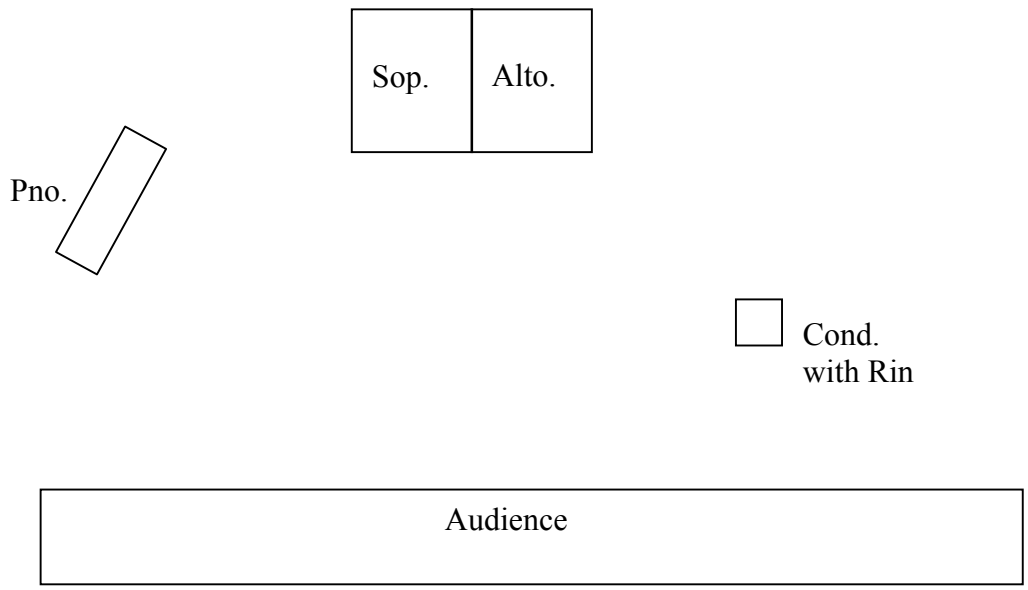
Position 2



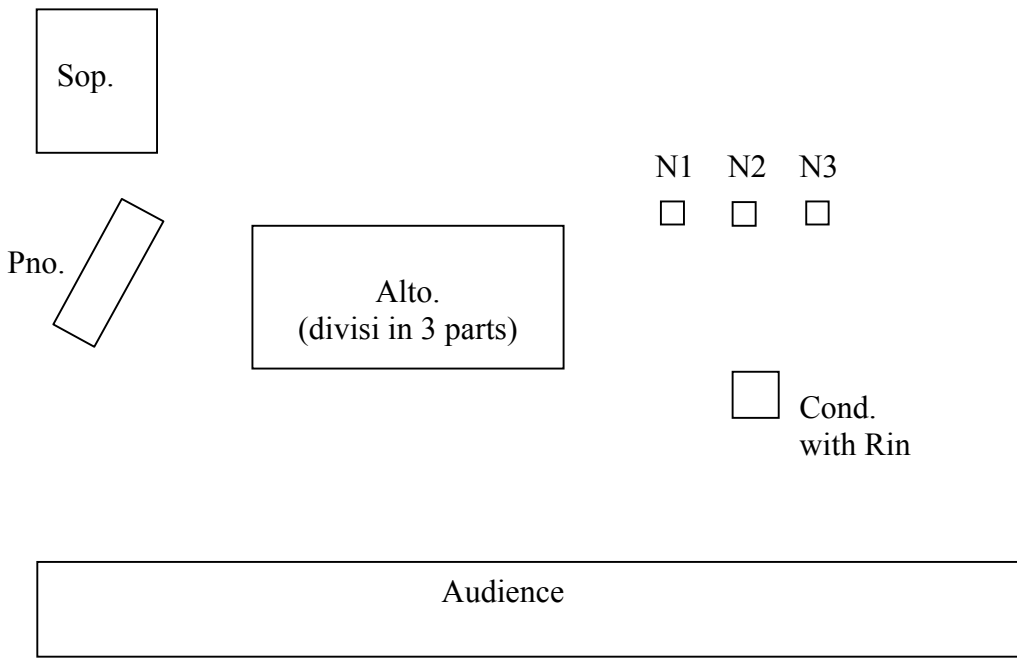
Notes on Position 2:

- Position 2 has two forms – ‘Fluid’ and ‘Fixed’.
- In the ‘Fluid’ form the singers in the ‘random distribution’ are slowly moving at random inside the mass of singers like a murmuration of starlings.
- In the ‘Fixed’ form the singers halt their movements in whatever random distribution of soprano and alto they have reached. In this position they sing verse one of the poem (b.18-44).
- After completing their final line of text (b.17) the soloist moves from position S(c) to join the ‘murmuration’.

Position 3



Position 4



Notes on Position 4:

- N1,2,3 = three separate narrators. The crotales should be passed between the narrators

- Sopranos should ideally be offstage. If this is not possible then facing away from the audience in the position shown will suffice.
- Alto divisi positions should reflect the division of parts in the score as left to right (note that this is not high, middle, low).

Notational Considerations

Opening section (b.1-17)

- The soloist intones the words of the first stanza on the given pitches in a slow but free rhythm. The spacing of the words in relation to metred score is a guideline for the pacing of the lines of text.
- The soprano and alto sections of the choir hum throughout this section. Breathing should be uncoordinated to allow for continuous sound.
- The piano and rin progress through this section according to the rhythm, metre and tempo given. Flexibility must be given to accommodate coinciding events with the soloist (e.g. b.8).
- The crossed note head in the soloist part indicates the striking of the crotales to introduce the text. All strikes of the crotales are allowed to ring indefinitely.

Final section (b.78-96)

- The three narrators speak the words of the final stanza. The spacing of the words in relation to the metered score does NOT give a guide to the pacing of the spoken words. They should be spoken slowly and with a sense of wonder but at each narrator's own pace.
- The altos, piano and rin progress through this section according to the rhythm, metre and tempo given.
- The vowel sounds used by the divisi alto parts are 'a' as in 'arm', 'ee' as in 'feet' and 'o' as in 'hot'.
- During b.91-96 the breathing of alto parts 1 and 3 should be uncoordinated to allow for continuous sound.

When I set out for Lyonesse – Thomas Hardy (1840-1928)

When I set out for Lyonesse,
A hundred miles away,
The rime was on the spray,
And starlight lit my lonesomeness
When I set out for Lyonesse
A hundred miles away.

What would bechance at Lyonesse
While I should sojourn there
No prophet durst declare,
Nor did the wisest wizard guess
What would bechance at Lyonesse
While I should sojourn there.

When I came back from Lyonesse
With magic in my eyes,
All marked with mute surmise
My radiance rare and fathomless,
When I came back from Lyonesse
With magic in my eyes!

...with magic in my eyes...

Thomas Hardy
(1840-1928)

Position 1

Sam Cave
(b.1987)

(♩=60) [S(a)] intoned, like an incantation *p*

Soprano Solo

strike
crotales

When I set out for Ly-on- nesse,

pp continuous humming until b.16, each singer breathe when necessary
mmm...

Alto

pp continuous humming until b.16, each singer breathe when necessary
mmm...

Rin

f

Piano

(♩=60)

mf

4

S. Solo

p

a hun - dred miles a - way,

Pno.

mf

7

S. Solo

[S(b)]

the rime was oh the spray,

Pno.

mf *mp*

2

10

S. Solo

and star - light lit my lone - some -

Pno.

mp



13

S(c)

Fluid Position 2

S. Solo

ness when I set out for Ly - on - nesse a

Rin

'stir' the rin with mallet

f

ppp

Pno.

mp



16

non dim.

S. Solo

hun - - dred miles a - -

S.

A.

Rin

Fixed Position 2

A ♩=85

3

17

S. Solo

way.

S.

Rin

f

p

When

Pno.

mf

mp

A ♩=85

20

S.

I set out for Ly - on -

Pno.

23

S.

nesse, a hun - - dred

26

S.

miles a - way, the

Pno.

S. *rime was on rime the spray,*

Pno.



S. *mp* *and star - light lit my*

A. *mp* *and star - light lit*

Pno.



S. *mp* *lone - some - ness when I set*

A. *mp* *my lone - some - ness when I set*

Pno.

38

S. out for Ly - - on - nesse

A. out for Ly - on - - nesse

Pno.



41

S. solo *p* a hun - dred miles a -

Rin *f*



44 **B** Move to Position 3

S. way.

Pno. *mf*



47

Pno. $\text{♩} = 90$

6

50 Position 3

tutti *mp*

S. What_ would be- chance_ at

A. *mp* What would

Pno. *p* *pp*

53

mf

S. ly - on - nesse while I_ should.

A. be - chance

Pno. *p* *mp*

56

S. so - journ there no

A. at Ly_ on_ nesse,

Pno. *pp* *mp*

59 7

S. *mp* pro - - phet durst de - clare,

A. no pro - phet *p* nor wise

Pno.

62 *mp* *cresc.*

S. nor did the wis - - est wiz - ard

A. *cresc* wiz - ard

Pno. *cresc*

D

65 *f* *p*

S. guess what would be - chance at

A. *f* *p* guess what would be -

Pno. *f* *p*

68 *mp*

S. Ly - - on - - nesse while I should

A. *mp*
chance at Ly - - -

Pno. *mp*



71 *p*

S. so - - - - - jour n there. **E** Move to Position 4

A. *p*
on - - - - - nesse

Pno. *mf*



slow tremolo to match semiquaver speed

74 *mp*

Pno. *mp*

Position 4

77

rit. 9

A.

Pno.



80

F ♩=50

A.

Rin

Pno.

82

A.

mp

ma - - gic in my eyes,

Pno.

p

L.V. sempre

p



84

A.

p

a

p

ma - -

Rin

mp

Pno.

S. Solo

Musical staff for S. Solo, Narrator 1. It features a treble clef, a key signature of one sharp (F#), and a common time signature. The staff contains a single note with a fermata and a breath mark (v) above it.

When I came back from Lyonnese

Musical staff for A. (Alto). It features a treble clef, a key signature of one sharp (F#), and a common time signature. The staff contains a whole note chord with a fermata, marked *mp*. Below the staff, the letter 'o' is written under the first measure and 'a' under the second measure, with an arrow pointing from 'o' to 'a'.

A.

Musical staff for A. (Alto). It features a treble clef, a key signature of one sharp (F#), and a common time signature. The staff contains a whole note chord with a fermata, marked *mp*.

Musical staff for A. (Alto). It features a treble clef, a key signature of one sharp (F#), and a common time signature. The staff contains a whole note chord with a fermata, marked *mp*. Below the staff, the letter 'o' is written under the first measure and 'a' under the second measure, with an arrow pointing from 'o' to 'a'.

Rin

Musical staff for Rin (Cymbal). It features a common time signature and contains a single note with a fermata.

Pno.

Musical staff for Pno. (Piano). It features a grand staff (treble and bass clefs), a key signature of one sharp (F#), and a common time signature. The right hand contains a triplet of eighth notes, marked *pp*. The left hand contains a complex accompaniment with a fermata. A dynamic marking *p* is present at the end of the piece.



S. Solo

Musical staff for S. Solo, Narrator 2. It features a treble clef, a key signature of one sharp (F#), and a common time signature. The staff contains a single note with a fermata and a breath mark (v) above it.

with magic in my eyes,

all marked with mute surmise my radiance

Musical staff for A. (Alto). It features a treble clef, a key signature of one sharp (F#), and a common time signature. The staff contains a whole note chord with a fermata.

A.

Musical staff for A. (Alto). It features a treble clef, a key signature of one sharp (F#), and a common time signature. The staff contains a triplet of eighth notes, marked *p*, followed by a whole note chord with a fermata. Below the staff, the word 'ma - - gic' is written.

Rin

Musical staff for Rin (Cymbal). It features a common time signature and contains a single note with a fermata.

Pno.

Musical staff for Pno. (Piano). It features a grand staff (treble and bass clefs), a key signature of one sharp (F#), and a common time signature. The right hand contains a triplet of eighth notes, marked *p*. The left hand contains a complex accompaniment with a fermata.

S. Solo

rare and fathomless,

each singer breathe where necessary

pp

a → o → a

move between vowel sounds ad lib

A.

pp

3

ma - gic

each singer breathe where necessary

pp

a → o → a

move between vowel sounds ad lib

Rin

p

Pno.

p

pp



Narrator 3

S. Solo

when I came back from Lyonnaise

pp

A.

pp

mf

3

ma

gic

ma

Rin

Pno.



S. Solo

Musical staff for Soprano Solo, featuring a treble clef, a key signature of one sharp (F#), and the lyrics *with magic in my eyes!* written below the staff.

Musical staff for Alto, featuring a treble clef, a key signature of one sharp (F#), and a long melodic line with a fermata at the end.

A.

Musical staff for Alto, featuring a treble clef, a key signature of one sharp (F#), and a long melodic line with a fermata at the end.

Musical staff for Bass, featuring a bass clef, a key signature of one sharp (F#), and a long melodic line with a fermata at the end.