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Accretion and Acrylics: Composition Portfolio with Commentary

Patrick Egan

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Accretion and Acrylics: Composition Portfolio with Commentary.

Patrick Egan BMus (composition)

This thesis is submitted to the Dublin Institute of Technology, Conservatory of Music and Drama in the College of Arts and Tourism for the degree of Doctor of Philosophy

February 2017

Head of Academic Studies: Dr Kerry Houston

Research Supervisor: Dr Gráinne Mulvey

DECLARATION

I certify that this material which I now submit for examination for the award of PhD, is entirely my own work and has not been taken from the work of others, save and to the extent that such work has been cited and acknowledged within the text of my work.

This thesis was prepared according to the regulations for postgraduate study by research of Dublin Institute of Technology and has not been submitted in whole or in part for another award in any other third level institution.

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Abstract

This portfolio consists of nine compositions and an accompanying commentary on each of the pieces. The earlier compositions represent the exploration of preoccupations with canon, counterpoint, and rhythmically-charged, pulsating mobiles. This led to the further research elements incorporating the development of rhythmic motifs and their proliferation, culminating in static sonic canvases, slowing the rate of harmonic change.

Investigative research into the various gradations applied to amplitude levels, first explored in my electronic music and then applied in the form of dynamics in my acoustic writing, represents another highly-featured process in this thesis.

The opening chapters chart the processes of the compositional techniques attained over the course of the degree, with reference to my musical background, my interest in timbre and rhythmic development, through the exploration of electronic music.

With reference to the study of softwares, for sampling and synthesis allowing for the manipulation of sounds, by changing registers, pitch, by time stretching alongside the myriad of synthesis applications available, I reference some of the cross-fertilization processes with regards to my acoustic compositions.

The nine compositions ranging from duo to orchestral works mark the culmination of four years of research embracing the aforementioned features, leading to the development of my current aesthetic of music.

Acknowledgements

There are many people that have aided and contributed to the completion of this portfolio and thesis. A special thanks to my supervisor Dr Gráinne Mulvey for all her hard work and support. Her expert guidance over the research period has been paramount to my development as a composer and her patient and understanding nature has made this research period truly enjoyable.

I would also like to thank my previous mentors Dr Jane O’Leary and Dr Dave Flynn, both of whom were extremely encouraging in the formative stages of my compositional development and contributed massively in my decision to pursue this degree. Furthermore, I would like to thank all the talented people who have helped me with my portfolio, directly and indirectly: Ben Rawlins, William Melvin, Cassandra Hamilton, Richard Waters, Abigail Hyde-Smith, Dermot Dunne, Elaine Clarke, John Feeley, Lesley Cassidy, Laoise O’Brien, Martin Johnson, Madeleine Staunton, Pablo Manjón-Cabezas Guzmán, Paul Roe and Kerry Houston to name but a few.

I owe a huge debt of gratitude to my incredible mother and father for supporting me throughout this period—this simply would not have been possible without them. Lastly, a huge thank you to my partner Andrea for her constant support and encouragement.

List of Works

The Lighthouse (SSAATTBB 6’).

Then ‘til Now (vl1, vl2, vla, vc 6’50’’) performed 29 June 2013 by the Bernadel Quartet in Bantry Hall at the West Cork Chamber Music Festival.

Ambages (fl, cl, vl, vc 9’).

Busker (electronics 7’45’’) played at the Waterford Institute of Technology for the Contemporary Music Centre Marathon Day 21 March 2014.

From the Same Stone (bc, acc, vc 9’) first performed by Concorde: Paul Roe, Martin Johnson, Dermot Dunne, at the Royal Hibernian Academy Gallery 27 March 4 2014.

Where There Were Wolves (bc, tape 5’30’’) first performed by Pablo Manjón at the National Concert Hall 12 November 2015.

Hypnagogia (orchestra 10’) performed at DIT Kevin Street, Dublin by the DIT Symphony Orchestra, conducted by David Brophy 10 March 2015.

Echoes (vib, fl, cl, vl, vc 10’) performed at DIT Rathmines by Concorde: Martin Johnson, Paul Roe, Madeleine Staunton, Elaine Clark 12 May 2016.

Accretion and Acrylics (Orchestra 15’).

CD 1

1. **The Lighthouse**—Electronic realisation, to bar 35 only
2. **Then 'til Now**—Performed by the Bernadel Quartet
3. **Ambages**—Electronic realisation
4. **Busker**—Electronics
5. **From the Same Stone**—Performed by Concorde
6. **Where There Were Wolves**—Performed by Paul Roe
7. **Where There Were Wolves**—Live recording, performed by Pablo Manjón-Cabezas Guzmán, at the National Concert Hall

CD 2

7. **Hypnagogia**—Segment of work in progress recording by the DIT Symphony Orchestra, conducted by David Brophy
8. **Hypnagogia**—Full piece, electronic realisation
9. **Echoes**—Workshop recording, performed by Concorde
10. **Accretion and Acrylics Movement 1**—Electronic realisation
11. **Accretion and Acrylics Movement 2**—Electronic realisation
12. **Accretion and Acrylics Movement 3**—Electronic realisation

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Chapter 1: Introduction

This thesis examines the aesthetic and technical aspects of my portfolio of compositions and traces the development of my work over the research period. The structure of this commentary initially concentrates on a style that was originally rooted in motivic, rhythmic material and subsequently traces a stylistic metamorphosis that encompasses a rhythmic language acknowledging complexity and diversity. I will first chart the progress of the compositional techniques attained over the course of the degree. As the thesis progresses, I will display how each element has advanced and combined to form my current compositional aesthetic.

Each composition traces the development of the structural rhythmic elements that govern the musical aesthetic. By that, I refer to the emphasis on rhythmic motifs that have been pivotal for the compositions written throughout the research period. Concerns with rhythmic proliferation in combination with the exploration of timbre and harmonic material, have resulted in textures that allow static sonic canvases to emerge in the discourse. Since I compose concentrating on the resultant verticalization, based on an aggregate of pitch material, these sonic canvases are vehicles in which to slow down the rate of chord progression. In later works, especially, line is implicit, in order to counteract any form of melodic delineation.

The works I will discuss in this thesis, in chronological order are *The Lighthouse*¹ for choir SATB, *Then 'til Now*² for string quartet, *Ambages*³ for clarinet, flute, violin, and cello. *Busker*⁴ for electronics, *From the Same Stone*⁵ for accordion, bass clarinet and cello, *Where There Were Wolves*⁶ for bass clarinet and electronics, *Hypnagogia*⁷ for orchestra, *Echoes*⁸ for flute, clarinet, cello, violin and vibraphone and finally, *Accretion and Acrylics*⁹ for orchestra.

Before I began to write any music for this portfolio, I had one general goal in terms of the overall structure, which was to include one large-scale orchestral work, as the last piece. The motive here was to gain a deeper understanding of the different families of instruments, their various timbres and technical difficulties by writing ensemble pieces, before undertaking the task of combining all these different categories together.

This is the central idea that my portfolio is structured around, however the direction in which my interests followed from piece to piece were not predetermined.

¹ Egan, Patrick: *The Lighthouse* (2012). Awarded Highly Commended In the Feis Ceoil Choral Composition Competition 2013.

² Egan, Patrick: *Then 'til Now* (2013). Winner of the West Cork Chamber Music Festival. Workshopped and then performed in Bantry Hall, Cork by the Bernadel Quartet 29 June 2013.

³ Egan, Patrick: *Ambages* (2013). Awarded 2nd prize in the Feis Ceoil Chamber Ensemble composition competition 2014.

⁴ Egan, Patrick: *Busker* (2014). Played at the Waterford Institute of Technology, Waterford, for Contemporary Music Centre Marathon Day 21 March 2014.

⁵ Egan, Patrick: *From the Same Stone* (2014). Awarded 1st prize in the Feis Ceoil Chamber Ensemble composition competition 2015. First performed at the R.H.A Gallery, Dublin, 27 by Concorde: Martin Johnson, Paul Roe, Dermot Dunne 27 April 2014.

⁶ Egan, Patrick: *Where There Were Wolves* (2015). First performed at the National Concert Hall, Dublin by Pablo Manjón 12 November 2015.

⁷ Egan, Patrick: *Hypnagogia* (2015). performed at DIT Kevin street, Dublin, 10th March 2015, by the DIT Symphony Orchestra, conducted by David Brophy 10 March 2015.

⁸ Egan, Patrick: *Echoes* (2016). performed at DIT Rathmines, Dublin by Concorde: Martin Johnson, Paul Roe, Madeleine Staunton, Elaine Clarke 12 May 2016.

⁹ Egan, Patrick: *Accretion and Acrylics* (2016).

Chapter 2: Early Compositional Approach and Influences

2.1 My Musical Background

As a self-taught guitarist, my initial development in music relied heavily on my aural senses. Through improvisation, I began to explore chord progressions which lead to instrumental pieces long before I learned to notate music. Because of this, I relied heavily on my own instincts and intuition. I believe this element is still strongly imbedded in my compositional practices to this day. Although, my compositional technique has evolved and grown with my understanding of music, improvisation is still a key factor in my formative and structural processes.

It was while studying for my undergraduate degree that I began to develop an interest in contemporary composition. As my initial interest in contemporary music was forming, I found I was particularly interested in very rhythmically-orientated pieces and the style of many minimalist composers such as Steve Reich,¹⁰ Philip Glass,¹¹ and David Lang,¹² among others. I think this may have been in part, due to my background in playing with rock bands, where generally the material is often repetitive and very rhythmically driven.

Certainly, in the beginning of my research, I wanted to employ the architectural rhythmic structures found in minimalism that appealed to me, but with a less harmonically and

¹⁰ Steve Reich (b. 1938) works published by Universal Edition.

¹¹ Philip Glass (b. 1937) works published by published by the Ramakrishna-Vivekananda Center of New York, Dunvagen Music Publishers.

¹² David Lang (b. 1957) works published by G. Schirmer.

linearly-constrained narrative (by that I refer to some of the simple chord progressions and repetitive melodic sequences applied in minimalist compositions). I didn't feel it appropriate to follow minimalism because I am interested in having a broader palette of pitch material that is not confined to a diatonic system. My early interests in minimalism led me to explore other 20th century composers such as Bartok,¹³ Stravinsky,¹⁴ Messiaen,¹⁵ and some of the earlier works of Ligeti.¹⁶ I became fascinated with the irregular rhythmic pulsations that I found particularly at that time, in the works of Bartok and Stravinsky. The level of rhythmic activity and textural diversity that is evident in a lot of these composers' works appealed to me. I believe these earlier interests maintain a role in my later works, but are particularly present in the first two pieces that I wrote for this degree: *The Lighthouse* and *Then 'til Now*.

The approach to form and structure in these two pieces are very similar. My early compositions rely on predetermined pitch material that is gradually revealed linearly, or vertically. An interest in counterpoint and canon can be seen in these early pieces also, which allowed me to devise different architectural events juxtaposed with the voice leading. This idea was further addressed in other pieces such as *Ambages* and *From the Same Stone*. A goal for every piece has been to expand my rhythmic vocabulary, and this can be seen within these two pieces, with the introduction of more complex rhythmic structures.

¹³ Béla Bartók (1841-1945).

¹⁴ Igor Stravinsky (1882-1971).

¹⁵ Olivier Messiaen (1902-92).

¹⁶ György Ligeti (1923-2006).

2.2 Timbral and Rhythmic Development Through Electronics

Structurally, line has been explicit in the vertical and linear sense in my earlier compositions. However, the functionality of rhythm and line and its role, changes quite dramatically in later works, where line becomes implicit by using rhythmic variations to create saturated, layered textures. I attribute this both to an interest in microtonality, mainly found in the works of Ligeti and my research into electronic music.

Research into electronic music offered new insight into managing different musical cells, either rhythmically or harmonically within the same space and time. Being able to have one or more harmonic textures interacting, as dense and static or homophonic, seemed much more manageable with electronics, due the ability of being able to physically control a console to perform a myriad of actions.

The ability to control amplitude levels has had a significant impact in constructing the dynamic shape for some of my later orchestral works and this is an area that I am still exploring. I believe pieces written after my initial experimentation with electronics display a noticeable departure from my previous aesthetic of melodically driven lines, with a new emphasis on timbre and texture.

My piece *Busker* was my first venture into electronics and incorporates recorded street sounds that are morphed and manipulated to create a sonic collage. The process of synthesising the sounds for *Busker* taught me about the possible applications and transformations of timbre and alternative instrumental techniques in my own acoustic writing. While there is still a strong

sense of line and narrative in *Busker*, with many contrasting moments, the narrative is now expressed through timbre and sonic ‘events’.

My piece *From the Same Stone* which was written immediately after *Busker*, displays this interest in timbre as it explores the blending of similar timbres that exist within the combination of three disparate instruments. This continued interest in timbral sonorities is evident throughout the research of the portfolio and is prevalent in my orchestral pieces.

2.3 Later Compositional Approach

In the last pieces of my portfolio, particularly in my orchestral works, the fusion of timbre and fluctuating rhythmic cells act to form dense static textures that rely heavily on divergent dynamics. Within these harmonic cells, the concern is to hide line by implication and to concentrate on the vertical to express an aggregate of pitch material. Certainly, my early interest in counterpoint and canon can still be recognised within these ‘static cells’, however, the antecedent and consequence syntax of normal phrasing by strong and weak beats is obliterated. I experimented with transition between two or more fluctuating harmonic cells, by gradually introducing new pitch material to the established clusters of motivic variations.

Like my early works, I am still interested in composing dense harmonic and rhythmically active textures, but unlike my early works, the goal is not to delineate any explicit line but to make line implicit by saturation of layered rhythmic variation. Register and timbre are often used in combination with these dense cells and act as structural pillars in the overall form of the piece.

Chapter 3: Overview of Early Processes

3.1 Introduction

Rhythm has been the initial starting point for structuring my music and this is relevant to the first two pieces that I wrote for this thesis. *The Lighthouse* for SATB and *Then 'til Now* for string quartet, both focus on the expansion of rhythmic motifs and the processes involved structurally are very similar. The harmonic language is predetermined for both pieces and is gradually divulged through diverse rhythmic and textural events. Both of these works follow an arch-like reflective structure, referring to textural ideas or melodic content. These pieces contain quite melodic and rhythmically explicit events that lead to the culmination of longer sections where a dialogue of canon or contrapuntal material evolves.

3.2 *The Lighthouse*

In a lot of my compositions, I derive much conceptual content for my music from nature, and in particular, landscapes. During the summer before I began my research I had spent many weekends in Wexford and often visited the Hook Lighthouse at Hook head.

The ocean and its ability to transition from moments of serene calmness to chaos and raw power was the main catalyst for the concept. I wanted to display and represent these contrasting states in this piece and the gradual transition from one to the other. By chance, I randomly culled words from a variety of different sources and from multiple googled texts about the ocean. The final narrative comprises mainly phonemes and a series of disjointed words and sentences

occasionally superimposed revolving around the sea. This setting for choir was particularly appealing and symbolic particularly because of the versatile timbral qualities that the voice can produce to display the oceanic extremities.

Using different inversions and exploring contrasting registers, I constructed a series of chords based on a few pitches gradually introducing a new note into the aggregate. This idea of introducing new notes to the chord one at a time begins on a slow timeline with staggered entries juxtaposed over each other which can be seen in Fig 3.1.

Largo *Tranquil*

♩ = 37

The musical score consists of eight staves, each representing a different voice part. The top two staves are for Soprano I and Soprano II, both in treble clef. The next two are for Alto I and Alto II, also in treble clef. The bottom four staves are for Tenor I, Tenor II, Bass I, and Bass II, all in bass clef. The score is marked 'Largo' and 'Tranquil' with a tempo of quarter note = 37. Dynamic markings include *pp*, *ff*, *ppp*, and *fff*. The Tenor and Bass parts include vocalizations 'Awh' with horizontal lines underneath. The music features staggered entries of notes across the different parts, creating a layered, oceanic texture.

Fig. 3.1

The piece is based on the chromatic scale. In the opening fourteen bars the pitch material rotates on F, F#, G and G# in octave displacement then gradually expands chromatically in contrary motion. In bar 14, E enters in the tenor parts and then an A follows in bar fifteen within the alto parts. In bar seventeen, a D# and D natural enters in the bass parts followed briefly by a C# and C in the tenor parts, in bar eighteen. Similarly, the alto parts introduce A# also in bar 18. In bar 20 the full chromatic cycle is completed with the introduction of B in the bass part.

Pitch rotation is a frequent characteristic within this piece, which allowed me to slow down the rate of harmonic progression. The timeline and rate at which new pitches are introduced speeds up dramatically, coinciding with the expansion into rhythmically active textures. This expansion into dense rhythmic material that can be seen in Fig 3.2 is paralleled by the descent into almost complete chromaticism with each register using different improvisational pitch boxes. These elements are intended to symbolize the raw power and unpredictable nature of an ocean storm. Glissando is also an important feature of this piece and is used in conjunction with these improvisational boxes.

36 *fff*

S. *fff* *fff legato*

O

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.

S. *fff*

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.

A. *fff* half spoken half sung.

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

A. *fff* half spoken half sung.

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

T. *fff* turn - ing spin Ah

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

T. *fff* turn ing Ah

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

B. Awh

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.

B. Awh

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.

Fig 3.2

Initial ideas for the some of the textures were inspired by *The Nonsense Madrigals*, specifically the movement: *The Alphabet*.¹⁷ I wanted to explore some of these sonic effects by combining many divergent dynamics in the same texture. The idea of these long-held notes gradually dove-tailing and morphing into each other was extremely beneficial in creating these wave-like ambient textures in my piece, particularly at the end section that can be seen at Fig.3.3, where

¹⁷ Ligeti, Gyorgi: *The Nonsense Madrigals* (Mainz: Schott, 1999). Premiered 25 September 1988, Berlin · The King's Singers.

a series of divergent dynamics is explored, marking the end of the storm and the return of the ocean to its former serene state. By employing persistent divergent dynamics, the voice leading within a chord is constantly shifting, allowing certain pitches to emerge in the foreground, while submerging others in the background and vice-versa. What intrigued me most about these undulating textures is that the focus is constantly shifting and any subjective perception of line is quickly obliterated.

The musical score for Fig 3.3 consists of eight staves, each representing a different voice part. The staves are labeled on the left as S., S., A., A., T., T., B., and B. from top to bottom. The score begins at measure 45, indicated by a '45' above the first staff. The music is characterized by a constant oscillation between fortissimo (ff) and pianissimo (pp) dynamics. The notes are often slurred together, and the dynamics change abruptly within the same phrase. The first two staves (S.) feature a rhythmic pattern of eighth notes with a 'gliss.' marking. The subsequent staves (A., T., B.) feature a more melodic line with a 'gliss.' marking. The overall texture is dense and undulating, with the focus constantly shifting between different pitches and dynamics.

Fig 3.3

Dynamics are also used to produce an echo or shockwave effect by the exit of voices, one quaver at a time. This idea would later become a crucial component and important device for composing later works such as *Hypnagogia*, *Echoes* and *Accretion and Acrylics*.

3.3 Then 'til Now

Bartok's string quartets and Ligeti's String Quartet No.1 and No.2¹⁸ were a huge source of inspiration at the time of writing this piece. Much like Bartok's String Quartet No. 5, ¹⁹ this piece borrows from traditional folk tunes.

This string quartet was one of four winners for the West Cork Chamber Music Composition Competition and it was based on the following brief.

'The submitted work should be based on or derived from one or more of the melodies from the Bunting collections. The Bunting collections refers to a number of transcriptions of ancient Irish folk music that the Irish Musician Edward Bunting (1773–1843) collected throughout his career. He released three main publications in his lifetime:

¹⁸ Ligeti, G: *String Quartet no. 1, Métamorphoses Nocturnes* (Vienna: Schott, 1972). First performed in May 1958, Vienna by the Ramor-Quartett; Ligeti, G: *String Quartet no. 2*, (Mainz: Schott, 1971). First performed 14 December 1969, Baden-Baden · LaSalle-Quartett.

¹⁹ Bartók, B: *String Quartet No.5, Sz.102* (Vienna: Universal Edition, 1936). First performed in Washington, D.C. 8 April 1935 by the Kolisch Quartet.

*A General Collection of the Ancient Irish Music (1796),*²⁰ *A General Collection of the Ancient Music of Ireland (1809),*²¹ *The Ancient Music of Ireland (1840).*²²

I was interested by Bartok and Stravinsky's use of ethnic folk tunes in their compositions for some time and this competition was a good incentive to apply this to my own work by experimenting with Irish folk music. The aim was to maintain a certain stylistic aesthetic relating to Irish music, imposing contemporary idioms without explicitly exposing the tunes.

I began the process by searching for two melodies from the collections that would complement each other rhythmically and contrapuntally. I did various exercises with many tunes from the collections as part of the planning process, this involved the superimposition of different melodies to see how they would operate against each other.

²⁰ Bunting, Edward: *A General Collection of the Ancient Irish Music* (London: Preston and Son, 1796).

²¹ Bunting, Edward: *A General Collection of the Ancient Music of Ireland* (London: engraved by Williamson, n.d. [1809]).

²² Bunting, Edward: *The Ancient Music of Ireland* (Dublin: Hodges and Smith, 1840).

The two melodies I chose are both from *A General Collection of the Ancient Irish Music* (1796) and are shown in Fig 3.4 and 3.5.

No.18 *The Chamber with the Fair Locks*²³



Fig. 3.4

No.7 *The Summer is Coming*²⁴



Fig. 3.5

As seen in Fig 3.6 and Fig 3.7, I superimposed the two tunes rhythmically and applied my own chromatic pitch material, resulting in a new contrapuntal melody which forms the basis for the harmonic and melodic content of the piece.

²³ Bunting, Edward: *A General Collection of the Ancient Irish Music* (London: Preston and Son, 1796).

²⁴ *Ibid.*

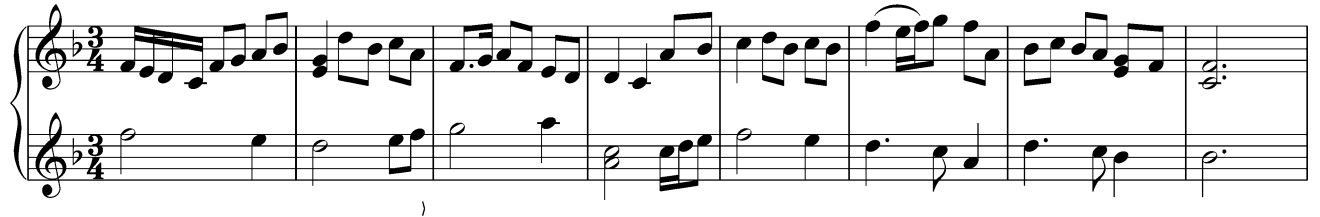


Fig. 3.6

Pitch material altered.



Fig. 3.7

I reconfigured and exposed parts of the rhythmic phrasing with my own chromatic versions of the melodies. The opening rhythmic motif is taken from *The Chamber with the Fair Locks*, varied by the insertion of occasional triplet quavers related to my pitch material, slotted between timbral harmonic passages. The original four semi-quaver descending motif gradually becomes a more important tool in structuring the more rhythmically active sections of the piece, which we first see in bar 41.

Most of the pitch material and intervals found in this piece is abstracted from my modified melody which acts as a scale, binding the harmonic structure of the piece together. I also employ certain contours from the original melody—for example the Bb followed by the F and

F# in bar 6, appears frequently in different rhythmic configurations such as in bars 37, 39 and 54.

A frequent compositional tool I utilize is a rhythmic motif that acts as a structural pillar or interjection which is inserted into the piece multiple times. These pillars, aside from acting as ‘surprises’ are functional in superimposing an interrupting refrain to the line, allowing it to re-emerge and agglomerate while exploring new harmonic terrain from the original phrase. I formed these sections that can be seen in Fig 3.8 separately by reconfiguring the material in bar 7 of the deconstructed melody.

The image shows a musical score for four string instruments: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The score is divided into two systems. The first system starts at measure 21. Each instrument part begins with a rhythmic motif consisting of eighth notes, with the first three notes grouped as a triplet. Above the first measure of each staff, the instruction 'Sul 1 2 3 sim.' is written. The second system continues the same rhythmic motif. A dynamic marking of 'ppp' (pianissimo) is placed below the first measure of each staff in the second system. The Vln. I part ends with a fermata. The Vln. II part ends with a fermata and a final triplet. The Vla. part ends with a fermata and a final triplet. The Vc. part ends with a fermata and a final triplet.

Fig 3.8

The use of this ostinato rhythm and the same *spiccato* technique on all the string instruments, displays the homogeneity of the string family. I employ other string techniques such as *pizzicato* and *glissando* on all the strings as another homogenous feature.

As mentioned previously, the first half of the piece serves as an introduction or suggestion to my reconfigured *meta* melody (Fig 3.7), which is finally revealed in bar 58, in double canon.

The image displays a musical score for four string instruments: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The score begins at bar 58 and continues through bar 61. Each instrument part is marked with a dynamic of *ff* (fortissimo) and the instruction *sempre* (always). The notation includes various rhythmic values, accidentals, and articulation marks such as accents and slurs. The Vln. I part features a complex rhythmic pattern with many sixteenth notes. The Vln. II part has a more melodic line with some slurs. The Vla. part plays a steady eighth-note accompaniment. The Vc. part provides a harmonic foundation with a mix of eighth and sixteenth notes. The overall texture is dense and rhythmic, characteristic of a double canon.

Fig 3.9

Once the melody is revealed in its entirety, it expands into denser, more rhythmically active textures. These textures comprise variations and developments of the rhythmic fragments found in my *meta* melody, while also employing new timbres and techniques. This *meta* melody is referred to again at the end of the piece beginning at bar 105 (Fig 3.10), using a

combination of glissandi on the viola and cello juxtaposed with constant semiquaver counterpoint played on the violins using slurs, with added passing notes.

105 Slurs ad lib.

Vln. I *mp* sempre
Slurs ad lib.

Vln. II *>mp* sempre

Vla. *mf* sempre
gliss.

Vc. *mf* sempre
gliss.

109 *rit.*

Vln. I *mp*

Vln. II *mp*

Vla. *pp*
gliss.

Vc. *pp*
gliss.

107

Vln. I *mp*

Vln. II *mp*

Vla. *pp*
gliss.

Vc. *pp*
gliss.

Fig. 3.10

3.4 Summary

My compositional formulae for these two pieces is quite similar. The importance of melody and rhythmic drive are apparent and quite explicit. The two pieces were written primarily from the expansion of rhythmic fragments that gradually accumulate and combine to form dense active textures. This expansion into denser textures is paralleled by the expansion of pitch material. The explorations into counterpoint, polyphony, fugue and canon were essential in the development of the dense multi-layered textures in my orchestral works.

My use of divergent dynamics and the use of wave-like textures found in *The Lighthouse* is a feature I continued to revisit as my research progressed, both in my large scale orchestral works, as well as my small ensemble works such as *Echoes*. The use of dynamics becomes more sophisticated and complex as the portfolio progresses and becomes more of an informative structural component. This was largely due to my studies into electronic music and the composition of two electronic pieces which are featured in this portfolio.

The use of structural pillars or interjections (Fig 3.8), that are prevalent in *Then 'til Now* remains an important compositional tool that I continue to use in my works. I often form these pillars separately in the beginning of the writing process, with the intention of inserting them later on in the piece. In later works, these interruptions become less based on rhythmic interactions and are often emphasised through timbral means.

Chapter 4: Rhythmic Development

4.1 Introduction

Following these two pieces I began to expand on my rhythmic technique. I was particularly interested in using highly dense rhythmic counterpoint in combination with triplet configurations and experimenting with micro-polyphonic textures. The content within my textures in this instance comprises different temporal relationships and rhythmic variations on a melodic fragment or a series of pitches.

It was at this time, that I began to have a greater interest in Ligeti's later works such as *Atmospheres*, *Apparitions*, *Requiem*, *Lontano* and *Chamber Concerto for Thirteen Instruments*.²⁵ I really enjoyed the rhythmic density of some of the textures within these pieces and his use of micropolyphony. I believe this following explanation of Ligeti's use of micropolyphony is apt in describing the technique. 'In these and other micropolyphonic pieces, the circulation of independent voices within a narrow ambitus produces a masking effect, the overlapping of parts interfering with their segregation into distinct streams. Individual threads become difficult to discern and, as a result, merge into a fused fabric.'²⁶

²⁵ Ligeti, G: *Atmospheres* (Vienna: Universal Edition, 1971). First performed 22 October 1961 at the Donaueschingen Festival, Germany by the SWF Symphony Orchestra, conducted by Hans Rosbaud; Ligeti, G: *Apparitions* (Vienna: Universal Edition, 1971). First performed 19 June 1960 in Köln Germany by the NDR SO Orchestra, conducted by Ernest Bour; Ligeti, G: *Requiem* (London: Peters, 1965). First performed 14 March 1965 in Stockholm by the Swedish Radio Symphony Orchestra conducted by Michael Giele;. Ligeti, G: *Lontano* (Germany: Schott, 1969). First performed on 22 October 1967, in Donaueschingen, Germany by the Sinfonie-Orchester des Südwestfunks, Conducted by Ernest Bour; Ligeti, G: *Chamber Concerto for Thirteen Instruments* (Germany: Schott, 1970). First performed 1 October 1970, Berlin · die reihe · conducted by Friedrich Cerha.

²⁶ Drott, Eric : *Lines, Masses, Micropolyphony: Ligeti's Kyrie and the Crisis of the Figure* (Seattle WA: Perspectives of New Music).
http://www.academia.edu/4538593/Lines_Masses_Micropolyphony_Ligetis_Kyrie_and_the_Crisis_of_the_Figure 16 September 2016.

Although I enjoyed the effect of this technique, my goal was not to base a full piece around the concept of micropolyphony, but rather to be inspired to explore faster, denser rhythmic interactions. The result was the next piece I composed, *Ambages* for flute, clarinet, violin and cello.

At the time of writing *Ambages* I began to experiment with multiple polyrhythmic strands in demisemiquaver configurations, which are prevalent throughout this particular piece. In certain sections I use divergent dynamics in combination with these rhythmic strands, with the aim to blend and morph each contributing motivic fragment into a constantly oscillating texture. I also used a multi-layered canon, which was a form that I utilized in the fugal section of *Then 'til Now*.

The structure of the piece is similar to my previous two compositions, in that it is based around a small predetermined motif which becomes the catalyst in developing the material, however, the process in which material proliferates from a simple motif is far more abstract. For the most part, within this piece, there is a departure from obvious motoric rhythms underlining a clear melody, to more densely layered rhythmic activity, although there are many different ostinati figures harkening back to my early minimalist influences.

4.2 *Ambages*

Ambages is defined as indirect or roundabout routes or ways of doing things. My original concept for this piece was based around the idea of obscuring, while simultaneously implying an impression of a short simple three note motif seen here in Fig 4.1.



Fig. 4.1

Conceptually, I was interested in the idea of creating content based on this simple motif in two ways.

- By employing different abstract mutations or distorted imitations of this motif.
- By examining these pitches on a micro-level and by using dense rhythms with a narrow pitch range, in quarter tones, based around these original pitches C, B and E.

This piece was my first major venture into the use of quarter tones. Since the piece revolves around the use of equal temperament and quarter tones, a frequent feature is the exploitation of dissonance by the juxtaposition of tempered and untempered pitches, thus creating strong dissonances, for example a C played in the same chord as C quarter sharp.

The general contours of this simple motif reappear and are often substituted with quarter tones that are applied on opposite sides of the notes C, B and E, from the original motif or on the nearest tone. For example, in bar 7 (Fig. 4.2) the first imitation of the motif appears and is

shared between the instruments in an imitative section, with a C quarter flat in the flute highlighting the note C of the motif, followed by the violin playing an A quarter sharp, while the cello is playing a C quarter flat which are both intended to represent the note B from the motif. The flute plays a D while the violin finishes the sequence with an F quarter flat, an octave higher, hinting at the final note E of the motif.

The musical score for measures 7-10 features four staves: Flute (Fl.), Clarinet (Cl.), Violin I (Vln. I), and Cello (Vc.).

- Flute (Fl.):** Measure 7 starts with a trill (marked '3') and a dynamic of *f*. Measure 8 has a trill (marked '3') and a dynamic of *mf*. Measure 9 has a fluttertongue marking and a dynamic of *ff*. Measure 10 ends with a dynamic of *ppp*.
- Clarinet (Cl.):** Measure 7 starts with a dynamic of *f*. Measure 8 has a trill (marked '3') and a dynamic of *mf*. Measure 9 has a dynamic of *f*. Measure 10 ends with a dynamic of *ppp*.
- Violin I (Vln. I):** Measure 7 starts with a dynamic of *ppp*. Measure 8 has a dynamic of *f*. Measure 9 has a dynamic of *ppp*. Measure 10 ends with a trill (marked '3').
- Cello (Vc.):** Measure 7 starts with a dynamic of *ppp*. Measure 8 has a dynamic of *f*. Measure 9 has a dynamic of *ppp*. Measure 10 ends with a dynamic of *ppp*.

Fig 4.2

These imitations of the motif continue and present themselves in different instruments and registers. They are often overlapping, both vertically and horizontally. For example, in bars 16 and 17 (fig 4.3) the cello and violin share an imitation playing quarter tones around the notes of the original motif, with the violin ending on an E, completing the phrase, which is juxtaposed by the flute delineating a linear imitation and the clarinet playing the original motif, buried in the dissonance.

Musical score for measures 16-18, featuring Flute (Fl.), Clarinet (Cl.), Violin I (Vln. I), and Violoncello (Vc.).

Measure 16: Marked "fluttertongue" and "5/4". Dynamics include *ff* for Flute and Clarinet, *f* for Violin I, and *f* for Violoncello. Articulation includes slurs and accents. Trills and triplets are present in the woodwinds and strings.

Measure 18: Marked "nat." and "4/4". Dynamics include *mp* for Flute, *mp* for Clarinet, *mp* for Violin I, and *mp* for Violoncello. Articulation includes slurs and accents. Trills and triplets are present in the woodwinds and strings.

Fig. 4.3

The discourse continues to expand on the material presented, with the addition of the initial arabesque figures found in the opening bars, reintroduced into the texture:

25

Vln. I

Vc.

f sempre

5

3

f sempre

Fig. 4.5

26

Vln. I

Vc.

3

3

5

gliss.

Fig. 4.6

As mentioned before the pitches of the three-note motif are developed by quarter tone expansion, in fast, rapid rhythmic durations. These rapid configurations that can be seen in Fig. 4.7 are chromatically saturated patterns and are perceived to speed up, slow down and peak dynamically before fading out.



Fig. 4.7

The direction changes at bar 60, with the entrance of a flute solo exploring new rhythmic terrain. At the time of writing this section I was particularly inspired by some rhythmic ideas explored in a piece called *Ángulos* by Alejandro Castaño.²⁷ There is a section within this piece in which a flute plays a melody which is saturated in very rapid rhythms and many ornamentations, while the other instruments enter asynchronously very gradually playing contrasting slow, punctuating rhythms.

I decided to adopt some of the ideas based on the structural framework of that particular section in *Ángulos*. The result is a flute line that appears as a frantic solo improvisation that doesn't follow a predictable metre or a repeating thematic motif, combined with a slower ostinato motif, in the clarinet, creating a groove-based line. This can be seen in Fig. 4.8.

²⁷ Castaños, Alejandro: *Ángulos, for ensemble*, Concorde Ensemble, Reflections. Navona records 5838.

The image displays a musical score for Flute (Fl.) and Clarinet (Cl.) across six systems of music, numbered 60 through 66. The Flute part is highly active, featuring intricate melodic lines with various ornaments and rhythmic patterns. Key features include:

- Measure 60:** Starts with a 'C' in a box above the staff. The Flute part begins with a quintuplet (5) and includes trills (tr) and trills with wavy lines (tr~). The dynamic is *f sempre*.
- Measure 62:** Continues the complex melodic development with trills and trills with wavy lines.
- Measure 64:** Features a triplet (3) and quintuplets (5) in the Flute part. The Clarinet part begins to play a rhythmic accompaniment. The dynamic is *ff*.
- Measure 66:** Shows further melodic complexity with trills and trills with wavy lines. The Clarinet part continues its accompaniment.

The Clarinet part is mostly silent in the first two systems, then enters in the third system (measures 64-66) with a rhythmic accompaniment consisting of eighth and sixteenth notes.

Fig. 4.8

This line initially played by the clarinet is then repeated by the violin in bar 70 and the cello in bar 73. In bar 74 all instruments are playing either fragments of this motif or variations of it. The instruments play redundant canonic fragments of the melody, whereby the phrases are constantly transferred and reiterated between the four instruments, giving a disjointed impression of the original melody.

The piece continues with dense textures referencing the aforementioned material and concludes with a broad texture referencing the material in the beginning of the piece. The three-note motif on which the piece was based is finally revealed in bar 108.

The image shows a musical score for four instruments: Flute (Fl.), Clarinet (Cl.), Violin I (Vln. I), and Violoncello (Vc.). The score covers measures 105 through 108. Measure 105 begins with a treble clef and a key signature of one sharp (F#). The Flute part starts with a whole note G5, followed by a half note G5, and then a quarter note G5. The Clarinet part starts with a whole note G4, followed by a half note G4, and then a quarter note G4. The Violin I part starts with a whole note G4, followed by a half note G4, and then a quarter note G4. The Violoncello part starts with a whole note G2, followed by a half note G2, and then a quarter note G2. In measure 106, the Flute part has a whole note G5, followed by a half note G5, and then a quarter note G5. The Clarinet part has a whole note G4, followed by a half note G4, and then a quarter note G4. The Violin I part has a whole note G4, followed by a half note G4, and then a quarter note G4. The Violoncello part has a whole note G2, followed by a half note G2, and then a quarter note G2. In measure 107, the Flute part has a whole note G5, followed by a half note G5, and then a quarter note G5. The Clarinet part has a whole note G4, followed by a half note G4, and then a quarter note G4. The Violin I part has a whole note G4, followed by a half note G4, and then a quarter note G4. The Violoncello part has a whole note G2, followed by a half note G2, and then a quarter note G2. In measure 108, the Flute part has a quarter note G5, followed by a quarter note G5, and then a quarter note G5. The Clarinet part has a whole note G4, followed by a half note G4, and then a quarter note G4. The Violin I part has a whole note G4, followed by a half note G4, and then a quarter note G4. The Violoncello part has a whole note G2, followed by a half note G2, and then a quarter note G2. The score includes dynamic markings: *ppp*, *fff*, and *mp*. The Flute part has *ppp* markings in measures 106 and 107, and *fff* in measure 108. The Clarinet part has *ppp* markings in measures 106 and 107, and *mp* in measure 108. The Violin I part has *fff* in measure 106 and *ppp* in measure 107. The Violoncello part has *ppp* markings in measures 106 and 107, and *fff* in measure 108. The Violoncello part also includes a *gliss.* marking in measure 105 and a *nat.* marking in measure 106. The Flute part has a triplet of eighth notes in measure 108.

Fig. 4.9

Chapter 5: Research into Electronics

5.1 Introduction

The study of electronics and the creation of my subsequent electronic pieces have had and still have a profound impact on my composition style. Through experimentation with electronics, I believe I have achieved new insights into areas such as timbre, space within a sonic context, and the application of these elements with regards to texture.

As seen in *Ambages*, which I was in the process of finishing as I began to study electronics, I began to experiment with layered polyphonic textures. This interest has continued and is evident in my following electronic piece, *Busker*. I quickly discovered working in this genre offers insurmountable sonic possibilities. The software that is available in the market place today such as Cubase and Wavelab allowed endless transformations and complete control over all musical parameters, even with regard to the acoustic concert space.

Electronics continue to inform my thought processes, particularly offering different perspectives on narrative. During the creation of *Busker*, a huge part of the process was synthesizing recorded street sounds into new timbres. The initial focus in my research on rhythmic and melodic motifs as catalysts for my compositional processes, was substituted here in this piece by focusing on timbre and its application within line and narrative.

5.2 *Busker*

While In New York City in 2014, I recorded different street musicians and general street sounds with the Zoom H4N field recorder. I used Wavelab 8 to resynthesize these sounds and Cubase 7 to combine these sounds to form a sonic collage.

Much of the pitch material is taken from an excerpt of one street musician in particular, a jazz saxophone player, improvising on a melody that was vaguely recognisable to me. I was interested in the concept of creating a completely different piece from his melodies, a sort of ‘recycling’ of his improvisations. A secondary goal was to capture some of the character of New York City itself, not in a literal auditory sense but rather, to convey the city and its bustling nature in a symbolic representation. The idea was not to have any sounds with an easily recognizable source, but to create a completely new and separate soundscape that could exist on its own merit.

There was a steep learning curve with regards to how to use Cubase and Wavelab, as these were programs that were relatively new to me. I found one of the biggest challenges was isolating the particular required sound (e.g. the saxophone) from the other general background noise, which in any major city, is constant. WaveLab offers some useful tools in filtering out this background noise such as the Sonnox De-Buzzer (Fig 5.1) and the De-Noiser (Fig 5.2). After the process of de-buzzing and de-noising the sound file, I then used a compressor. I repeated this process multiple times until I was satisfied with the clarity of the sound.



Fig. 5.1

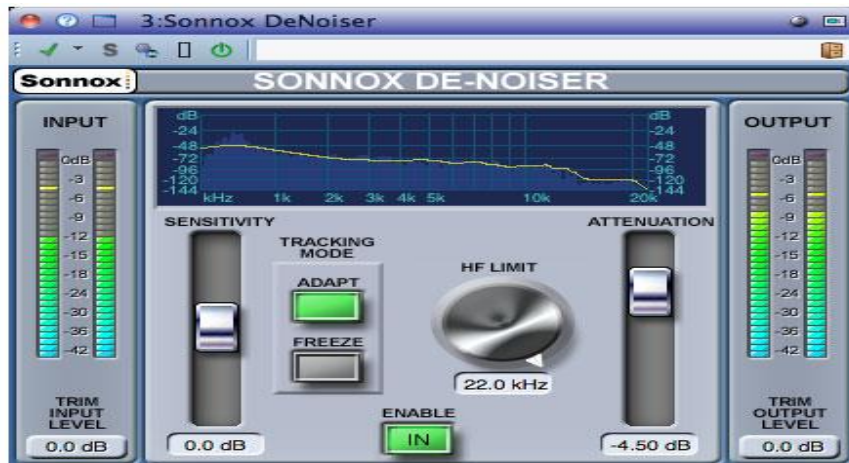


Fig. 5.2

After sounds were resynthesized I used Cubase to arrange and combine the different sound files to create a densely woven sonic collage.

The opening minutes of the piece serve to vaguely hint at the *Busker's* melody, in tandem with

using pitches extracted from the melody to construct sustained layered chords. These chords contain individual notes extracted from the recording of the saxophonist's melody and also street sounds that were resynthesized and transposed to pitches relative to that same melody. Brief echoes of the saxophonist's melody can be heard, but these are quickly engulfed by the ascending and descending chords. The main excerpt of the *Busker's* melody can be heard in its most basic form from 2'20" to 3'00", however with additional effects such as delay and reverb applied, in combination with resynthesized street noises, the melody remains distant and indistinct.

The structure of this piece is characterized by contrasting timbral textures which agglomerate in amplitude and density towards dynamic peaks or 'events'. These 'events' or dynamic peaks act as a means to transition to a new section or to herald the end of an old one. Aside from acting as structural pillars, these dynamic 'events' serve to build and release tension.

The piece comprises three main sections: 0:00 to 3:22, 3:22 to 5:20 and 5:20 to 7:43. At the time of 3:22 the first major dynamic event occurs, signifying the transition into the second section which contains denser, highly saturated textures. Within these textures, I superimposed a variety of velocity increased loops or fragments of the *Busker's* original melody to evoke a chaotic fluctuating representation of the original pitch material presented in his improvisation. These loops and fragments increase in density and amplitude and are accompanied by a deep bass drone, that ascends gradually in amplitude from the background into the foreground. This tension is released in a second dynamic event at 5:20, which marks the end of the second section and heralds the beginning of the third section. This dynamic event is followed by reversed, distorted fragments of the melody, gradually fading out, proceeding to the final climax.

The texture in the third section consists of various break sounds from vehicles that I resynthesised and transposed to all twelve pitches in the chromatic scale. In similar fashion to the previous texture, there is an ascending bass drone which is derived from a subwoofer of a passing car on the street in New York. This appears in different resynthesised versions throughout the entire work.

Aside from learning the basics surrounding the technical aspects of acquiring the relevant skills to maneuver within this software, I believe that my research into electronics has benefited my acoustic compositions, particularly with regards to timbre, multi-layered textures and mensuration canon. It has also provided new insights into the expansion and proliferation of pitch material.

Chapter 6: Timbre and Harmony

6.1 Introduction

Following *Busker* the use of timbre remains a more prominent feature in my subsequent pieces. The harmonic language becomes less constrained, because I deliberately move away from extracting pitch material from melody or note clusters. Unlike the revelation of my modified melody that comes forth in a double canon in *Then 'til Now* or the arrival of the full twelve chromatic pitches in *The Lighthouse* and in *Busker*, my next piece, *From the Same Stone* has no preordained harmonic or melodic goals, since the direction of the piece is governed by the exploration into timbre.

In this piece and also in the following orchestral piece, my compositional processes become more liberal, albeit all the material is compiled in chronological order. *From the Same Stone* focuses on the development and progression of line and although there were certain predetermined timbral features I wished to include, the progression and harmony of the line was composed on a reactionary bar by bar basis. The piece naturally progressed with certain intervallic and motivic repetitions, however the vertical accompaniment frequently deviates with unrelated improvised chords that were structured around the melody.

6.1 *From the Same Stone*

I was chosen by the world-renowned Concorde ensemble²⁸ to write a piece for trio using any combination of instruments that the ensemble provided. The brief for the competition was

‘Concorde are inviting composers who are registered as students in Ireland during the year 2013-14 to apply for the position of ‘Up Close’ Student Composer. The selected composer will be invited to write a piece for Concorde (trio or duo) for performance on April 27, 2014 in the series ‘Up Close with Music III’ at the RHA Gallery, Dublin.’

The title *From the Same Stone* comes from the expression ‘cut from the same stone’. My initial goal for this piece was to focus on the sonorities of the three instruments. Although these instruments contain great contrast, I discovered that they share a lot of similarities with regards to timbre, techniques and range. I had been a frequent attendee at many of Concorde’s concerts for some time and one of the prominent features that caught my attention was the timbral diversity of the instruments within the ensemble, which are accordion, bass clarinet, cello and violin. However, what impressed me even more was how timbral similarities could occur by focusing on the extremities of the instrumental registers and utilizing certain instrumental techniques. Therefore, exploring these areas of timbral sonorities became the focal point of the piece.

Being chosen for this competition was extremely beneficial to my development as a composer at the time. It offered me the opportunity to work with the musicians in the initial formative

²⁸ Concorde Ensemble. (Founded 1976) Director: Jane O’ Leary.

processes of composing the piece and allowed me to experiment by exploring some extended techniques and hearing the various timbral possibilities of the three instruments collectively. Following my electronic piece which involved resynthesizing recorded sounds into new timbres, I was eager to explore unique timbres in my acoustic writing.

I had no previous experience in writing for accordion and bass clarinet. Studying literature on these instruments, particularly Harry Sparnaays book: *The Bass Clarinet*²⁹ and the *Handbook on Accordion Notation*³⁰ by Geir Draugsvoll and Eric Højsgaard were essential in understanding the full range of alternative techniques and effects available.

One of the formative processes I researched was matching the different timbres of the instruments that I believed shared similar sonic qualities. One of the initial similarities that was revelatory is the incredibly large range that each instrument possesses, especially factoring in the use of harmonics on the cello and the many multiphonics available on the bass clarinet.

As seen in Fig. 6.1, the very beginning of the piece begins with chords and a semiquaver tremolo shared amongst the instruments, with the clarinet playing its own imitation of this technique, using a trill instead. This is aided by dovetailing divergent dynamics which blend the entries and exits of each instrument. The idea of transferring the line to each of the three instruments is a regularly occurring feature and the introduction sets the conceptual precedent of the piece.

²⁹ Sparnaay, Harry: *The Bass Clarinet: A Personal History*, translated by A. de Man and P. Roe. (Barcelona: Periferia Sheet Music, 2011).

³⁰ Draugsvoll, Geir. Højsgaard, Eric: *Handbook on Accordion Notation*. Edited and translated by Andreas Borregaard <http://www.hojs.dk/Resources/Handbook.pdf> 5 January 2014

Bass Clarinet in B \flat $\text{♩} = 77$ Andante
 Accordion mf
 Violoncello $\text{♩} = 77$ Andante

3
 B.Cl. p tr mf
 Accord. mf
 Vc. p *gliss.*

Fig 6.1

In bar 19 (Fig. 6.2) the first exploration of the high registers of the instruments occurs by employing harmonics in the cello and multiphonics in the bass clarinet, in combination with

the naturally high range of the accordion. As explained in Harry Sparnay's book *The Bass Clarinet* certain tremolo figures could be used in conjunction with multiphonics. This effect is utilized in bar 19 as the multiphonics interact vertically with the cello harmonics and high notes played on the accordion, to form these high registered chords. At this high range, the timbres are intended to blend together in a homogenous texture.

The musical score for Figure 6.2 is set in 4/4 time, Moderato, with a tempo marking of 63 bpm. It begins at measure 18, marked with a box containing the letter 'A'. The score consists of three staves:

- B.C. (Bass Clarinet):** The staff shows a rest for the first two measures. In measure 3, it plays a series of notes: a half note G₂, a quarter note A₂, a quarter note B₂, and a half note C₃. A slur covers these notes, with a *mp* dynamic marking below.
- Accord. (Accordion):** The staff shows a rest for the first two measures. In measure 3, it plays a series of notes: a half note G₄, a quarter note A₄, a quarter note B₄, and a half note C₅. A slur covers these notes, with a *mp* dynamic marking below.
- Vc. (Violoncello):** The staff shows a rest for the first two measures. In measure 3, it plays a series of notes: a half note G₂, a quarter note A₂, a quarter note B₂, and a half note C₃. A slur covers these notes, with a *gliss.* marking above. In measure 4, it plays a triplet of notes: G₂, A₂, and B₂, with a *harm gliss* marking above.

Fig 6.2

I believe this effect of multiphonics in combination with tremolo shares a lot of timbral similarities to the cello part, playing similar two-note tremolo figures *sul pont*, which can also yield very high frequencies. This occurs at bar 31.

31

B.Ci. *p* *mf* *p*

ord. *tr*

Accord. *mp* *p* *ppp*

Vc. *pp* *gliss.* *mf* *sul pont.* *p* *mp* *p*

Fig. 6.3

This example of the tremolo multiphonics with the *sul pont* tremolo in the cello was one of the previously matched sonorous timbres discovered in the formative processes. Another sonorous match may be seen with the combination of breathy tones on the bass clarinet in conjunction with the cello playing *sul tasto*, both at the lower tessitura of their registers. This occurs at bar 29 (Fig 6.4).

28

Adagio
♩=56

breathy

mf

mf

air

mf

sul tasto

Adagio
♩=56

mf

Fig 6.4

The two timbres of the instruments blend well together in their lower registers and share the melody primarily up until bar 40, while the accordion plays long held chords that are wide in register and serve as a background drone.

The use of air in combination with high notes played by the accordion is intended to match the similar sounding effect of producing a multiphonic on a clarinet. This effect occurs first at bar 30 and also in conjunction with the bass clarinet playing tremolo multiphonics at bar 37. The role of adding these high tessitura notes to the texture is constantly shared between the three instruments.

Structurally, the piece progresses linearly and gradually becomes more contrapuntal and rhythmically active. It is unlike my pre-electronic pieces with regards to pitch material, as I hadn't consciously committed to employing only certain predetermined pitches or basing the piece around a set group of pitches, however abstract that notion was in previous pieces like *Ambages*.

There is the familiar use of structural pillars that can be seen in the vast majority of my pieces, where the material interjects to dissolve and interrupt the progression of the line, similar to the structure of *Then 'til Now*. This approach is first seen at bar 43 to 44 (Fig 6.5) Here, the formation of this particular structural pillar takes the form in a fugal line that increases in rhythmic density and dynamically peaks at the end of the phrase. This peak in amplitude occurs as a result of the accordionist slapping the keys at designated note clusters in combination with double stops on the cello.

The image shows a musical score for three instruments: Bass Clarinet (B. Cl.), Accordion (Accord.), and Violoncello (Vc.). The score begins at bar 43. The B. Cl. part starts with a piano (*p*) dynamic and features several triplet markings. The Accord. part has a piano (*p*) dynamic and includes a section marked *fff* (fortississimo) with a sixteenth-note cluster. The Vc. part also starts with a piano (*p*) dynamic and includes a section marked *fff* with a sixteenth-note cluster. The score concludes with a sixteenth-note cluster in the B. Cl. part marked *mf* (mezzo-forte) and a sixteenth-note cluster in the Vc. part marked *fff*.

Fig. 6.5

Generally, the piece can be divided into two sections, the first half is from bar 1 to bar 63, which leads into the bass clarinet performing a solo, which signals the beginning of the rhythmically active portion of the piece. The cello and accordion provide a background drone to this solo which increases in density by slowly adding pitches in the accordion part, resulting in a climax at bar 72. This second section contains highly dense rhythmic interaction between the three instruments playing ostinati figures which are derived from the bass clarinet solo and many descending chromatic figures that were initially introduced in the first section of the piece. The structural pillar from Fig 6.5 is reintroduced at bar 81 and a further development of this pillar occurs at bar 90 developing into rhythmically denser textures.

The image shows a musical score for three instruments: Bass Clarinet (B.Cl.), Accordion, and Violoncello (Vc.), starting at bar 90. The B.Cl. part is in the treble clef and features a melodic line with triplets and a dynamic shift from *f* to *fff*. The Accordion part consists of two staves (treble and bass clefs) with dense rhythmic patterns and triplets, marked *fff*. The Vc. part is in the bass clef, playing a rhythmic accompaniment with triplets, marked *f* and *fff marcato*.

Fig. 6.6

The culmination of the piece explores the lowest register of each instrument. The focus on timbral sonorities comes back into the foreground in this section with the accordion adopting the glissandi of the former cello part. The accordion plays a high diffuse note which is imitated by the flute producing a simple breath noise, followed by a harmonic note on the cello.

L Largo
 93 multiphonic *sempre*

The musical score consists of two systems. The first system shows the accordion part in the upper staff and the cello part in the lower staff. The accordion part begins with a multiphonic chord marked *fff*. The cello part features a glissando marked *gliss.* and *fff*. The second system continues the accordion part with dynamics *mf*, *ff*, and *mf*, and the cello part with dynamics *fff*, *mf*, *ff*, and *mf*. Performance instructions include "gradual gliss of roughly a tone" for the accordion, "sul pont." for the cello, and "ord" for the accordion.

Fig 6.7

Chapter 7: Electro-Acoustic Research

7.1 Introduction

Following *From the Same Stone*, I was eager to continue my research into electronics with the inclusion of an acoustic instrument. I wished to revisit some textural ideas using layered mensuration canon, that were touched upon in my first electronic piece *Busker*, while also further developing my skills within the context of my chosen software. An in-house competition for postgraduates to write a piece for clarinet or bass clarinet, with or without electronics, gave me an additional incentive for this project. DIT would include the winning piece on a compilation CD entitled *Western Wind*³¹ which would be played by Paul Roe.

Before initialising the processes of composing my electroacoustic piece, I had decided that the basic function of the relationship between the tape and clarinet would coexist as equal partners. By that I mean that the timbre of the clarinet would amalgamate, blend and morph with the various soundscapes of the tape part, similar to the method applied to *From the Same Stone*. Similarly, the tape would act to support the clarinet by adopting and continuing tones or motifs or by providing an ample background in which to frame motivic ideas. It was also important that the dialogue be extremely reactive, whereby motifs or tones could be constantly swapped and then further developed between the live and fixed parts.

³¹ *Western Wind: DIT Conservatory of Music and Drama 1890-2015*. Launch Date: Thursday 22nd October 2015.

7.2 *Where There Were Wolves*

This piece was chosen as the winning composition of a competition for DIT postgraduates. The winning piece would be recorded and included in the CD *Western Wind*. This was the brief for the competition:

‘A 5-minute work for Solo Clarinet/Bass Clarinet. This work can be stylistically influenced by a range of genres including early music, traditional, jazz, contemporary etc. Ideally the work should appeal to a diverse listenership. The use of technology-audio/video and improvisatory aspects can be included if desired.

The album is conceived around the medieval poem *Westron Wynde*. Ireland is a country on the western fringes of Europe. Over the centuries we have been shaped and influenced by many diverse forces: Celts, Vikings, Normans, English, Scots, Spanish, Huguenots and more recently, by other nationalities and cultures. The conservatory comprises many of these elements; the music and drama we collectively perform comes from many parts of the world, spanning a millennium of creativity. The repertoire on the recording relates either directly or metaphorically to the theme of the wind. The winning composer would collaborate with the performer (Paul Roe-Concorde) in preparing the work for performance/recording.’

I first met with Paul Roe for him play through some of my sketches and to record some sample material to use in sculpting the tape part of the piece. The piece was conceptualised while hearing Paul play a short motif (Fig 7.1) which incorporated the technique of singing into the

instrument. The low grumbling drone and timbre was reminiscent of a howling wolf in the distance.

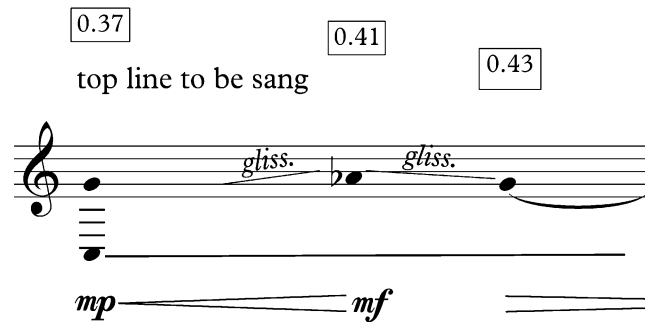


Fig. 7.1

I began to contemplate an ancient, untamed Ireland inhabited by wolves and the difference of that landscape in comparison to modern day Ireland, with all the drastic transformations that took place between these two time periods. I was imagining this transformation with regards to one landscape in particular: Bray shore, which has been a favourite location of mine since early childhood. I envisaged looking out on the landscape from Bray Head and witnessing the transformation from an ancient uninhabited Ireland to the present-day landscape, as if watching a motion time lapse video. There are some literal audio clues to represent this timeline, but much like *Busker* this transformation is mainly represented metaphorically and symbolically.

During my meeting with Paul I recorded multiple different motivic and timbral articulations and a large array of various multiphonics. For me, the sound of multiphonics have an almost electronic characteristic, similar to feedback when a microphone is put in front of an electronic

speaker or a guitar amplifier. I wanted to exploit this similarity in the opening minutes of the piece by featuring these multiphonics, in combination with my recorded versions, to form homophonic chords. Aside from forming these chords, occasionally the live multiphonics are continued in the tape part and the subsequent textures that ensue. The live multiphonics are ‘collected’ by the tape part and continue to linger in the background texture, occasionally coming to the foreground. The upper partials of the multiphonics gradually accumulate and contribute to a texture which acts as a support to the main ‘wolf motif’ and the following variations of it, seen here in Fig 7.2.



Fig. 7.2

From this point onwards, I experiment with some more reactionary dialogue between the tape and the clarinet. Fig. 7.3 involves a passage of counterpoint whereby the tape part, in the form of a midi clarinet instrument is pitted against the natural clarinet itself. A synthesized version of this counterpoint was previously introduced by the tape part during the ‘wolf motif’.

The image shows a musical score for two parts: B. Cl. (Bass Clarinet) and Tape. The B. Cl. part is in bass clef and contains a melodic line with several triplet markings. It starts with a box containing '2.40' and the word 'Breathy'. Below the staff, there is a dynamic marking 'mp' that transitions to 'f' and then back to 'mp'. A tempo marking '♩=100' is also present. The Tape part is also in bass clef and features a rhythmic pattern with quintuplet markings. It includes dynamic markings 'p' and 'mp'. At the bottom of the score, there is a MIDI keyboard graphic with a horizontal line and a vertical bar, indicating a specific point in time.

Fig. 7.3

Another example of this reactionary dialogue between the two instruments, can be seen when the tape part rhythmically mimics the trill effect found at 2.34 and 2.57, in the form of percussive samples that are very low in register.

The piece reaches a climactic peak at 3.23 (Fig 7.4) when the clarinet reaches its highest amplitude level following some rhythmically dense figures. The loudest attack in the clarinet is surpassed in volume by a resynthesised version of the same recorded note, reversed and distorted. This segues into a multi-layered canonic texture.

B. Cl. *f* *fff*

3.19 3 3.23 don't break note gliss. 3.28

Fig. 7.4

7. 2.1 Mensuration Canon and a Hierarchy of Dynamics

A critical landmark within the piece begins at 3:40. This section involves multiple layered canons and variations on another relatively simple motif which is stated by the live clarinet at 4.03 (Fig 7.5).

Rubato disjointed 4.03

B. Cl. *p* *mf*

♩=63

Fig 7.5

For the tape part in this section, I created individual files with a delay effect to create the canons. These were placed sporadically at many entrance points throughout this section, in combination

with constantly dovetailed dynamics within each individual canonic file. It was my aim to obliterate a sense of repetition or predictable pattern that is synonymous with traditional canon. The lack of explicit melody or pattern is further dissolved by employing different temporal relationships of the original melody found in Fig 7.5.

Using Wavelab 8, I stretched and shortened the tempo of the melody and the related canons in many multi-layered fragments and also applied the same method to small fragments of the main melody to create miniature loops. Similarly, the low percussive beats that were previously heard at 2:40 begin to re-emerge. Similar to the canons, these percussive beats are at different tempi and their amplitude level is constantly increasing and decreasing. These are also positioned at many different entry points to avoid any sense of a predictable meter or pulse. The dynamics of each of these different synthetic manipulations are constantly diverging on a micro level and contribute to an arch wave form, synonymous with fluctuation in volume. The clarinet plays fragments of the melody disjointedly, which is also adopted by the tape. At 5:34 the clarinet returns to playing multiphonics which act as the leading voice over the dense texture.

Multiphonic, fundamental
to be decided by performer

B. Cl.

4.44 4.54 4.55 5.02 5.04 5.19

mf *mp* *mf*

Fig. 7.6

Using divergent dynamics on such a grand scale on both the micro and macro level was new ground for me. This in combination with employing different temporal relationships of the same motivic material contributed to building this multi-layered aggregate of pitch material. I was excited to explore the possible transference of some of these ideas to my orchestral piece *Hypnagogia*.

7.2.2 Challenges with Live Performance: Expectation Versus Reality

This piece was performed at the National Concert Hall 12 November 2015 by Pablo Manjón and also at the International Association of Music Information Centres (IAMIC) conference which was hosted by NUI Galway and was performed by Paul Roe. Having this piece performed in two separate venues offered me new insights into the balance between acoustics and electronics with regards to the performance space. The venues were acoustically very different and the sonic results reflected some imbalances.

Although I am satisfied with the resultant recorded final piece, there were certain factors in both of these performances that were both positive and disappointing.

The first performance (included in CD1) took place at the NCH, in the John field Room (see i.i in appendix). The carpets, chairs and stairwell resulted in a dry, dead acoustic, particularly because of the stairwell that leads to the balconies overlooking the main auditorium which trapped the sound. The height of the ceiling above the stairwell allowed for the live part to sound prominent, particularly delineating the upper partials clearly. However, because of this, there was a very noticeable separation between the clarinet and the tape part.

Conversely, the performance space in Galway (see i.ii appendix) was completely open with a tile floor, stairwells and a very high ceiling, resulting in an extremely reverberating environment. As a result, the live part blended perfectly with the tape part, especially in the execution of the multiphonics. However, the second half of the piece was lacking in definition in the mid to low tessituras, mainly in the tape part and because of these problems, the dialogue between the live and tape part was indistinct.

To counteract these problems. I have come to the conclusion that the addendum of a real-time electronic part would allow flexibility to counteract the acoustic problems of both these particular venues and at least it would mitigate against too dry and too live surfaces.

Chapter 8: Hypnagogia

8.1 Introduction

My programme note for this piece describes the conceptual catalyst:

‘Hypnagogia is the experience of the transitional state from wakefulness to sleep. For as long as I can remember I have been having frequent experiences with sleep paralysis. This is the sensation of being unable to move your body but still being semi-conscious to your surroundings. In this state the dream world and reality merge together. Hallucinations occur, dreams begin to form and then vanish. It can be disorientating and confusing. Experiences have ranged from the blissful to the utterly terrifying.’

8.2. Hypnagogia

The piece uses chromatic saturation in its entirety. The opening 5 bars of the piece focuses on the pitches A, A#, D, D#, E, F, F#, and G in an imitative texture gradually expanding to include the notes G# and B at bar 6. In bar 15, C# enters and at bar 20 the arrival of a C natural in the tuba completes the full chromatic pitch material (Fig ii.i and Fig ii.ii in Appendix).

The rhythm does not adhere to a deliberate systematic schemata, it operates throughout the work by the juxtaposition of augmented overlapping phrases in pitch rotation and imitative, layered motifs, similarly associated with structures particularly on the micro level found in my electronic music. This can be seen from the very beginning of the piece. From the dense

opening texture the discourse becomes rhythmically elongated resulting in a series of chords and divergent dynamics

The rate of pitch delineation rhythmically creates an active texture which slowly moves to stasis and it is at bar 7, (Fig ii.ii Appendix) a cluster chord emerges based on the notes F, F#, G, G#, A, and A#. Arpeggiated figures in the piccolo and flute at bar 18 introduce ostinato figures in oboe 1 and 2, leading to the next chord progression at bar 21. From bar 30 to 54 (extract Fig 8.1) this procedure continues by means of accretion and layering, whereby the ostinati figures proliferate creating a vortex of rhythmic activity with the addition of divergent dynamics creating momentum to this texture. Just like tuning into a radio frequency, these phrases occupy the same space as far as rhythmic delineation is concerned, however, the dynamic shading highlights each of these separate phrases.

38

Picc.

Fl.

Ob.

Ob.

Cl.

Cl.

Bsn.

Bsn.

7

(Fig 8.1)

The image shows a musical score for an orchestral piece, specifically a section marked 'G'. The score is arranged in a system with seven staves. From top to bottom, the staves are: Piccolo (Picc.), Flute (Fl.), Oboe (Ob.), Oboe (Ob.), Clarinet (Cl.), Clarinet (Cl.), and Bassoon (Bsn.). The bottom-most staff is for the Bass Drum (Bsn.). The music is written in a key signature of one sharp (F#) and a common time signature (C). The score includes various dynamic markings such as *mp*, *mf*, *ppp*, and *p*, along with articulation like accents and slurs. There are also some performance instructions like '8va' and '5'. The Piccolo staff has a 'G' above it, indicating a specific section or measure.

Fig. 8.1

This section culminates with a climax that begins with the introduction of the bass drum that enters at figure I at bar 54 and lasts up to bar 60, whereby the harmonic progression leads to a short section of chromatic saturation introducing a motif in the piccolo, flute and oboe at bar 55. From this point onwards at bar 60 (Fig. ii.iii Appendix) cross-rhythmic active harmonic stasis ensues, largely consisting of semiquaver delineation. I first heard this effect utilized in Michael Gordon's orchestral piece *Beijing Harmony*³² and found it to be a very effective method in creating a 'fizz' or reverberation affect.

³² Gordon, M: *Beijing Harmony*. First performed National Centre for the Performing Arts Orchestra; Kristjan Järvi, conductor March 17, 2013.

The phrase introduced at bar 55 that can be seen in Fig. 8.2 constantly re-emerges through the ensuing texture juxtaposed with the semiquaver material, each gradually expanding until another climax is reached at bar 126.

Bar 55

The musical score for Bar 55 is written for Piccolo, Flute, and two Oboes. The time signature is 3/4. The Piccolo part begins with a melodic phrase in the first measure, marked with a forte (f) dynamic and an 8va (octave up) marking. The Flute part enters in the second measure with a triplet of eighth notes, also marked with a forte (f) dynamic. The two Oboe parts enter in the second measure with a sustained note, marked with a forte (f) dynamic. The score continues with complex phrasing and dynamic shading, alternating between forte (f) and pianissimo (ppp) dynamics across all instruments.

Fig. 8.2

The synthesis of this disparate rhythmic material results in the dissolving of the rhythmic phrases gradually into silence.

8.3 Summary

In conclusion, this piece was a critical landmark in terms of applying textural ideas, with regards to cross-rhythmic and harmonic layering that were specifically illuminating while writing my electronic pieces. In this case, the processes have derived by means of cellular proliferation and the ensuing expanded phrases that materialised. Because of the huge spectrum of amplitude levels available in electronics, my attention to dynamic shading was reinforced. This attention to amplitude is particularly relevant to my second electronic piece *Where There*

Were Wolves, because of the constant dynamic shading that allows multiple phrases to shift emphasis from foreground to the background, in a constant spatial rotation.

This focus on dynamic detail applies to my two remaining pieces *Echoes* and *Accretion and Acrylics*.

Chapter 9: Echoes

9.1 Introduction

As the title suggests, I was quite interested in the concept of echoes and possible ways to explore this paradigm in a musical context. This piece for flute, clarinet, violin, cello and vibraphone shares a lot of similarities with my orchestral works and it is a good representation of the culmination of the different elements that are definitive in my current aesthetic.

As seems to be the case with a lot of my pieces, there are often lingering concepts or features from my previous composition that cross-fertilize each other. This is certainly the case when I was writing *Echoes*. There were many ideas regarding dynamics that I began to explore in *Hypnagogia* that I wanted to develop in a different context. By exploring spatial textures or effects, I found dynamics to be one of the critical components in simulating an echo effect.

One of the methods I used was transferring the same pitch at the same register through the different instruments, with each repetition reaching a lower dynamic peak, whereby the first pitch entry is the loudest and the subsequent peaks are at lower dynamic rates. Underpinning this process, another pitch is articulated by another instrument at the lowest audible dynamic range which acts as a ‘collected’ afterthought of the echo, gradually dying out but also lingering long enough to provide a harmony to the new pitch that follows in a similar process. I first became interested in this sort of effect while creating my electronic pieces, particularly in *Where There Were Wolves*, where many of the partials that were introduced by the clarinet

playing multiphonics in the dynamic foreground, are ‘collected’ by the tape and then redistributed to contribute to the background texture.

The piece comprises two movements, which are both based around different musical ideas. In the first movement, the focus is mainly on the vertical line and timbre. However, the second movement shares similarities with my earlier pieces, in that it is very percussive and rhythmically active, particularly with the vibraphone playing the main melodic material for most of the piece. As with my later works, dynamics are a prominent feature in both movements.

9.2 Movement 1

The piece begins with a proclamatory rhythmic statement (sharing parallels with the beginning of *Hypnagogia*) that slows down into homophonic broader textures. My aim was to create a texture that represents the process of accretion before dissolving. This is represented by an increase and decrease of rhythmic density, paralleled with a gradual increase and decrease in amplitude. This can be seen in Fig. 9.1. The quarter tones in the violin and cello part contribute to this concept of accretion, relevant in the opening seven bars which becomes a structural pillar that reappears in a similar form at bar 17 (Fig 9.2), heralding the next section of the piece.

Allegretto All notes bowed until instructed otherwise

$\text{♩} = 120$

Vibraphone *f*

Flute *ppp* *f* *ppp*

Clarinet in B \flat *ppp* *f* *ppp*

Violin 1 *p* *mf* *ppp*

Violoncello *ppp* *mf* *gliss.*

Fig. 9.1

Vib. *f* *ppp* use Mallets *ppp* *mp* *ppp*

Fl. *ppp* *fff*

Cl. (tr)

Vln. 1 *ppp* *mf* *ppp* Sul 4 3 2 1 7

Vc. *ppp* *mf* *ppp* *gliss.* 3 6 *gliss.*

Fig. 9. 2

Different articulations are explored in this movement and notes that peak dramatically in dynamics on their exit are prevalent throughout. In bar 21 (Fig 9.3) the violin and cello play

figures that peak dynamically in volume, accompanied by an accent. This was a continued interest first seen in *Hypnagogia* in exploring different ways to maintain the presence of a single note within the texture in an active way.

21

No Vibrato
Detache with sudden spikes

Vln. 1

ppp *mp* *ppp* < *fff* *mp* *ppp* < *fff* *mp*

No Vibrato
Detache with sudden spikes

Vc.

gliss. *3* *mp* *ppp* < *fff* *mp* *ppp* < *fff*

Fig. 9.3

Unlike some of my previous pieces based on timbral sonorities, a formative goal was to highlight the difference in timbres between the instruments. This is done by transferring the same pitch to one or more of the instruments.

The first half of the piece until bar 36 deals with the pitches E, G, A, A#, B, C and D. The use of quarter tones are prevalent throughout the piece and are employed around this collection of pitches. The piece explores different chord combinations and inversions around these notes and at bar 35, a new note F# enters the pitch aggregate in the flute, followed by a drone melody that enters in bar 37 (Fig 9.4). This melody is in the background texture and does not appear to be related to the previous material.

37

Vib.

p *mp*

Fig. 9.4

Variations of drone melody:

41

Vib.

p *mp*

43

Vib.

Fig. 9.5

A variation of this melody enters in the cello at bar 44.

44

Vc.

fff *ppp* *mp* *p*

Fig. 9.6

In Fig 9.7 The drone melody can be seen to grow in significance as all four instruments play fragmented composites of it, which are interrupted by the previously stated homophonic material.

55 **M**

Vib. *f*

Fl. **M** *ppp ppp <fff ppp <fff*

Cl. *ppp ppp <fff ppp*

Vln. 1 nat. *fff ppp*

Vc. *ppp <fff*

Fig 9.7

The melody expands in duration when it is repeated after the first interruption, followed by a longer homophonic refrain. The piece closes with the fragmented melody growing in dynamic intensity on all instruments, with the strings and woodwind playing with combinations of tremolo and fluttertongue, frantically. The concept of this drone melody gradually infiltrating the piece and eventually taking over from the homophonic textures was an element in structuring the piece, similar to *Hypnagogia*'s processes. This procedure of blending two or more different

musical ideas that at first seem unrelated, but gradually morph into one another is a continued facet of interest to me.

9.3 Movement 2

This movement is for the most part, contrasting to the style of the first movement. It is an extremely, lively, dense piece with plenty of rhythmic activity. In the first movement the obvious percussive qualities of the vibraphone are mainly concealed by using bowed notes for a large portion of the entire movement. However, the vibraphone becomes the central instrument in this second movement, particularly from bar 19 onwards. The material that begins in the vibraphone in bar 19 (Fig 9.8) originated from my own exploration into improvisations. Essentially, I was interested in the idea of a groove-based melody, based on polyrhythmic activity, whereby the other instruments would react and support the line.

The musical score for the Vibraphone (Vib.) is presented in two staves. The first staff begins at bar 19, marked with a tempo of ♩=120 Allegro and dynamics of *f sempre*. The music features a complex, groove-based melody with polyrhythmic activity, including several triplet patterns. The second staff continues the piece from bar 21, maintaining the same rhythmic and melodic complexity.

Fig 9.8

The material for this second movement was created separately around the time I was writing the first movement. It was originally intended to be for harp in a separate piece, but as the pitch material evolved to become more chromatic, this became impossible. I decided to develop this material into a second movement of my ensemble piece after it became apparent that it shared an emphasis on the same pitches found in the first movement. I also felt that the vibraphone would actually be much better suited for this type of rhythmic, chromatic activity, providing resonance and definition to the constantly changing rhythms which may have not of been so audible on the harp. Bars 1 to 18 was the last section I composed and serves as an introduction. As I mentioned the material was conceived by improvising around the aggregate of pitches: B, Bb, A, Ab, F and F#. The resultant material was proliferated from a simple melody that appears at bar 39.

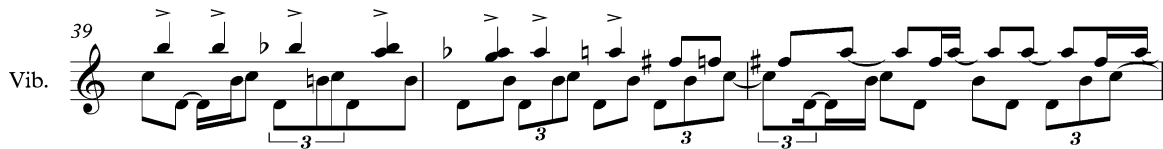


Fig. 9.9

The lower part of the register in the vibraphone acts as counterpoint to the aforementioned pitches above outlining the pitches: D, B and C, which were the initial pitches that were established in the introduction of the piece from bar 1 to 18. The rhythm and order of these

notes are constantly varied to offset a predictable pattern. In both the top line and the accompaniment of the vibraphone, my intention was for a resultant staggered melody and pulse, analogous to an elementary, explicit melody, broken and reassembled. This could be compared to an entropy, whereby a smashed piece of pottery is hastily and haphazardly reformed but now with uneven curves, jagged surfaces and missing fragments. Variations of this melody in Fig 9.9 appear frequently in different guises between bars 19 to 65, but the original melody repeats in its entirety at bar 61.

The strings and woodwinds fulfil a few different purposes in this rhythmically driven section, however the one defining goal throughout is for the ensemble to support the vibraphone line. By this I mean the reinforcement of some harmonies, while also adding new pitch material to the aggregate. For example, Fig. 9.10 shows bars 24 to 30 where the flute and clarinet loosely serve as both melodic and harmonic reinforcement on occasional pitches found in the vibraphone melody, in both additive and subtractive rhythmic durations.

The musical score for Figure 9.10 consists of two systems of staves. The first system starts at measure 24 and includes staves for Vibraphone (Vib.), Flute (Fl.), Clarinet (Cl.), Violin I (Vln. I), and Violoncello (Vc.). The Vibraphone part is marked with a forte 'F' and features a complex rhythmic pattern with triplets and sixteenth notes. The Flute part starts with a forte 'F' and has dynamics of ppp, mp, and ppp. The Clarinet part starts with a forte 'F' and has dynamics of ppp and mp. The Violin I part starts with a forte 'F' and has dynamics of mp and ppp. The Violoncello part starts with a forte 'F' and has dynamics of p, mp, and ppp. The second system starts at measure 28 and includes the same staves. The Vibraphone part continues with its complex rhythmic pattern. The Flute part has dynamics of ppp, mp, and p. The Clarinet part has dynamics of ppp and mp. The Violin I part has dynamics of mp and ppp. The Violoncello part has dynamics of mp and ppp. The score includes various musical notations such as slurs, accents, and dynamic markings.

Fig 9.10

The primary function of the strings in this section is to offer rhythmic contrast to the vibraphone line and also echo and enforce some of the melodic content using pizzicato, while gradually decreasing in dynamic level. This happens first at bar 34 and reoccurs throughout the rest of

the piece. There is an imitative dialogue between the flute and clarinet part in ostinato patterns that accompanies and counterpoints the vibraphone (Fig 9.11); this material was first conceived in the first movement.

The image displays a musical score for five instruments: Vibraphone (Vib.), Flute (Fl.), Clarinet (Cl.), Violin I (Vln. I), and Violoncello (Vc.). The score is divided into two systems, measures 48-49 and 50-51.

System 1 (Measures 48-49):

- Vib.:** Measures 48-49. Melodic line with triplets and slurs. Measure 48 starts with a first ending bracket labeled 'I'.
- Fl.:** Measures 48-49. Ostinato pattern of eighth notes. Dynamics: *ppp* in measure 48, *f* in measure 49.
- Cl.:** Measures 48-49. Ostinato pattern of eighth notes. Dynamics: *ppp* in measure 48, *f* in measure 49.
- Vln. I:** Measures 48-49. Rests in measure 48. In measure 49, plays a sustained note marked *arco* and *mp*.
- Vc.:** Measures 48-49. Rests in measure 48. In measure 49, plays a sustained note marked *mp*.

System 2 (Measures 50-51):

- Vib.:** Measures 50-51. Melodic line with triplets and slurs. Measure 50 starts with a first ending bracket labeled 'I'.
- Fl.:** Measures 50-51. Ostinato pattern of eighth notes. Dynamics: *ppp* in measure 50, *f* in measure 51.
- Cl.:** Measures 50-51. Ostinato pattern of eighth notes. Dynamics: *ppp* in measure 50, *f* in measure 51.
- Vln. I:** Measures 50-51. Sustained notes with dynamic markings: *p* in measure 50, *mp* in measure 51, and *ppp* in measure 51.
- Vc.:** Measures 50-51. Rests in measure 50. In measure 51, plays a melodic line with a triplet and slurs, marked *p* in measure 50 and *mp* in measure 51.

Fig. 9.11

Later on in the movement, this dialogue between the vibraphone, flute and clarinet changes in pitch material, becoming more chromatic. As the piece becomes more rhythmically active, the strings role becomes very percussive using *pizzicato*, *staccato* and accented notes as all instruments reiterate rhythmic patterns from both the first and second movements.

Chapter 10: *Accretion and Acrylics*

10.1 Introduction

As I mentioned in the beginning of this thesis, my intention was always to compose a large scale orchestral work for my last piece in this portfolio. With the broad spectrum of sonic possibilities that the orchestra encapsulates, I was conscious of the fact that it would probably be the best possible medium to represent the knowledge accumulated from my various ensemble and electronic works composed throughout the research period.

The title refers to the process of accretion which is defined as ‘Growth or increase by the gradual accumulation of additional layers or matter’³³ and a style of art that involves the pouring and mixing of acrylic paint, often resulting in incredibly vibrant mixtures and combinations of colour. In this case the theme of constantly merging and clashing colours that can be seen in the acrylic artwork of painters such as Morris Louis Bernstein³⁴, Lawrence Poons³⁵ and Frank Bowling³⁶ is reflected throughout this piece by metamorphosis of timbral material, the rate of harmonic progression and by the constant varying metres. The primary tool I utilize to aid the transition and transformations within these musical elements is the use of dynamics.

³³ <https://en.oxforddictionaries.com/definition/accretion> 06 February 2017

³⁴ Bernstein, Morris Louis (1912 - 1962)

³⁵ Poons, Lawrence (1937)

³⁶ Bowling, Frank (1934)

The first structural goal was to include three movements, which could exist separately on their own merit. Each movement is quite different in character, with each one focusing on contrasting timbral areas.

The first movement is energetic, contrapuntal and rhythmically dense. The second movement acts as a transition to the third, which is a slower movement with a specific focus on exploring homogenous timbres in the lower registers. Although each movement has its own set of unifying characteristics such as active harmonic stasis, an extreme focus on dynamics and close contrapuntal lines, which bind the work as a whole, each movement in itself, is also designed to exist independently.

10. 2 Movement 1

This movement is dense rhythmically and energetic from the very beginning. It focuses mainly on the higher register of the orchestra and uses contrasting repeated notes in different metres, creating a sense of continuously active harmonic stasis while at the same time, dissolving a predictable sense of pulse. Concepts of ‘echoes’ and ‘ripples’, analogous to previous works are further explored in different forms here. One example of this can be seen at bar 17 (Fig 10.1) with the woodwinds repeating the note F# that was first declared in the horns, with each entry gradually diminishing in dynamic level. The use of ostinati figures in other parts, gradually diminishing into the background are also representative of this idea.

bar 17

The musical score for bar 17 is written in 4/4 time. It consists of six staves, each representing a different instrument. The dynamics for each instrument are as follows:

- Flute 1: *mp* (mezzo-piano)
- Flute 2: *pp* (pianissimo)
- Oboe 1: *ppp* (pianississimo)
- Oboe 2: (no dynamic marking)
- Clarinet in B \flat 1: *f* (forte) and *p* (piano)
- Clarinet in B \flat 2: *mf* (mezzo-forte) and *ppp* (pianississimo)

Fig. 10.1

The movement traverses through dense saturated textures which rely on pitch rotation and various layered ostinato and motivic figures which enter and exit the texture using divergent dynamics. The dense rhythmic activity that usually originates from the piano is framed by these other instruments, playing repeated notes and ostinati figures in different metres to create this active harmonic stasis and a feeling of constant static movement. These different rhythmic sets displayed in Fig 10.2 were created in the formative processes.

The image displays a musical score for ten staves, all in 4/4 time. The notation is as follows:

- Staff 1:** Four quarter notes, each with a long horizontal line above it, suggesting a sustained or tied note.
- Staff 2:** A sequence of eighth notes: quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth.
- Staff 3:** A sequence of eighth notes: quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth.
- Staff 4:** A sequence of eighth notes: quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth.
- Staff 5:** Four groups of eighth notes, each group containing a triplet of eighth notes followed by a quarter note.
- Staff 6:** Four groups of eighth notes, each group containing a triplet of eighth notes followed by a quarter note.
- Staff 7:** Four groups of eighth notes, each group containing a triplet of eighth notes followed by a quarter note.
- Staff 8:** Four groups of eighth notes, each group containing a triplet of eighth notes followed by a quarter note.
- Staff 9:** A sequence of eighth notes: quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth.
- Staff 10:** A sequence of eighth notes: quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth, quarter, eighth.

Fig 10.2

These rhythmic sets are used in combination with the idea of the strings playing repeating quaver figures that occasionally spike in amplitude, keeping the vertical pitch aggregate

fluctuating.

The image shows a musical score for four instruments: Violin I, Violin II, Viola 1, and Viola 2. The score is labeled "bar 4" at the top. The time signature is 4/4. The key signature has one sharp (F#). The dynamics are marked as *ppp*, *fff*, and *mf*. The Violin I part starts with *ppp*, then *fff*, then *ppp*, and ends with *mf*. The Violin II part starts with *ppp*, then *fff*, then *ppp*, and ends with *fff*. The Viola 1 part starts with *ppp*, then *fff*, then *ppp*, and ends with *fff*. The Viola 2 part starts with *ppp*, then *fff*, then *ppp*, and ends with *mf*.

Fig 10.3

The first movement contains six sub-sections: Bars 1—15, 16—22, 23—33, 34—41, 42—68, 69—87. The interval of a minor third is highlighted in the beginning in conjunction with combinatorial scales based on the Dorian mode, starting on the note B and on the B melodic minor scale.

In the first section the percussion, harp and piano parts form a sonic filigree of arabesque passages moving from middle to high registers, underpinned by a micropolyphonic rhythmic lattice.

This lattice leads into the second section at bar 18 whereby an explicit fanfare echoing the opening interval of a minor third at a loud dynamic level, heralding the second section and acting as a transition to the third section. The third section progresses to the lower tessitura of the orchestra consisting of the lower brass instruments, percussion, and the double bass section.

This occurs at bar 23 in the form of loud a dynamic event, which acts as a structural pillar not dissimilar to those found in *Busker*.

The fourth section beginning at bar 34 concentrates on the expansion of the intervals to form fifths and fourths, concentrating on the pitches B and F# with dense rapid rhythms in the piano.

The fifth section at bar 42 concentrates on ostinati figures which are centred around the piano and higher percussion. This gradually diminishes as the texture becomes sparse.

In bar 69 the sixth section begins with the piano, harp and percussion instruments sharing rapid rhythmic figures (Fig. iii.i Appendix) which is framed by the strings and woodwinds playing previously stated ostinati figures with divergent dynamics. The movement finishes with the horn fanfare bringing the movement to a close on a minor third.

10.3 Movement 2

Although this movement was the last one that I wrote for this piece, it serves as a transitional interlude between the contrasting first and third movement. It contains a mini interpolation based on material of the two outer movements.

In contrast to the first movement, where the interlocking strings and woodwind passages contribute to the overall fluctuating static texture, this movement separates the woodwind and strings, with both sections playing unrelated material. This texture is interrupted occasionally when both elements dynamically re-emerge to create aggressive dynamic peaks.

The piece begins with the woodwind playing a series of crescendo figures which peak on the notes F#, G, G#, A and A#. The entry points and figures between the instruments are constantly varied based on these pitches, fluctuating in an ever-changing texture. This is followed by the introduction of the double basses playing pizzicato stating their unrelated pitch material. These pizzicato figures reappear frequently, with varied patterns that I constructed through improvisation. I wanted to slowly introduce a melody that has the impression of seemingly being formed and developed each time the double basses play it. I abstracted certain patterns gradually from these improvisations and then constructed an explicit melody from what I considered to be the most prominent parts of these improvisations. This can be seen in bar 41 (Fig 10.4).

The image shows a musical score for two Contrabass (Cb.) instruments. The top system consists of two staves, both labeled 'Contrabass'. The first staff begins with a 'pizz.' (pizzicato) marking and contains a sequence of notes: a dotted quarter note, followed by eighth notes, and a final quarter note. The second staff begins with a 'pizz.' marking and a 'f' (forte) dynamic, containing a similar sequence of notes. The bottom system also consists of two staves, both labeled 'Cb.'. The first staff starts with a '3' (triple) marking and contains a sequence of notes. The second staff contains a similar sequence of notes. The score is written in bass clef and includes various rhythmic values and dynamics.

Fig 10.4

The material heard in the woodwinds in the beginning of the piece, is reintroduced in bar 18, now in combination with the strings which serve as a contrasting percussive role. This piece continues on from some of the conceptual ideas from my previous ensemble piece, in that I constantly revisit the concept of relegating a pitch or motif gradually from the foreground to the background and vice versa. This can be seen particularly at bar 81, whereby the following texture comprises primarily a system of two instruments from the woodwind section, that play a sequence beginning with dotted semiquavers with separate entries, which constantly alternate between forte and piano. In bar 81 the flutes are playing dotted quaver figures that can be seen in the first movement, on the notes G# and A. In bar 83 both instruments play these notes in unison, peaking dynamically. These peaks gradually decrease in dynamic level and the time between each entry expands. The expanding and diminishing dynamic levels are eventually adopted by the horns. The order and timeline of this sequence can be seen in Fig 10.5.

The image displays three systems of musical notation, each consisting of a treble and bass staff. The first system is in 4/4 time and features a sequence of notes with dynamic markings: *p*, *f*, *p*, *f*, *p*, *f*, *p*, *f*, *p*, *f*, *ppp*. The second system, marked with a '3' above the first staff, shows a triplet of notes with dynamic markings: *fff*, *f*, *ppp*, *fff*, *mf*, *ppp*, *mf*, *mp*, *ppp*, *mp*, *ppp*. The third system, marked with a '5' above the first staff, shows a sequence of notes with dynamic markings: *p*, *ppp*, *pp*, *ppp*, *p*. The notation includes various articulation marks such as accents and slurs.

Fig 10.5

This sequence repeats in different instruments and different pitches, for example in bar 82 (Fig iii.ii Appendix) in the oboes with the pitches E and F # and in the flutes again at bar 85 with E and Eb. At bar 92, these sequences begin to merge with rapid rhythmic figures played by the piano, harp and woodwinds combined with strings playing *col legno*, bringing the movement to a close.

10.4 Movement 3

This particular movement takes inspiration from a piece by John Luther Adams titled *Becoming Ocean*.³⁷ By chance, I heard this piece performed live 6 March 2015 in the National Concert Hall and it has had a massive impact on me ever since. This piece concentrates on the use of divergent dynamics on a macro and micro scale and it is this continual shifting from foreground to background in a lattice texture that is the focal point here. A rough sketch by Alex Ross of the piece's form, which I believe gives a good impression of the ideas explored can be seen below in Fig. 10.6.³⁸

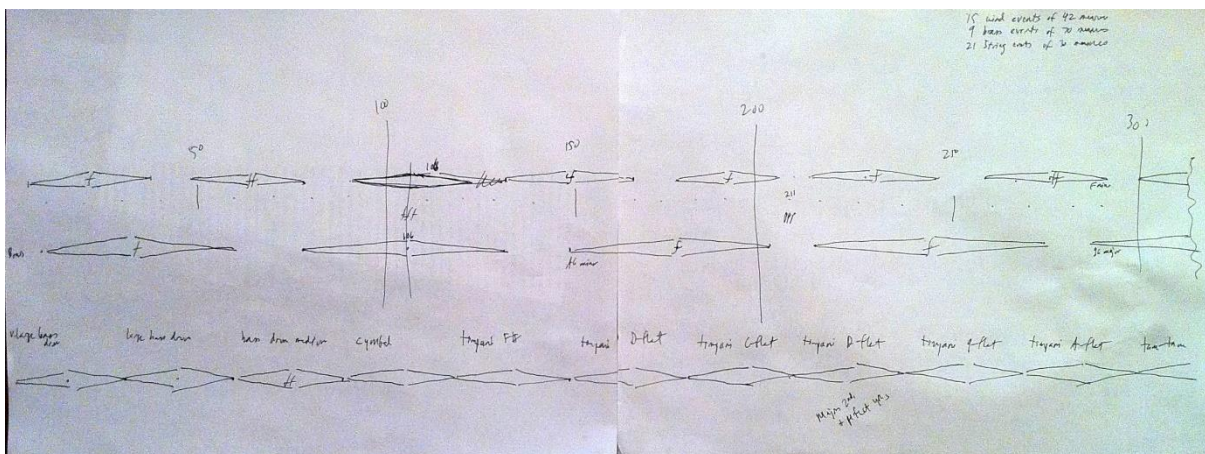


Fig 10.6

I began to make my own dynamic sketches or graphs, free hand, working with the principle that almost every crescendo or diminuendo, be it macro or micro, should also be dovetailed by

³⁷ Adams, J.L: *Becoming Ocean*. (Fairbanks: Taiga Press, 2013). First performed in Benaroya Hall, Seattle 20 July 2013.

³⁸ <https://blog.murfie.com/2014/10/27/album-review-become-ocean-by-john-luther-adams/> 8 September 2016.

the opposite dynamic level. For the most part, this movement is focused on the lower registers of the instruments in combination with almost constant low sustained pedal notes on the piano, in order to form a cohesive blended texture, which occasionally allows higher pitches to emerge.

When planning this movement I felt it was important to ensure that each crescendo or diminuendo on a particular instrument would be counter acted by the opposite effect on another instrument. The multiple layers of different dynamics are governed by an overall greater dynamic scheme comprising several structural pillars, whereby the dynamic level increases in the micro structure, in short gestures, at the same time cocooned in the overall macro level, analogous to waves within waves.

The piece is divided into 6 sections: Bars 1—17, 18—39, 40—52, 53—65, 66—105, 106—133 which are defined by a focus on different pitch aggregates and scales. The transition into these different sections begins primarily with the piano introducing a linear representation of the new proceeding pitch aggregates. These pitches are then gradually adopted by the other instruments in the form of dynamically ascending and descending sustained notes.

The opening section focuses on a note cluster spanning a perfect fifth from E, seen in the form of rapid rhythm figures played by the piano. This is underpinned with a sustained pedal note A by other instruments.

This leads into the fifth section which returns to the scale (Fig 10.7) found in the second section. This is the quietest section of the piece as the instrumentation gradually becomes sparse, transitioning into the last and loudest dynamic swell of the piece.

The last section of the piece begins in bar 106 and is a return and expansion to the material found in the opening. Similar to the 2nd movement, the piece climaxes with the rising long-held notes giving way to a clustered dense static texture (Fig iii.vi Appendix). The pitch material at this point becomes highly chromatic.

The main feature of this movement is the constant lattice of sound that continues right throughout because of the cross rhythmic activity largely in ostinato patterns which pervade the texture. Elements of this can be seen in all three movements, binding the work as a whole.

Chapter 11: Summary

11.1 Introduction

In conclusion, my research has covered considerable exploration of instrumental techniques and timbres which have been ongoing research processes over the four years. From this research, I believe I have found my personal aesthetic and it is one that includes rhythmic activity, exploration of dynamics levels and an acknowledgement of some of the processes governing spectralism, specifically with regards to my focus on timbre. Rhythmic activity is a feature in every piece within this portfolio and can be seen to become more complex as the portfolio progresses. In *The Lighthouse* and *Then 'til Now*, the use of rhythm is very metric but in later pieces such as *Hypagogia* and *Accretion and Acrylics* rhythm is used as a tool in constructing active, fluctuating textures.

11.2 The Development of my Current Aesthetic

Writing these pieces has led to the development of certain characteristics of my compositional style and formative processes which I was not consciously aware of until I analysed my works, as a collective. I refer here to my fundamental compositional processes that reappear in many of the pieces presented, such as the construction of interruptions or structural pillars that are inserted into the piece, often at multiple locations. In pieces *Then til' Now*, *From the Same Stone* and *Echoes* these interjections occur as rhythm motifs, In later pieces such as *Busker* and my orchestral pieces, they occur in the form of timbral events or dynamic peaks.

As demonstrated in this commentary, what became particularly evident while reviewing my work, was the significant impact and development the process of studying electronics has had on timbre, harmony, rhythm and texture, resulting in a broader spectrum of ideas.

After *Busker*, timbre became a structural component as opposed to a feature. The process of synthesizing field recorded sounds and arranging them to form a piece, forced me to organise sound without using any explicit melodic or rhythmic content. This was a much-needed parameter at the time and created a subjective perceptual enhancement of my approach to composition. The impact of this increased awareness on timbre, can be seen immediately in my proceeding piece *From the Same Stone*, where I focus on timbral sonorities between the bass clarinet, accordion and cello. My interest in timbral sonorities continues throughout the portfolio and is evident in *Where There Were Wolves* which explores homogenous textures between electronics and a live bass clarinet.

The process of creating my electro acoustic piece *Where There were Wolves* and witnessing its performance at two different locations, offered some valuable new experience in the many intricacies of balancing a live instrument with a fixed tape part. Unlike *Busker*, where different rhythmic elements agglomerate equally to a climax, these separate rhythmic cells and their significance within the texture is constantly shifting while they emerge and submerge from the background to foreground. This concept of having one or more separately conceived musical ideas or cells interacting in the same sonic space was carried into my next orchestral piece *Hypnagogia*.

My awareness of volume levels within a sonic space was greatly affected by controlling amplitude levels in electronics. This translated to an extreme focus on dynamics within my acoustic writing, which has become a conceptual catalyst in many of my modern compositions. This focus on timbre and dynamics, coupled with my development in rhythm, enabled me to slow down the rate of harmonic progression in my orchestral pieces. This often appears in the form of divergent dynamics on broad long held notes, in combination with rhythmic variations and pitch rotation. These textures are abundant in *Hypnagogia* and *Accretion and Acrylics*.

With very limited experience with electronics prior to this study, I was apprehensive at first to delve into this new medium as my original intention was to focus primarily on acoustic instruments, for this portfolio. What I have garnered from this experience is that experimenting with new and different compositional mediums that are foreign to me, can be used as an extremely beneficial research method for uncovering new areas of interest as well as enhancing my acoustic writing.

11.3 Current and New Areas of Interest

From my early minimalist influences to my current style, listening to works of many composers have sharpened my intuitive aural skills, with a noticeable development in counterpoint, in voice leading and constructing rhythmic patterns into densely woven textures. Ligiti's work has been a particular source of inspiration for me. Elements of his micropolyphony technique was a huge source of inspiration and strongly influenced the direction of my work over the research period.

Currently, my interests range from American composers such as Micheal Gordon and John Luther Adams to the great spectral composers Gérard Grisey³⁹ and in particular Tristan Murail⁴⁰ who's blending of electronics with acoustic instruments to form interesting soundscapes is a particular point of interest for me, at this time.

Electronics and electro-acoustic research continues to inform my acoustic writing. This is an area that I will continue to investigate where I hope to explore new methodologies and investigate new possibilities and new sonic horizons within this medium.

³⁹ Grisey, Gérard (1946-1998)

⁴⁰ Murail, Tristan (1947)

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Appendix

i. Photos of the performance locations of Where There Were Wolves



i.i The John Field Room, National Concert Hall.



i.ii IAMIC Conference, National University of Ireland, Galway.

ii. Hypnagogia illustrations

Hypnagogia

Patrick Egan

Largo Slow and dynamic
♩ = 40

Violin I

Violin II

Viola

Violoncello *sul pont.*

Double Bass

Fig ii.i

This musical score, labeled 'Fig ii.ii', is a page from a larger work, indicated by the number '2' in the top left. It features a full orchestral arrangement with woodwinds, brass, and strings. The woodwind section includes Piccolo, Flute, Oboe, Clarinet in C, Clarinet in Bb, Bassoon, and Bassoon in C. The brass section includes Horns, Trumpets, Trombones, and Tuba. The percussion section includes Timpani, Bells, Cymbals, and Vibraphone. The string section includes Violin I, Violin II, Viola, Violoncello, and Double Bass. The score is divided into two systems. The first system covers measures 7 through 14, and the second system covers measures 15 through 22. A section labeled 'B' begins at measure 15. Dynamic markings such as *mp*, *mf*, *p*, *ppp*, and *f* are used throughout. Performance instructions include 'molto vibrato' and 'sul tasto'. The score is written in a key signature of one flat and a common time signature.

Fig ii.ii

♩=80

K Allegretto - double original tempo

65

Picc. *f* *ppp* *ppp* *mf* *ppp* *ppp*

Fl. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Ob. *ppp* *ppp* *mf* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Ob. *ppp* *ppp* *mf* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Cl. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Cl. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Bsn. *f* *ppp* *mf* *mf* *mp*

Bsn. *mf* *mf* *mp*

Hn. *ppp* *mf* *ppp*

Tpt. *mf* *ppp*

Tpt. *ppp* *mf* *ppp* *mf* *ppp*

Tbn. *mf* *ppp*

Tbn. *mp*

Tba. *mp*

Timp.

B. D.

Cym.

Vib.

♩=80

K Allegretto - double original tempo

Vln. I *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Vln. II *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Vla. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf*

Vc. *mf* *ppp* *mf* *ppp* *ppp* *mf*

Db. *mf* *mf* *mf* *mf*

Fig ii.iii

iii. Accretion and Acrylics illustrations

Bar 69

Score for measures 69-70. The system includes Glockenspiel, Vibraphone, Harp, and Piano. The Glockenspiel part begins in measure 69 with a *ppp* dynamic. The Vibraphone part features triplet patterns. The Harp and Piano parts have complex rhythmic patterns with *f sempre* dynamics.

70

Score for measures 70-71. The system includes Glockenspiel, Vibraphone, Harp, and Piano. The Glockenspiel part continues with a melodic line. The Vibraphone part has triplet patterns. The Harp and Piano parts have complex rhythmic patterns with *f sempre* dynamics.

71

Score for measures 71-72. The system includes Glockenspiel, Vibraphone, Harp, and Piano. The Glockenspiel part continues with a melodic line. The Vibraphone part has triplet patterns. The Harp and Piano parts have complex rhythmic patterns with *mp* dynamics.

Fig iii.i

G

Fl. 1 *mp*

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2 *p*

Bsn. 1

Bsn. 2 *ppp* *p* *ppp*

Hrn. 1

Hrn. 2

Tpt. 1

Tpt. 2 *ppp*

Tbn. 1 *ppp*

Tbn. 2 *p* *ppp* *plunger mute* *ppp* *p* *ppp*

B. Tbn. *p* *ppp*

Tuba *ppp*

Timp. *p*

B. D. *ppp* *p*

Vln. *mf* *p* *mf* *mp* *p* *mf*

Hrp. *p* *mp*

Pno. *ppp* *p* *ppp*

Vln. I

Vln. II

Vla. *ppp* *mp*

Vla. *p*

Vcl. *ppp* *mp* *ppp* *mp* *ppp* *mp*

Vcl. *mp* *ppp* *mp* *ppp*

Ch. *mp* *ppp* *mp* *ppp*

Ch. *p* *mp* *ppp* *mp* *ppp*

Fig. iii.iii

This musical score page, labeled 'Fig iii.iv', contains the following parts and markings:

- Flutes (Fl. 1, Fl. 2):** Resting.
- Oboes (Ob. 1, Ob. 2):** Resting.
- Clarinets (Cl. 1, Cl. 2):** Playing a melodic line with dynamics *p* and *mp*.
- Bassoons (Bsn. 1, Bsn. 2):** Resting.
- Horns (Hn. 1, Hn. 2):** Resting.
- Trumpets (Tpt. 1, Tpt. 2):** Resting.
- Trombones (Tbn. 1, Tbn. 2, B. Tbn., Tbn.):** Playing a melodic line with dynamics *p* and *ppp*. Includes the instruction 'Harmon mute' for the Baritone Trombone.
- Timpani (Timp.):** Resting.
- Bass Drum (B. D.):** Playing a rhythmic pattern with dynamics *p* and *ppp*.
- Vibraphone (Vib.):** Playing a melodic line with dynamics *p* and *mp*. Includes the instruction 'Bowed'.
- Harp (Hp.):** Playing a melodic line with dynamics *p* and *mp*.
- Piano (Pno.):** Playing a complex rhythmic accompaniment with dynamics *p* and *ppp*.
- Violins (Vln. I, Vln. II):** Resting.
- Violas (Via. I, Via. II):** Playing a melodic line with dynamics *ppp*, *mp*, and *p*.
- Violoncellos (Vc. I, Vc. II):** Playing a melodic line with dynamics *mp*, *ppp*, and *mp*. Includes the instruction 'con sord.'.
- Double Basses (Cb. I, Cb. II):** Playing a melodic line with dynamics *mp*, *ppp*, and *mp*. Includes the instruction 'con sord.'.

Fig iii.iv

This is a page of a musical score, likely for a symphony orchestra. The score is arranged in systems, with each system containing multiple staves for different instruments. The instruments listed on the left side of the page are: Fl. 1, Fl. 2, Ob. 1, Ob. 2, Cl. 1, Cl. 2, Bsn. 1, Bsn. 2, Hrn. 1, Hrn. 2, Tpt. 1, Tpt. 2, Tbn. 1, Tbn. 2, B. Tbn., Tbn., Timp., B. D., Vln. I, Vln. II, Vla., Vcl., and Cb. The score includes various musical notations such as notes, rests, and dynamic markings (e.g., *p*, *mp*, *f*, *fpp*). There are also performance instructions like "Harmon mute" and "senza sond." (without bow). The page number "60" is visible at the top left.

Fig. iii.v

The Lighthouse

For SATB

Patrick Egan

2012

Program note

Before I began to write this piece I decided that I wanted the ocean to be a main theme. I have always been fascinated with the sea's ability to switch from moments of serenity and calmness to chaos and raw power. My goal was to represent these two extremes in this piece.

Notes to performers

Accidentals apply only to the bar they appear in.

For the improvisational boxes that first appear at bar 36 are to be sung using the vowels A (sung 'aw'). Try to sing for the note durations given and include all notes in equal enough rotation.

Text written by Patrick Egan

Breath the salt here

Slow moon rising

Breeze for the living

Sun, sway, feel peace

Angel of black sea

Angel glow, fire of the night

Keep watch, storm is here

Blow rise and swell

Speechless wrath both rise and swell.

Woken from my slumber hear my roar

Blinding light piercing through the darkness

guide the lost through the storm

kernal of the night

The Lighthouse

Largo Tranquil

Patrick Egan

Soprano I
O _____ O _____ Slow _____

Soprano II
O _____ O _____ Slow _____

Alto I
O _____ O _____ Breath _____

Alto II
O _____ O _____ Breath _____

Tenor I
Awh _____ Awh _____ Awh _____

Tenor II
Awh _____ Awh _____ Awh _____

Bass I
Awh _____ Awh _____ Awh _____ Breeze _____

Bass II
Awh _____ Awh _____ Awh _____ Sea _____ sway _____

A

8

S. moon ris - - ing _____ Awh _____ An

S. moon ris - - ing _____ Awh _____ An

A. the salt here _____

A. the salt here _____

T. Awh _____ Awh _____ Awh _____ Awh _____

T. Awh _____ Awh _____ Awh _____ Awh _____

B. for the liv ing _____ Awh _____ Awh _____

B. feel peace _____ Awh _____ Awh _____

13

S. *ff* *pp* *mf* *ff* *pp* *mf* *fff*
 gel of black sea Awh

S. *ff* *pp* *mf* *ff* *pp* *mf* *fff*
 gel of black sea Awh

A. *mf* *ff* *mp* *mf* *ff* *pp* *mf* *fff*
 An - gel glow fire of the night Awh

A. *mf* *ff* *mp* *mf* *ff* *pp* *mf* *fff*
 An - gel glow fire of the night Awh

T. *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *mf* *ff* *pp*
 Awh Awh Awh Keep watch

T. *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *mf* *ff* *pp*
 Awh Awh Awh Keep watch

B. *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *mf*
 Awh Awh Awh Keep watch

B. *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *mf*
 Awh Awh Awh Keep watch

B

17

S. *pp* *gliss.*
 swell

S. *pp* *gliss.*
 swell

A. *pp* *f* *gliss.* *gliss.*
 Blow rise and swell

A. *pp* *f* *gliss.* *gliss.*
 Blow rise and swell

T. *mf* *f*
 Storm is here speech - less both and swell

T. *mf* *f*
 Storm is here speech - less wrath - rise - swell

B. *fff* *ppp* *f* *f*
 blow Wok - en from my - sleep hear

B. *fff* *ppp* *f* *f*
 blow Wok - en from my - sleep hear

20

fff marcato Hear me hear me hear me me ba ba Ah *fff legato mp* *gliss.*

fff marcato Hear me hear me hear me me ba ba Ah *fff legato mp* *gliss.*

fff marcato Hear me hear me hear me me ba ba Ah *fff legato mp* *gliss.*

fff marcato Hear me hear me hear me me ba ba Ah *fff legato mp* *gliss.*

fff marcato sempre Hear ba ba ba Ah *fff legato mp* *gliss.*

fff marcato sempre Hear ba ba ba Ah *fff legato mp* *gliss.*

fff marcato sempre my roar Hear ba ba ba Ah *fff legato mp* *gliss.*

fff marcato sempre my roar Hear ba ba ba Ah *fff legato mp* *gliss.*

23 **C**

ff legato Awh *ff legato* Awh

ff legato Blind - ing light pierce through the dark - ness and guide the lost through the storm kern - al of the

ff legato Blind ing light pierce

fff marcato sempre Ker - nal of light guide us through the storm ba ba blow *ff legato*

fff marcato sempre Ker - nal of light guide us through the storm ba ba blow *ff legato*

fff marcato sempre Ker - nal of light guide us through the storm ba ba blow *ff legato*

fff marcato sempre Ker - nal of light guide us through the storm ba ba blow *ff legato*

S. *gliss.* *ff* Awh

S. *gliss.* *ff* Awh

A. *ff* night spin - ning bea - con blind - ing light pierce through the dark ness and guide

A. through the dark - ness and guide the lost through the storm kern - al of the night spin - ning

T. *fff marcato sempre* ba Spin - ning be - con ker - nal of night Spin - ning be - con ker - nal of night

T. *fff marcato sempre* ba Spin - ning be - con ker - nal of night Spin - ning be - con ker - nal of night

B. *fff marcato sempre* ba Spin - ning be - con ker - nal of night Spin - ning be - con ker - nal of night

B. *fff marcato sempre* ba Spin - ning be - con ker - nal of night Spin - ning be - con ker - nal of night

S. *mf* spin - ning end - less - ly *f* turn - ing end - less

S. *mf* spin - ning end - less - ly

A. the lost through the storm kern - al of

A. bea - con guide us

T. *mf* ba ba ba ba ba turn - ing and turn - ing

T. *mf* ba ba ba ba ba turn - ing and turn - ing

B. *legato mp* Awh

B. *mp legato* Awh

D

30

S. ly No Blow

S. spin-ning end-less-ly No Blow

A. night No Aw blow rise

A. through the night No Aw blow rise

T. turn - ing and turn - ing No sea mine Blow my roar

T. turn - ing and turn - ing No the is Blow hear trem bling roar

B. No sea mine Blow my roar

B. No the is Blow hear trem - bling roar

fff legato *fff*

33

S. blow rise and swell Aw

S. blow rise and swell Aw

A. and swell Aw

A. and swell Aw

T. speech-less both and swell turn-ing spin-ning turn-ing spin Ah

T. speech-less wrath rise swell turn-ing spin-ning turn-ing Ah

B. rise O Aw

B. rise O Aw

mp *f* *fff*

port. *mf* *fff*

port. *mf* *fff*

mf *fff*

mf *fff*

mf *fff*

mf *fff*

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

37

S. *fff legato gliss.* *gliss.*
O O O

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.

S. *fff legato gliss.* *gliss.*
O O O

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.

A. half spoken half sung.

A. half spoken half sung.

T. *fff legato gliss.* *gliss.*
O O O

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

T. *fff legato gliss.* *gliss.*
O O O

Improvise shouting these pitches in any order and rhythm that does not exceed the duration of a crotchet.

B. *legato gliss.* *gliss.*
Blow swell

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.

B. *legato gliss.* *gliss.*
Blow swell

Improvise using these pitches in any order and rhythm that does not exceed the duration of a quaver.



41

E *mf* *legato pp*
S. Ah ah ah ah ah ah ah ah ah ah ah ah Ahw

mf *legato pp*
S. ah ah ah ah ah ah ah ah ah ah ah ah Ahw

mf *legato pp* *ff* *pp*
A. ah ah ah ah ah ah Ahw

mf *legato pp* *ff* *pp*
A. ah ah ah ah ah ah Ahw

legato pp *ff* *pp* *ff*
T. Ahw Ahw

legato pp *ff* *pp* *ff*
T. Ahw Ahw

pp *ff* *pp* *ff*
B. Ahw Ahw

pp *ff* *pp* *ff*
B. Ahw Ahw

45 7

S. *ff* *pp* *ff* *pp* *ff* *pp* *ff* *pp* *ff* *pp* *ff*

S. *ff* *pp* *ff* *pp* *ff* *pp* *ff* *pp* *ff* *pp* *ff* *pp*

A. *gliss.* *ff* *pp* *gliss.* *ff* *pp*

A. *pp* *ff* *pp* *ff* *pp*

T. *pp* *ff* *pp* *ff* *pp* *ff* *pp*

T. *pp* *ff* *pp* *ff* *pp* *ff* *pp*

B. *pp* *ff* *pp* *ff* *pp* *ff* *pp*

B. *pp* *ff* *pp* *ff* *pp* *ff* *pp*

Awh Awh Awh Awh Awh

Awh Awh Awh Awh Awh

Awh Awh Awh

Awh Awh Awh

Awh Awh Awh

Awh Awh Awh

Awh Awh Awh

Awh Awh Awh

50

S. *pp* *ff* *pp* *ff* *pp* *ff* *ppp*

S. *ff* *pp* *ff* *pp* *ff* *pp* *ff* *ppp*

A. *ff* *pp* *ff* *ppp*

A. *ff* *ppp*

T. *ff* *pp* *ff* *ppp*

T. *ff* *ppp*

B. *ff* *pp* *ff* *ppp*

B. *ff* *ppp*

Awh Awh Awh

Awh Awh Awh

Awh

Awh Awh Awh

Awh Awh Awh

Awh Awh Awh

Awh Awh Awh

Then 'til Now

For string quartet

Patrick Egan

2013

Program Note


The title *Then 'til Now* is based on the idea of combining Irish ethnic music with western contemporary music techniques, as homage to the development of music in Ireland from Bunting's era to the present.

I chose two melodies from Bunting's 'Ancient Irish Music': no.7 *The Summer Is Coming* and no.18 *The Charmer With The Fair Locks*. I constructed a new melody using different aspects of these two tunes. I decided this new melody would incorporate certain characteristics of Irish music but in a contemporary setting and for the original Bunting tunes to be part of the framework in an implicit manner, rather than explicit.

Notes to performers

Accidentals remain for the bar.

 - Narrow fast vibrato

 - Wide slow vibrato

In the first half of the piece, the countermelody around which this piece is centered is fragmented and interjects as part of a textural and timbral fabric. These fragments emerge intermittently in the overall structure until the full melody is revealed in a fugal section in bar 58. This moment should feel like an arrival.

no vibrato

22

Sul 1 2 3 3 2 1 sim.

Vln. I *ppp*

Vln. II *ppp*

Vla. *ppp*

Vc. *ppp*

28

Vln. I *p*

Vln. II *pp*

Vla. *pp*

Vc. *pp*

mp

pizz.

arco

35

B

Vln. I *mp*

Vln. II *mf*

Vla. *mf*

Vc. *mp*

mf

f

41

Vln. I *ff sempre*

Vln. II *ff sempre*

Vla. *ff sempre*

Vc. *ff sempre*

gliss.

45 *accel.* *Sul 1 2 3 sim*

Vln. I *3* *3* *3* *3* *3*

Vln. II *3* *3* *3* *3* *3*

Vla. *nat.* *3* *3* *3* *3* *3*

Vc. *3* *3* *3* *3* *3*

47 *Sul 1 2 3 3 2 1* **C** *pp*

Vln. I *ppp* *3* *3* *3* *3* *3*

Vln. II *ppp* *3* *3* *3* *3* *3*

Vla. *ppp* *3* *3* *3* *3* *3*

Vc. *Sul 1 2 3 3 2 1 sim.* *ppp* *3* *3* *3* *3* *3*

51 *gliss.* *sul pont.* *poco a poco sul tasto* *mp*

Vln. I *ppp* *p* *mp*

Vln. II *ppp* *p* *mp*

Vla. *ppp* *p* *mp*

Vc. *ppp* *p* *mp* *sul pont.* *mp*

54 *sul tasto* *gliss.* *ord* *f* *gliss.*

Vln. I *3* *3* *3* *f* *ord* *gliss.*

Vln. II *gliss.* *gliss.* *f* *ord* *gliss.*

Vla. *f* *ord* *ppp* *fff*

Vc. *sul tasto* *ord* *f* *ppp* *fff*

D

Lively

$\text{♩} = 85$

58

Vln. I *ff sempre*

Vln. II *ff sempre*

Vla. *ff sempre*

Vc. *ff sempre*

64

Vln. I *gliss.*

Vln. II *gliss.*

Vla.

Vc.

67

Vln. I

Vln. II

Vla.

Vc.

71

Vln. I

Vln. II *gliss.*

Vla.

Vc. *gliss.*

74 **E**

Vln. I *mf* *mp* < *fff* > *mp* < < *fff* > *f*

Vln. II *mf* *mp* < *fff* > *mp* < < *fff* > *f*

Vla. *mp* < *fff* > *mp* *mf* pizz.

Vc. *mp* < *fff* > *mp* *mf* pizz.

77

Vln. I pizz. *mf* *mp* 3

Vln. II pizz. *mf* *mp* 3

Vla. *f* *mp*

Vc. *f* *mp*

80

Vln. I *poco a poco cresc.* *mp* *mf* *f* *ff* *mp* < *fff* > *mp*

Vln. II *poco a poco cresc.* *mp* *mf* *f* *ff* *mp* < *fff* > *mp*

Vla. *poco a poco cresc.* *f* *ff* *mp* < *fff* > *mp* < *fff* > *mp*

Vc. *poco a poco cresc.* *f* *ff* *mp* < *fff* > *mp* < *fff* > *mp*

arco accel. A tempo ♩=77

83

Vln. I < *fff* > *mp* < *fff* > *mp* > *p* *mp* *mf*

Vln. II < *fff* > *mp* < *fff* > *mp* > *p* *mp* *mf*

Vla. < *fff* > *mp* > *p* *mp* pizz. arco *mf*

Vc. < *fff* > *mp* > *p* *mp* pizz. *mf*

89

Vln. I

Vln. II

Vla.

Vc.

mf

f

f

f

93

Vln. I

Vln. II

Vla.

Vc.

p — *ff* *marcato*

p — *ff* *marcato*

p — *fff* *marcato*

p — *fff*

pizz.

96

Vln. I

Vln. II

Vla.

Vc.

arco

marcato

98

Vln. I

Vln. II

Vla.

Vc.

100

Vln. I

Vln. II

Vla.

Vc.

ord

p

p

ff

ord

p

ff

p

ord

p

gliss.

gliss.

ord

p

gliss.

gliss.

103

Vln. I

Vln. II

Vla.

Vc.

Slurs ad lib.

p

ff

p

ff

mp sempre

Slurs ad lib.

p

ff

p

ff

mp sempre

gliss.

gliss.

gliss.

gliss.

gliss.

gliss.

gliss.

mf sempre

mf sempre

106

Vln. I

Vln. II

Vla.

Vc.

gliss.

gliss.

gliss.

gliss.

gliss.

gliss.

gliss.

109

Vln. I

Vln. II

Vla.

Vc.

rit.

pp

pp

gliss.

gliss.

gliss.

gliss.

gliss.

gliss.

Ambages

For flute, clarinet in Bb, violin and cello

Patrick Egan

2013

Program note

Ambages is defined as an indirect or roundabout routes or ways of doing things. My original concept for this piece was based around the idea of obscuring, while simultaneously implying an impression of a short simple three note motif.

Notes to performer

This score is in C.

Accidentals apply only to the bar they appear in.

- ♭ - Quarter flat
- ♭ - Three-quarter flat
- ♯ - Quarter sharp
- ♯ - Three-quarter sharp

Ambages

Patrick Egan

♩=60 Andante

Flute *mf* *5* *tr* *ppp* *rall.*

Clarinet in Bb *mf* *5* *ppp*

Violin *f* *5* *ppp* *gliss.* *col legno*

Violoncello *f* *3* *f* *mf* *mp* *p* *ppp* *col legno* *3*

Largo
♩=46

Fl. *mf* *f* *mf* *ff* *ppp* *f* *nat. 3* *5* *fluttertongue*

Cl. *mp* *ppp* *mf* *f* *mf* *f* *ppp*

Vln. *arco* *mp* *mf* *ppp* *f* *ppp* *ppp*

Vc. *arco* *mp* *f* *mf* *ppp* *f* *ppp* *ppp*

A tempo
♩=60

Fl. *mf* *5* *tr* *mf*

Cl. *mf* *5* *tr* *5* *tr*

Vln. *5*

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

Adagio
A ♩=49

fluttertongue

14 *rall.* *nat.*

Fl. *ppp* *ff* *mp*

Cl. *ff* *mf* *mp*

Vln. *col legno ppp* *ff arco* *mf* *mp* *p*

Vc. *col legno ppp* *f arco* *mp* *p*

20 *tr* *tr*

Fl. *p* *f* *mp* *fff* *mp* *fff* *mp*

Cl. *p* *f* *mp* *fff* *mp*

Vln. *f* *mp* *pp* *f sempre*

Vc. *f* *mp* *pp* *f sempre*

26 *nat.* *tr*

Fl. *f* *mp*

Cl. *f* *mp*

Vln. *nat.* *mp* *ff* *ppp* *mp*

Vc. *gliss.* *gliss.* *mp*

29 *(tr)*

Fl. *fff* *mp* *mp* *f*

Cl. *mp* *fff* *mp* *f*

Vln. *p* *f* *nat.* *ff* *ppp*

Vc. *p* *f* *gliss.* *gliss.*

32 nat. tr

Fl. *mp* *fff* *mp* *ppp* *f*

Cl. *mp* *fff* *mp* *ppp* *mp*

Vln. *mp* *p* *mp* *p* *f*

Vc. *mf* *pp* *mp* *p* *f*

37 Multiphonic

Fl. *mf* *mp* *ppp*

Cl. *mp* *pp* *fff* *ppp* *pp*

Vln. *mf* *mp* *p* *ppp*

Vc. *p* *ppp*

B A tempo ♩=60

42

Fl. *mp*

Cl. *fff* *ppp* *mp*

Vln. *ff*

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

44 Multiphonic

Fl. *mp*

Cl. *pp* *fff* *ppp* *fff* *ppp*

Vln. *ff* *pp* *mf* *pp* *mf*

Vc. *ppp* *mf* *mf*

48

Fl.

Cl.

Vln.

Vc.

mp \curvearrowright *mp*

nat.

ff *ppp*

mf *pp* *mf* *pp* *mf* *ppp* *p* sempre

50

Fl.

Cl.

Vln.

Vc.

f *p*

f *p*

51

Fl.

Cl.

Vln.

Vc.

ppp

52

Fl.

Cl.

Vln.

Vc.

tremolo

nat.

fff *ff* *ppp*

f *mp*

53

Fl. *3* *3* *3* *3*

Cl. *3* *3* *3* *3*

Vln. *ppp* *sul pont.*

Vc. *ppp*

Detailed description: This system covers measures 53 and 54. The Flute and Clarinet parts feature continuous triplet patterns. The Violin part is silent until measure 54, where it begins with a *ppp* note and a *sul pont.* instruction. The Violoncello part plays a steady eighth-note accompaniment throughout.

54

Fl. *3* *3* *3* *3*

Cl. *3* *3* *3* *3*

Vln. *nat.* *fff* *ppp* *sul pont.* *gliss.* *nat.* *fff* *ppp* *tremolo*

Vc. *fff* *mp* *fff* *ppp*

Detailed description: This system covers measures 54 and 55. The Flute and Clarinet parts continue with triplet patterns. The Violin part has dynamic markings of *fff*, *ppp*, *fff*, and *ppp*, with *nat.* and *sul pont.* instructions. A *gliss.* is indicated between the second and third measures. The Violoncello part has dynamics of *fff*, *mp*, *fff*, and *ppp*, with a *tremolo* instruction in the final measure.

56

Fl. *mf* *pp* *mf*

Cl. *mf* *pp* *mf* *pp*

Vln. *fff* *ppp*

Vc. *fff* *ppp* *fff* *gliss.*

Detailed description: This system covers measures 56 and 57. The Flute and Clarinet parts have dynamics of *mf* and *pp*. The Violin part has dynamics of *fff* and *ppp*. The Violoncello part has dynamics of *fff*, *ppp*, and *fff*, with a *gliss.* instruction in the final measure.

57

Fl. *pp* *mf* *pp* *pp* *Multiphonic*

Cl. *mf* *pp* *mf* *pp* *Multiphonic*

Vln. *fff* *ppp* *nat.* *3* *pp*

Vc. *ppp* *fff* *ppp* *nat.* *gliss.* *gliss.*

Detailed description: This system covers measures 57 and 58. The Flute and Clarinet parts have dynamics of *pp*, *mf*, and *pp*, with *Multiphonic* markings in the final measure. The Violin part has dynamics of *fff*, *ppp*, and *pp*, with *nat.* and a triplet of 3 notes. The Violoncello part has dynamics of *ppp*, *fff*, and *ppp*, with *nat.* and *gliss.* instructions.

60 **C**

Fl. *f sempre* *tr* *tr* *tr*

Cl.

Vln. *fff*

Vc. *fff*

62

Fl. *tr* *tr* *tr*

Cl.

Vln.

Vc.

64

Fl. *tr* *tr* *tr* *tr* *tr* *tr*

Cl. *ff sempre*

Vln.

Vc.

66

Fl. *(tr)* *tr* *tr* *tr* *tr*

Cl. *tr* *tr* *tr* *tr*

Vln.

Vc.

68

Fl. *tr*

Cl.

Vln.

Vc.

70

Fl. *tr*

Cl.

Vln. *ff sempre*

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

72

Fl. *tr*

Cl.

Vln.

Vc. *gliss.* *mf*

73

Fl. *mf* *ppp* **D** *ff sempre*

Cl. *ff sempre*

Vln. *tr* *ff sempre marcato*

Vc. *ff sempre marcato*

75

Fl.

Cl.

Vln.

Vc.

79

Fl.

Cl.

Vln.

Vc.

mf sempre

83

Fl.

Cl.

Vln.

Vc.

86

Fl.

Cl.

Vln.

Vc.

89 **E**

Fl. *mp*

Cl. *mp*

Vln.

Vc. *mp* *nat.*

91

Fl. *mp*

Cl. *mp*

Vln. *ppp*

Vc. *mp*

93

Fl. *fff* *sempre* *tr* *5* *3*

Cl. *fff* *sempre*

Vln. *ff* *sempre*

Vc. *ff* *sempre*

94

Fl. *mf* *f* *mf* *ff*

Cl. *mf* *f* *mf* *ff*

Vln. *mf* *f* *mf* *ff*

Vc. *mf* *f* *mf* *ff*

95

Fl. *fff* sempre 5 *tr* 3 *tr* *tr*

Cl. *fff* sempre *b*

Vln. *fff*

Vc. *fff*

96

Fl. *tr* 3

Cl. *b*

Vln. *mf* *f* *mf* *ff*

Vc. *mf* *f* *mf* *ff*

97

Fl. *tr* 5 3 *tr* 3 *tr* *tr*

Cl.

Vln. *mf* *f* *mf* *f*

Vc. *mf* *f* *mf* *f*

fluttertongue

99

Fl. *fff* *mp* *nat.*

Cl. *fff* *mf* *mp*

Vln. *f* *ppp* *fff* *ppp* *sul pont.* *fff* *ppp* *nat.*

Vc. *fff* *fff* *ppp* *fff* *ppp*

Multiphonic

103

Fl. *> ppp* *mf* *ppp* *fff* *ppp*

Cl. *> ppp* *mf* *ppp* *fff* *mp*

Vln. *fff* *ppp* *fff* *ppp* *fff* *ppp* *nat.*

Vc. *fff* *ppp* *gliss.* *fff* *ppp* *gliss.* *fff* *ppp*

108

Fl. *mf* *ppp* *ppp* *mf*

Cl. *ppp* *mf* *pp* *mf*

Vln. *sul pont.* *ppp* *mf* *ppp* *mp* *ppp*

Vc. *sul pont.* *ppp* *mf* *ppp*

Busker

For electronics

Patrick Egan

2014

Program note

The sounds in this piece derive mainly from a busker I recorded whilst in New York last summer. I recorded sounds of different street musicians and general street noises within in the city which I then resynthesized to form a sonic collage. I wanted to represent the power, magnitude and the often chaotic nature of the city.

Notes to engineers

This piece was designed to play on left/right channel speakers accompanied by a *subwoofer*.

From the Same Stone

For bass clarinet, accordion and cello

Patrick Egan

2014

Program Note

The title of this piece comes from the expression 'cut from the same stone'. The piece focuses on the sonorities shared between the three instruments. Although at first, these instruments appeared to me to be extremely contrasting, I soon discovered they shared a lot of similarities with regards to timbre, techniques, colour and range. I was interested in exploring timbres that would sonically match and textures where the instruments could blend together, becoming indistinguishable from one another.

Notes for performers

This score written in C.

Accidentals remain for the bar.

Performers should be conscious that sonorities between the three instruments is a key feature in this piece.

In the opening section the speed of thrills and tremolos should be similar on all instruments.

Bass Clarinet

In bar 93 to 97 the bass clarinet is to play multiphonics using the fundamentals notated. The upper partials are to be decided by the performer.

Accordion



This symbol represents a five note cluster to be played with one hand on the accordion.

From The Same Stone

Patrick Egan

$\text{♩} = 77$
Andante

Sound as one

Timbral

Bass Clarinet
in B \flat

Musical score for Bass Clarinet in B \flat , Accordion, and Violoncello. The Bass Clarinet part features a melodic line with dynamics *mp*, *mf*, and *p*. The Accordion part consists of sustained chords with a dynamic of *mf*. The Violoncello part has a glissando passage with a dynamic of *p*. A Timbral effect is indicated above the Bass Clarinet staff.

6

Timbral

Timbral

B. Cl.

Accord.

Vc.

Musical score for Bass Clarinet, Accordion, and Violoncello. The Bass Clarinet part has dynamics *mp*, *fff*, and *mp*. The Accordion part has a dynamic of *mf*. The Violoncello part includes a triplet with a glissando and a dynamic of *p*. Timbral effects are indicated above the Bass Clarinet staff.

12

multiphonic

B. Cl.

Accord.

Vc.

Musical score for Bass Clarinet, Accordion, and Violoncello. The Bass Clarinet part has a dynamic of *mp*. The Accordion part has a dynamic of *mp*. The Violoncello part includes glissandos, a triplet with a natural marking, and dynamics *p*, *f*, and *ppp*. A Timbral effect is indicated above the Bass Clarinet staff.

34

B.Cl. *mf* *p* *f* *p*

Accord. *mp* *p* *f* *p* air

Vc. *mf* *ppp* *f* *p* sul pont.

36

B.Cl. *mp* *ppp* *< f* *ppp* *mf*

Accord. *sfzp* *f* *p* air *sfzp* *mf*

Vc. ord. *gliss.* *f* *p* *f* *ppp* *mf*

Multiphonic

40

B.Cl. *mp* *f* *mp*

Accord. *mp* *fp*

Vc. *p* sul pont. *nat.* *gliss.* *f* *mp*

C

43

B.Cl. *p* *fff* *mf* *ppp*

Accord. *p* *fff*

Vc. *p* *fff* *ppp* sul tasto

46

B.Cl. *p* *fff* *mf*

Accord. *p* *fff* *mf*

Vc. *p* *fff* ord 3

48

B.Cl. *f* *p* *mp* **D**

Accord. *f* *p* *ppp* 5

Vc. *p* *mp* sul tasto **D** sul pont..

50

B.Cl. *ppp* *mf* *mp* *f*

Accord. *mp*

Vc. *mf* *p* *mf* *p*

52 **E**

B.Cl. *fff* *p*

Accord. *fff* *ppp*

Vc. *fff* *p*

sul pont. nat.

54

B.Cl. *f* *mp* *mf* *p*

Accord. *mf* *ff* *p* *mf*

Vc. *mf* *mf*

G

63

ppp

gliss. *p* *p* *gliss.*

G play near bridge explore partials *ppp*

68

mf *ppp*

69

B.Cl.

tr *tr* *6* *tr*

Accord.

Vc.

8

70

B.Cl. *tr* *tr* *tr* *tr* *mf*

Accord. *mp*

Vc. *mp*

72

B.Cl. **H** *f sempre*

Accord. *mf* *f sempre* *tr* *8va*

Vc. **H** *mf* *f sempre*

73

B.Cl. *tr*

Accord. *tr* *tr*

Vc. *tr*

74

B.Cl.

Accord.

Vc.

3 tr

75

B.Cl.

Accord.

Vc.

I

f *fff* *mf*

f *mp* *f* *mp* *f* *ff*

I

p *ff* *p* *ff* *p*

76

ff *f sempre*

mf *f*

fff sempre

77

B.Cl.

Accord.

Vc.

fff

fff

fff marcato

78

B.Cl.

Accord.

Vc.

f

marcato

marcato

79

B.Cl.

Accord.

Vc.

p *f*

marcato

marcato

fff

83

B.Cl. *fff* *f* *overblow*

Accord. *f* *ff* *f marcato*

Vc. *f* *ff* *f marcato*

84

B.Cl. *gliss.* *fff* *Overblow*

Accord. *mf*

Vc. *fff*

85

B.Cl. *ff* *gliss.* *fff* *Overblow*

Accord. *fff*

Vc. *fff*

K

86

B.Cl.

Accord.

Vc. = *fff marcato*

87

89

14

90

B.Cl.

Accord.

Vc.

f

fff

fff *marcato*

91

B.Cl.

Accord.

Vc.

overblow

6

6

92

B.Cl.

Accord.

Vc.

marcato

93 multiphonic overblow *sempre*

multiphonic overblow

multiphonic overblow

fff

gradual gliss of roughly a tone

gliss.

fff mf ff mf f

L Largo

sul pont.

ord

sul pont. ord gliss.

fff mf ff mf f

97

Air

f pp f p f p f p f p

p Air

gliss.

mp f ppp f p f p

sul pont. ord

gliss.

mp f pp p

Where There Were Wolves

For bass clarinet and tape

Patrick Egan

2015

Program note

When writing this piece, I was contemplating an ancient untamed Ireland inhabited by wolves and the difference of that landscape in comparison to modern day Ireland, with all the drastic transformations that took place between these two-time periods. I was imagining this transformation with regards to one landscape in particular: Bray shore, which has been a favorite location of mine since early childhood. I envisaged looking out on the landscape from Bray Head and witnessing the transformation from an ancient uninhabited Ireland to the present-day landscape, as if watching a motion time lapse video.

Notes to performer

This score is transposed.

This piece is to be played with a timer beginning at zero. The timer and the tape part should be synced and begin at the exact same time. The illustrations and signs found in the tape part of the score offer some visual cues, however the exact time of the entry and exit points of the live clarinet are displayed and should be as closely followed as possible.

The fundamental of the multiphonic at 3:05 and 4:55 is to be decided by the performer but should not be too dissonant to the overall harmony to the tape part of that section, however, the clarity of the upper partial in both cases is the priority.

Where There Were Wolves

Patrick Egan

Deep breathing noise with fizzing quality

Deep breathing noise with fizzing quality

Bass Clarinet in B \flat

0.00 0.04 0.07 0.09

0.08

Tape

wind

B. Cl.

0.22 Multiphonic 0.32

0.37 0.41 0.43

top line to be sang

gliss. *gliss.*

mp *mf*

Tape

0.45

0.59 Multiphonic

Tape

0.50

1.10 1.19 1.28 1.35

B. CL

mf \rightarrow f

8^{va}

Tape



1.43 1.48 1.56 2.01 2.03 2.06 2.09

B. Cl.

sing top line
gliss. gliss.

mp \rightarrow mf

mp \leftarrow mf

Tape



2.12 2.19 2.22 2.25 2.28 2.30 2.32 2.34 2.38

B. Cl.

sing gliss.

mp \leftarrow mf

mp \leftarrow mf

ff

Alternate finger to create burbling effect try to match preceding tape rhythm

Tape

♩=100

Breathy

2.40 silence 2.41 2.50

B. Cl. *mp* *f* *mp*

Tape



2.54 silence 2.57 'bubbling' effect 3.01 *ff*

B. Cl.

Tape



3.04 silence 3.05 3.12 *mf*

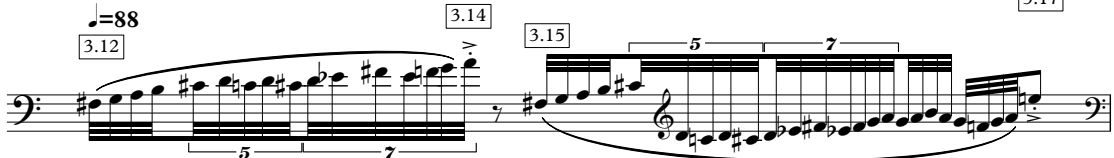
B. Cl.

Multiphonic, fundamental to be decided by performer


Tape

♩=88

3.12 3.14 3.15 3.17

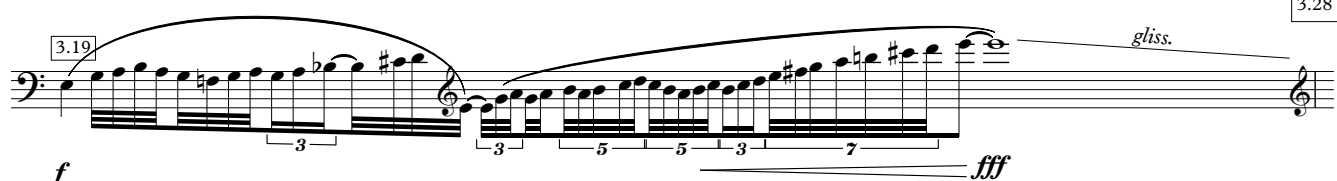
B. Cl. 

mp ————— *f* *mf* ————— *ff*



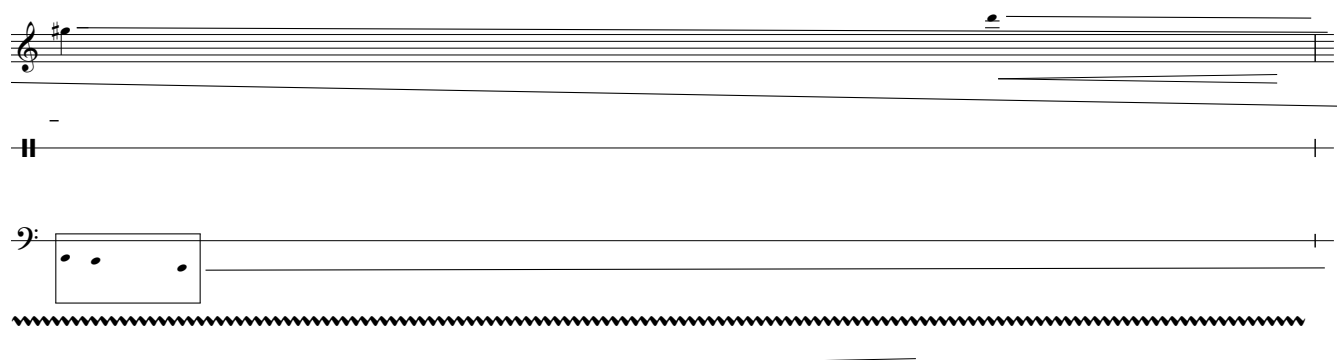
Tape 

3.19 3.23 3.28

B. Cl. 

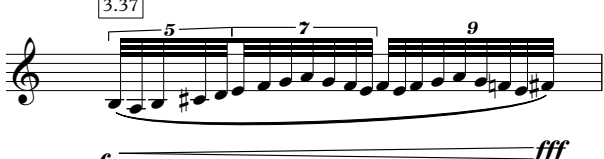
f ————— *fff*

gliss.

Tape 

shakey, as fast as possible

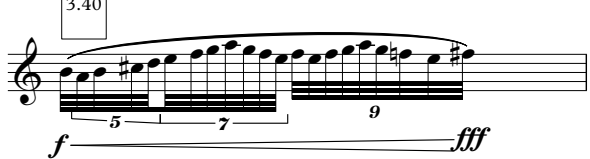
3.37

B. Cl. 

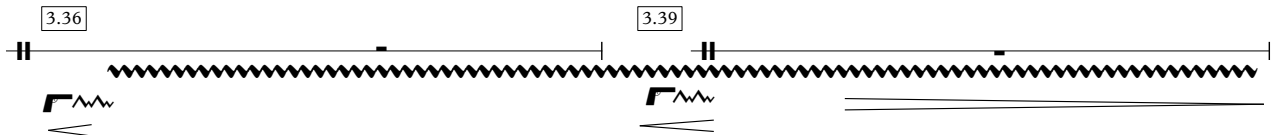
f ————— *fff*

shakey, as fast as possible

3.40

B. Cl. 

f ————— *fff*

Tape 

B. Cl. 3.51 4.01

Tape



B. Cl. Repeat this pattern, (4.03) player may alter the emphasis and duration of notes. Gradually fade out until 4.34

Rubato disjointed 4.03

p *mf*

$\text{♩} = 63$

Tape



Multiphonic, fundamental to be decided by performer

4.34 4.44 4.54 4.55 5.04 5.19

B. Cl. *mf*

Tape

Hypnagogia

For orchestra

Patrick Egan

2015

Program note

'Hypnagogia' is the experience of the transitional state from wakefulness to sleep. For as long as I can remember I have been having frequent experiences with sleep paralysis. This is the sensation of being unable to move your body but still being semi-conscious to your surroundings. In this state the dream world and reality merge together. Hallucinations occur, dreams begin to form and then vanish. It can be disorientating and confusing. Experiences have ranged from the blissful to the utterly terrifying.

Notes to performers

This score is in C.

Special attention should be paid to dynamics within this piece.

INSTRUMENTATION:

1 Piccolo

1 Flutes

2 Oboes

2 Clarinets in B flat

2 Bassoons

2 Horns in F

2 Trumpets in B flat

3 Trombones

Tuba

2 Percussion

Timpani

Bass drum

Cymbals

Vibraphone

Violin I

Violin II

Viola

Cello

Contrabass

Strings

 - Narrow fast vibrato

 - Wide slow vibrato

Percussion instruments are as follows:

Player 1:

Timpani, bass drum

Player 2:

Vibraphone, cymbals

Hypnagogia

Patrick Egan

Largo

♩ = 40

Slow with an attention dynamics

A

Piccolo
Flute
Oboe
Oboe
Clarinet in Bb
Clarinet in Bb
Bassoon
Bassoon

Horn in F 1-8
Trumpet in Bb
Trumpet in Bb
Trombone
Trombone
Trombone
Tuba

Timpani 1.2
Bass Drum
Cymbals
Vibraphone

Largo

♩ = 40

A

Violin I
Violin II
Viola
Violoncello
Double Bass

This page of a musical score contains the following parts and markings:

- Picc.**: *mp*, *mf*, *p*, *p*, *f*
- Fl.**: *mp*, *mf*, *p*, *mp*
- Ob.**: *ppp*, *mf*, *p*, *p*, *mp*
- Cl.**: *ppp*, *f*, *ppp*
- Bsn.**: *mf*, *ppp*, *ppp*, *f*, *ppp*, *f*, *ppp*
- Hn.**: *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*
- Tpt.**: *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*
- Tbn.**: *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*
- Tba.**: *mf*, *ppp*, *ppp*, *mf*, *ppp*, *ppp*, *mf*, *ppp*
- Timp.**: *mp*
- Vln. I**: *ppp*, *mf*, *ppp*, *ppp*, *p*, *ppp*, *f*, *ppp*, *ppp*, *f*
- Vln. II**: *ppp*, *mf*, *ppp*, *p*, *ppp*, *f*, *ppp*, *ppp*, *f*
- Vla.**: *ppp*, *mf*, *ppp*, *p*, *ppp*, *f*, *ppp*, *ppp*, *f*
- Vc.**: *ppp*, *mf*, *ppp*, *ppp*, *mp*, *ppp*, *p*, *ppp*, *mp*, *ppp*, *ppp*, *mp*
- Db.**: *mp*, *ppp*, *mp*, *ppp*, *mp*

Section **B** includes *molto vibrato* markings for Violin I, Violin II, and Viola.

16

Picc. *ppp* *f* *ppp* *mp*

Fl. *ppp* *f* *ppp* *mp*

Ob. Fluttertongue *ppp* *ff* *ppp* *ppp* *f*

Ob. nat. *ppp* *ppp* *ppp* *ppp* *f*

Cl. Fluttertongue *ppp* *ff* *ppp* *ppp*

Cl. *ppp* *ppp* *f* *ppp* *ppp*

Bsn. *ppp* *f* *ppp* *ppp* *f*

Bsn. *ppp*

Hn. *ppp* *ppp* *mf* *ppp* *pp* *ff* *pp*

Hn. *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Tpt. *ppp* *ppp* *mf* *pp* *ppp* *mf* *ppp*

Tpt. *mf* *ppp* *ppp* *f* *pp* *ppp*

Tbn. *ppp* *mf* *ppp* *ppp*

Tbn. *ppp* *mf* *pp* *ppp*

Tbn. *pp* *mf* *pp* *mf* *pp* *ppp*

Tba. *mp* *ppp*

Timp. *ppp* *mp* *ppp*

B. D.

Cym.

Vib.

Vln. I *ppp* *ppp* *f* *ppp* *f* *ppp*

Vln. II *ppp* *f* *ppp* *molto vibrato* *f* *ppp*

Vla. *f* *ppp* *ppp* *f*

Vc. *f* *ppp* *mp* *f*

Db. *f* *ppp* *mp* *f*

sul pont.

sul pont.

molto vibrato

molto vibrato

molto vibrato

47

Picc. *mf* *ppp* *ppp* *f* *ppp* *f* *ppp* **H**

Fl. *ppp* *f* *ppp* *ppp* *f* *ppp*

Ob. *mp* *mp* *ppp* *f* *ppp* *p* *mf*

Ob. *mp* *mp* *f* *ppp* *p* *mf*

Cl. *p* *ppp* *f* *ppp*

Cl. *mp* *p* *f* *ppp*

Bsn. *mf* *f* *ppp*

Bsn.

Hn. *ppp*

Tpt. *ppp*

Tpt. *ppp*

Tbn.

Tbn.

Tbn.

Tbn.

Tba.

Timp. *> ppp*

B. D.

Cym.

Vib.

Vln. I *ppp* *f* *ppp* *ppp* **H**

Vln. II *ppp* *f* *ppp* *ppp*

Vla. *f* *ppp* *nat.* *gliss.* *gliss.*

Vc. *ppp* *nat.* *gliss.*

Db. *ppp* *ff* *ppp*

51

Picc. *ppp* *f* *ppp* *ppp* *mf* *f* *ppp* *f*

Fl. *ppp* *f* *ppp* *ppp* *mf* *f* *ppp* *f* *ppp*

Ob. *p* *mf* *ppp* *ppp* *f* *ppp* *f* *ppp*

Ob. *ppp* *mf* *mf* *f*

Cl. *mp* *mf* *p* *mp* *mf*

Cl. *mp* *mf*

Bsn. *mp* *mp* *f* *ppp*

Bsn. *mp* *mf* *fff* *ppp*

Hn. *mf* *f* *mp*

Tpt. *mf* *f* *mp*

Tpt. *mp*

Tbn. *f*

Tbn. *f*

Tbn. *f*

Tba. *mf*

Timp.

B. D. *ppp* *f* *fff* *nat.*

Cym.

Vib.

Vln. I *f* *ppp* *f* *ppp* *nat.* *gliss.*

Vln. II *f* *ppp* *f* *ppp* *nat.* *gliss.*

Vla. *p* *gliss.* *mf*

Vc. *p* *gliss.* *gliss.* *mf* *fff* *gliss.*

Db. *p* *fff* *ppp* *f* *nat.* *gliss.* *fff*

57

Picc. *ppp f ppp f ppp f ppp f ppp* Fluttertongue *p*

Fl. *f ppp f ppp f ppp f ppp f ppp* Fluttertongue *f ppp*

Ob. *f ppp f ppp f ppp f ppp f ppp*

Ob. *mf ppp mp*

Cl. *nat. ppp mp ppp*

Cl.

Bsn. *fff p f ppp* *f ppp* *f fff mp*

Bsn. *fff p f ppp* *f ppp* *f fff ppp*

Hn. *f mp*

Hn. *f mp*

Tpt. *ff mp*

Tpt. *fff mp*

Tbn. *f p*

Tbn. *f p*

Tbn. *f fff fff p*

Tba. *p fff ppp f p f ppp*

Timp.

B. D. *nat. f fff f fff mf*

Cym.

Vib.

Vln. I *f* *ppp* *mf* *p* *mf* *ppp* *mp* *f* *p*

Vln. II *f* *ppp* *mf* *p* *mf* *ppp* *mp* *f* *p*

Vla. *f p f ppp mp f p*

Vc. *ppp fff gliss. ppp fff gliss. ppp fff gliss. ppp* *mp f*

Db. *fff ppp fff ppp fff ppp fff*

J

sul pont.

sul pont.

$\text{♩} = 80$ Lively
Allegretto - double original tempo

K

64 nat. *ppp* *f* *ppp* *ppp* *mf* *ppp* *ppp*

Fl. nat. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Ob. *ppp* *mp* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Ob. *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf*

Cl. nat. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Cl. nat. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Bsn. *ppp* *f* *ppp* *mf* *ppp* *mp*

Bsn. *mf* *mf* *mp*

Hn. *ppp* *mf* *ppp*

Tpt. *ppp* *mf* *ppp*

Tpt. *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Tbn. *ppp* *mf* *ppp*

Tbn. *mp*

Tba.

Timp.

B. D.

Cym.

Vib.

Allegretto - double original tempo
 $\text{♩} = 80$ Lively

K

Vln. I *ppp* *ppp* *mf* *ppp* *ppp*

Vln. II *ppp* *ppp* *mf* *ppp* *ppp*

Vla. *ppp* *mf* *ppp* *ppp* *mf*

Vc. *p* *mf* *ppp* *mf* *ppp*

Db. *mp* *mf* *mf* *mf* *mf*

86 **O** **P**

Picc. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Fl. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Ob. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Ob. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Cl. *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Cl. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Bsn. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Bsn.

Hn. *f* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Hn. *f* *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Tpt. *ppp* *f* *mp* *ppp* *mf* *ppp* *ppp*

Tpt. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Tbn. *f*

Tbn.

Tbn.

Tba.

Timp.

B. D.

Cym.

Vib.

O **P**

Vln. I *mp* *mf* *ppp* *mf* *ppp* *ppp*

Vln. II *mf* *ppp* *mf* *ppp* *ppp* *mf*

Vla. *mf* *ppp* *mf* *ppp* *ppp*

Vc. *mf* *ppp* *mf* *ppp* *ppp* *mf*

Db.

95

Picc. *mf* *ppp* *ppp* *mf* *ppp* *f* *ppp*

Fl. *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp* *f* *ppp* *mp* *ppp*

Ob. *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp* *f* *ppp* *mp* *ppp*

Ob. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp* *mf* *ppp* *f* *ppp* *mp* *ppp*

Cl. *ppp* *mf* *ppp* *mp* *ppp* *ppp* *mf* *ppp*

Cl. nat. *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Bsn. *f* *ppp* *f* *p*

Hn. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *ppp*

Tpt. *ppp* *mf* *ppp* *ppp* *mf* *ppp* *p*

Tpt. *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Tbn. nat. *ppp* *mf* *ppp* *ppp* *mf* *ppp*

Tbn. nat. *ppp* *mf* *ppp*

Tba.

Timp.

B. D.

Cym.

Vib.

Vln. I *mf* *ppp* *f* *ppp* *ppp*

Vln. II *ppp* *f* *ppp* *ppp*

Vla. *mf* *ppp* *mf* *ppp*

Vc. *ppp* *ppp* *mf* *ppp* *ppp*

Db.

118 **S**

Picc. *ppp* *f* *ppp* *ppp* *f* *ppp*

Fl. *ppp* *f* *ppp* *ppp* *f* *ppp*

Ob. *ppp* *f* *ppp* *f* *ppp*

Ob. *ppp* *f* *ppp* *f* *ppp*

Cl. *ppp* *f* *ppp* *ppp* *f* *ppp*

Cl. *ppp* *f* *ppp* *f* *ppp*

Bsn. *ppp*

Bsn. *ppp*

Hn. *ppp*

Tpt. *ppp*

Tpt. *ppp*

Tbn. *ppp*

Tbn. *ppp*

Tbn. *ppp*

Tbn. *ppp*

Tba. *ppp*

Timp.

B. D. *p*

Cym. *p* *mf* *ppp*

Vib.

S

Vln. I *mf* *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *fff* *p* *f* *gliss.*

Vln. II *pizz.* *f* *arco* *ppp* *f* *ppp* *f* *ppp* *f* *ppp* *f* *ppp* *f* *ppp* *f* *p* *f* *gliss.*

Vla. *ppp* *f* *ppp* *f* *ppp* *f* *ppp* *f* *ppp* *f* *ppp* *f* *ppp* *f* *p* *f* *pizz.*

Vc. *f* *pizz.*

Db.

135

Picc. *ppp f ppp f ppp f p* **V** *ppp f ppp* *ppp < f ppp* *ppp < f ppp* *ppp < f ppp*

Fl. *ppp f ppp f ppp f ppp f ppp* *ppp < f ppp* *ppp < f ppp*

Ob. *< ppp f ppp f ppp f p* *ppp* *ppp < f ppp* *ppp < f ppp*

Ob. *f ppp f ppp f ppp* *ppp* *ppp < f ppp* *ppp < f ppp*

Cl. *ppp mf ppp* *ppp* *ppp < f ppp* *ppp < f ppp* *f ppp*

Cl. *mf ppp* *ppp* *ppp* *ppp < f ppp* *ppp < f ppp*

Bsn. *f p*

Bsn. *f p*

Fluttertongue

Hn. *ppp ppp mf ppp*

Tpt. *ppp ppp mf ppp*

Tpt. *ppp ppp mf ppp*

Tbn. *ppp mf ppp*

Tbn. *mf sempre ppp*

Tbn. *mf sempre ppp*

Tba.

Timp.

B. D. *ppp mf ppp*

Cym.

Vib.

V

Vln. I *ppp f ppp f p* *f ppp f ppp f ppp*

Vln. II *ppp f ppp f ppp f p* *ppp f ppp f ppp*

Vla. *ppp f ppp f p f ppp* *f ppp f ppp*

Vc. *f ppp f ppp f p f p* *ppp f p* *ppp*

Db. *f f f f* *mf* *mf ppp*

Echoes

For vibraphone, flute, clarinet in Bb, violin and cello

Patrick Egan

2016

Program note

As the title suggests, I was quite interested in the concept of echoes and possible ways to explore this paradigm in a musical context. This piece is based around a simple three note motif. I wanted to see if I could represent or implant this simple idea by employing a series of imitations and mutations to this idea. The piece consists of two contrasting movements, the first being is slow and atmospheric and mainly focuses on timbre, while the second is lively, energetic and highly rhythmic.

Notes to performers

This score is in C.

All accidentals apply for the duration of the bar

♭ - Quarter flat

♭ - Three-quarter flat

♯ - Quarter sharp

♯ - Three-quarter sharp

Echoes Movement 1

Patrick Egan

Allegretto

Restless, Agitated

All notes bowed until instructed otherwise

♩=120

This system includes staves for Vibraphone, Flute, Clarinet in Bb, Violin, and Violoncello. The Vibraphone part starts with a whole note rest, followed by a half note chord (F4, C5) marked *f*, and then a half note chord (F4, C5) marked *fff*. The Flute and Clarinet in Bb parts play a rhythmic eighth-note pattern starting at measure 1, marked *ppp*, then *f*, and finally *ppp* *sempre*. The Violin part starts with a half note chord (F4, C5) marked *p*, then a half note chord (F4, C5) marked *mf*, and finally a half note chord (F4, C5) marked *ppp*. The Violoncello part starts with a half note chord (F4, C5) marked *ppp*, then a half note chord (F4, C5) marked *mf*, and finally a half note chord (F4, C5) marked *p*. There are triplets in measures 3 and 4 of the Violoncello part.

4

This system continues the musical score. The Vibraphone part has a half note chord (F4, C5) marked *mf*, followed by a half note chord (F4, C5) marked *fff*. The Flute and Clarinet in Bb parts continue their rhythmic patterns, marked *f*. The Violin part continues with a half note chord (F4, C5) marked *ppp*, then a half note chord (F4, C5) marked *mf*, and finally a half note chord (F4, C5) marked *f*. The Violoncello part continues with a half note chord (F4, C5) marked *ppp*, then a half note chord (F4, C5) marked *mf*, and finally a half note chord (F4, C5) marked *f*. There are triplets in measures 3 and 4 of the Violoncello part.

Adagio

A ♩=55 Slow and tense

7

This system includes staves for Vibraphone, Flute, Clarinet, Violin, and Violoncello. The Vibraphone part has a half note chord (F4, C5) marked *fff*. The Flute part has a half note chord (F4, C5) marked *ppp*, followed by a half note chord (F4, C5) marked *fff* with the instruction "Fluttertongue". The Clarinet part has a half note chord (F4, C5) marked *ppp*, followed by a half note chord (F4, C5) marked *fff*. The Violin part has a half note chord (F4, C5) marked *mf*, followed by a half note chord (F4, C5) marked *ppp*, and finally a half note chord (F4, C5) marked *mp*. The Violoncello part has a half note chord (F4, C5) marked *ppp*, followed by a half note chord (F4, C5) marked *ppp*, and finally a half note chord (F4, C5) marked *p*. There are triplets in measures 3 and 4 of the Violoncello part.

9

Vib. *ppp* *mp*

Fl. *mp* *ppp* *fff* *ppppp* nat.

Cl. *ppp* *fff* *p* Multiphonic

Vln. *mp* *ppp* *mf*

Vc. To Vln. Violin *mp* *ppp* *mf*

11 **B**

Vib. *mf* *mp* *mf*

Fl. *mf* *ppp* *fff*

Cl. *pp* Multiphonic

Vln. *fff* *ppp* *mp*

Vln. *mp* *mp* Molto sul pont

13 **C**

Vib. *mp*

Fl. *ppp* *mp* *ppp* *fff* nat.

Cl. *ppp* *mp* *ppp* *fff*

Vln. *ppp* *ppp* *fff*

Vln. *ppp* *mp*

15 **D** **E**

Vib. *mp* *f* *ppp* use Mallets *mf* *ppp*

Fl. *ppp* *fff* *ppp* *fff*

Cl. *ppp* *fff* *ppp* *tr*

Vln. *ppp* *mf* *ppp* *mf* *ppp* Sul 4 3 2 1 7

Vln. *ppp* *mp* *ppp* *ppp* *gliss.* *mf* *ppp*

rall.

19 **F**

Vib. *f* *fff* Lento ♩=42

Fl. *ppp* *rall.* *f* *fff* Lento ♩=42 Fluttertongue

Cl. *ppp* *fff*

Vln. *sul pont.* *gliss.* *mp* *mf* *p* *nat.* *ppp* *fff*

Vln. *mp* *mf* *ppp* *gliss.* *gliss.*

21 **G** **G**

Vib. *ppp* *fff* *ppp* *fff* *ppp* *fff*

Fl. *fff* *ppp* *fff* *nat.* *mp* *ppp* *3*

Cl. *ppp* *fff* *mp* *ppp* *fff*

Vln. *ppp* *mp* *ppp* *fff* *mp* *ppp* *fff* *ppp* *fff* *ppp* *fff* *mp* Gradually increasing vibrato

Vln. *3* *gliss.* *mp* *ppp* *fff* *mp* *ppp* *fff* *mp* *ppp* *fff* *ppp* *fff* *ppp* *fff* *mp* Gradually increasing vibrato

No Vibrato
Detache with sudden spikes

4

24

Bowed

accel.

Largo $\text{H} \text{ } \text{♩} = 50$

Vib. *ppp* *fff* *mp* *fff*

Fl. Fluttertongue *fff* *mp* *fff* *mp* *fff* *ppp* nat. 3

Cl. *ppp* *fff* *ppp* *fff* *ppp*

Vln. *ppp* *fff* *mp* *ppp* *fff* *mp* *ppp* *fff* *ppp* *ppp* nat. gliss.

Vln. *ppp* *fff* *mp* *ppp* *fff* *mp* *ppp* *fff* *ppp* *ppp* *ppp* nat. gliss.

28

Use Mallets

Vib. *ppp*

Fl. fluttertongue *ppp* *fff*

Cl. fluttertongue *ppp* *fff* *ppp* *fff*

Vln.

Vln. gliss.

30

Vib. *mf* *ppp*

Fl. nat. *ppp* *fff* *ppp* *fff*

Cl. nat. *ppp* *fff* *ppp* *fff*

Vln. *ppp* gliss. *ppp*

Vln. *ppp* gliss.

32 **I**

Vib. *mp* *ppp*

Fl. **I** fluttertongue *ppp* *fff* nat. *ppp* *p*

Cl. *ppp* *fff* *ppp* *fff* *ppp* sul pont. *p*

Vln. *ppp* gliss. *ppp* *mf*

Vln. *tr* *mp* *ppp* sul pont. *mf* *ppp* *mf*

34 Metric, unexpressive

Vib. *p* *mp*

Fl. fluttertongue *ppp* *fff* nat. *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp*

Cl. *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp*

Vln. Molto sul pont. *ppp* sempre *port.* nat. *ppp* gliss.

Vln. sul tasto *gliss.* *ppp* Molto sul pont. *mp* nat. *p* *fff* *ppp* *ppp*

40 **J**

Vib. *ppp* *p* *mp* *mp*

Fl. **J** *fff* *ppp* *fff*

Cl. *fff* *ppp* *fff* *ppp* *fff*

Vln. *fff* nat. *ppp* *fff* *ppp*

Vln. *fff* sul pont. *ppp* nat. *fff* *ppp*

Quite suddenly

52 Bowed

Vib. *f*

Fl. *ppp* *fff* *p*

Cl. *ppp* *fff* *p*

Vln. *ppp* *fff* Sul 4 3 2 1 7 sul pont *ppp* *fff*

Vln. sul tasto *fff* nat. Sul 4 3 2 1 7 *mf* *f*

54

Vib. *fff* *ppp* **M**

Fl. *f* *ppp* *ppp* **M**

Cl. *f* *ppp*

Vln. *gliss.* *ppp* nat. *ppp*

Vln. *ppp* *ppp*

56

Vib. *f* *fff*

Fl. *fff* *ppp* *fff* *ppp* *mf* *ppp* *ppp* *mp* *ppp* *f* *ppp*

Cl. *fff* *ppp* *fff* *mp* *ppp* *mp* *ppp* *ppp*

Vln. *ppp* *fff* *ppp* *fff* *ppp* *mp* *ppp* *ppppp* *p* *ppp*

Vln. *ppp* *fff* *ppp* *mp* *ppp* *mp* *p* *mp*

Molto sul pont.

Molto sul pont.

8

60

Vib. *mf* *ff* **N**

Fl. *mp* *p* *ppp* **N** Multiphonic *mf*

Cl. *f* *ppp* *ppp* *mf* *ppp*

Vln. *f* *ppp* *fff* *ppp* *mf* *ppp*

Vln. *mf* *ppp* *mf* *ppp*

Molto sul tasto

Molto sul tasto.

nat.

nat.

64

Vib. *mf* *ff* *mf* *ff*

Fl. *ppp* *ppp* *p* *ppp* *mf* *ppp*

Cl. *fff* *ppp* *fff* *ppp* *fff* *p* *mf* *ppp* *fff*

Vln. *fff* *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *mf* *ppp* *fff*

Vln. *mp* *ppp* *ppp* *ppp* *ppp* *ppp* *ppp* *ppp* *mf* *ppp*

fluttertongue

nat.

sul tasto

nat.

sul pont.

gliss.

71

Vib. *f* *fff* *fff*

Fl. *f* *mf* *f* *fff*

Cl. *mp* *mf* *f*

Vln. *mp* *p* *mp* *mf*

Vln. *mp* *mf* *mp* *mf*

arco

marcato

marcato

gliss.

gliss.

73

Musical score for measures 73-74. The score is for five instruments: Vibraphone (Vib.), Flute (Fl.), Clarinet (Cl.), Violin (Vln.), and Viola (Vln.). The key signature is one flat (B-flat major/D minor) and the time signature is 4/4. Measure 73 features a vibraphone part with a triplet of eighth notes marked *fff*. The flute and clarinet parts have slurs and triplets, with the flute marked *fff*. The violin and viola parts have slurs and triplets, with the violin marked *f* and the viola marked *gliss.* and *f*. Measure 74 features a vibraphone part with a triplet of eighth notes marked *fff* and the instruction "FLUTTERTONGUE". The flute and clarinet parts have slurs and triplets, with the flute marked *fff*. The violin and viola parts have slurs and triplets, with the violin marked *gliss.* and *mf*, and the viola marked *gliss.* and *mf*.

75

Musical score for measures 75-76. The score is for five instruments: Vibraphone (Vib.), Flute (Fl.), Clarinet (Cl.), Violin (Vln.), and Viola (Vln.). The key signature is one flat (B-flat major/D minor) and the time signature is 4/4. Measure 75 features a vibraphone part with a triplet of eighth notes marked *fff* and a 9-measure slur. The flute and clarinet parts have slurs and triplets, with the flute marked *ff* and the clarinet marked *fff*. The violin and viola parts have slurs and triplets, with the violin marked *gliss.* and *fff*, and the viola marked *gliss.* and *fff*. Measure 76 features a vibraphone part with a triplet of eighth notes marked *fff* and a 3-measure slur. The flute and clarinet parts have slurs and triplets, with the flute marked *fff* and the clarinet marked *fff*. The violin and viola parts have slurs and triplets, with the violin marked *gliss.* and *fff*, and the viola marked *gliss.* and *fff*.

Echoes Movement 2

Patrick Egan

Largo

Agressive, tense

$\text{♩} = 44$

1

Vibraphone

Flute

Clarinet in B \flat

Violin

Violoncello

4

Vib.

Fl.

Cl.

Vln.

Vc.

A

A

sul pont.

6

Vib.

Fl.

Cl.

Vln.

Vc.

B

B

8 **C**

Vib. *ppp* *p* *p*

Fl. *ppp* *ppp* *mp* *ppp* *p* *ppp*

Cl. *mf* *ppp* *ppp* *p* *ppp* *mp* *ppp*

Vln. *ppp* *ppp*

Vc. *ppp* *ppp* *p* *ppp* *ppp*

11 **D**

Vib. *mf* *mp* *mf*

Fl. *mp* *ppp* *f* *ppp*

Cl. *mp* *ppp* *mf* *p* *mf* *mp* *ppp* *f* *ppp* *mp*

Vln. *mp* *ppp* *mf*

Vc. *mp* *ppp* *sul pont.* *ppp* *mp* *ppp* *mp* *ppp*

15 **E**

Vib. *mp* *mf* *p* *mf* *p* *ppp*

Fl. *f* *mp* *fff* *mp* *p* *mf* *p*

Cl. *p* *fff* *p* *f* *mp* *p*

Vln. *ppp* *fff* *ppp* *sul tasto* *p*

Vc. *nat.* *ppp* *3* *p* *mf* *sul tasto* *mp* *p* *ppp*

19 $\text{♩} = 120$ **Allegro**

Vib. *f sempre*

Fl. *ppp*

Cl. *> ppp*

Vln. *ppp*

Vc. *ppp*

23 **F**

Vib. *f sempre*

Fl. *ppp* *mp* *ppp*

Cl. *ppp* *mp* *ppp*

Vln. *mp* *ppp*

Vc. *nat.* *p* *mp* *ppp*

sul 1 2-3-3 sim

sul 1 2 3 sim

28

Vib. *f sempre*

Fl. *ppp* *mp* *p*

Cl. *ppp* *mp* *ppp*

Vln. *mp* *ppp*

Vc. *mp* *ppp*

33

Vib. **G**

Fl. **G**

Cl.

Vln. *mp* *ppp* *f* *mf* *mp*

Vc. *mp* *ppp* *f* *mf* *mp*

38

Vib.

Fl.

Cl.

Vln. *p* *ppp*

Vc. *p* *ppp*

42

Vib.

Fl. **H** *p*

Cl. *ppp*

Vln.

Vc. *ppp* *mf* *ppp*

arco sul pont.

55

Vib. **J**

Fl. **J**

Cl.

Vln.

Vc.

mf *p*

ppp *mp*

ppp *mp*

sul pont. *ppp*

58

Vib.

Fl.

Cl.

Vln.

Vc.

ppp *mp* *ppp*

ppp *mp* *ppp*

p *f*

pizz. *mp* *mp* *fff* *f* arco marcato

61

Vib. **K**

Fl. **K**

Cl.

Vln.

Vc.

f *ppp* *f*

f *ppp* *f*

pizz. *f* *mf* *mp* *p* *ppp*

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

64

Vib. *3* *3* *3* *3*

Fl. *ppp*

Cl. *ppp*

Vln. arco *mp*

Vc. *mp*

67

Vib. **L**

Fl. **L** *ppp* *f* *ppp*

Cl. *ppp* *f* *ppp*

Vln.

Vc. *ppp*

70

Vib. **M**

Fl. *mp* *3* *3* **M** *mp*

Cl. *mp* *3* *mp*

Vln. *fff* *pizz.*

Vc. *mf* *fff*

73 **N**

Viola (Vib.) part: Treble clef, 4/4 time. Measures 73-76 contain a melodic line with various dynamics and articulations.

Flute (Fl.) part: Treble clef, 4/4 time. Measures 73-76 contain a melodic line with dynamics *mf* and *ppp*, and a triplet in measure 76.

Clarinet (Cl.) part: Treble clef, 4/4 time. Measures 73-76 contain a melodic line with dynamics *mf* and *ppp*.

Violin (Vln.) part: Treble clef, 4/4 time. Measures 73-76 contain a rhythmic pattern with dynamics *f*, *pizz.*, *f*, *mf*, *mp*, *p*, and *ppp*.

Violoncello (Vc.) part: Bass clef, 4/4 time. Measures 73-76 contain a rhythmic pattern with dynamics *f*, *f*, *mf*, *mp*, *p*, and *ppp*.

77 **O**

Viola (Vib.) part: Treble clef, 4/4 time. Measures 77-84 contain a melodic line with dynamics *p* and a triplet in measure 84.

Flute (Fl.) part: Treble clef, 4/4 time. Measures 77-84 contain a melodic line with dynamics *p* and a triplet in measure 84.

Clarinet (Cl.) part: Treble clef, 4/4 time. Measures 77-84 contain a melodic line with dynamics *p* and a triplet in measure 84.

Violin (Vln.) part: Treble clef, 4/4 time. Measures 77-84 contain a rhythmic pattern with dynamics *mf*, *sul pont.*, *gliss.*, and *nat. ppp*.

Violoncello (Vc.) part: Bass clef, 4/4 time. Measures 77-84 contain a rhythmic pattern with dynamics *mf* and a triplet in measure 84.

85

Viola (Vib.) part: Treble clef, 4/4 time. Measures 85-88 contain a melodic line with dynamics *mp* and triplets in measures 85, 87, and 88.

Flute (Fl.) part: Treble clef, 4/4 time. Measures 85-88 contain a melodic line with dynamics *mp* and triplets in measures 85, 87, and 88.

Clarinet (Cl.) part: Treble clef, 4/4 time. Measures 85-88 contain a melodic line with dynamics *mp* and triplets in measures 85, 87, and 88.

Violin (Vln.) part: Treble clef, 4/4 time. Measures 85-88 contain a melodic line with dynamics *mp* and triplets in measures 85, 87, and 88.

Violoncello (Vc.) part: Bass clef, 4/4 time. Measures 85-88 contain a melodic line with dynamics *mp* and *sfz*, and triplets in measures 85, 87, and 88.

90

Vib. **P**

Fl. **P**

Cl. **ppp**

Vln. **ppp** *sempre*

Vc. **mp** **ppp**

93

Vib.

Fl. **mf**

Cl. **mf**

Vln. **mf** **f**

Vc. **mp** **mf** **f**

96

Vib. **Q**

Fl. **Q**

Cl. **mf**

Vln. **mf** *pizz.* **mf** *pizz. arco*

Vc. **mf** *pizz.* **mf** *arco*

101

Vib. *rit.* *molto rall.*

Fl. *molto rall.*

Cl. *rit.*

Vln. *gliss.*

Vc.

Allegro
♩ = 120

106 *fff*

Vib. *mp*

Allegro
♩ = 120

Fl. *f* *tr*

Cl. *f* *tr*

Vln. *mf* *sul pont.* *f*

Vc. *f* *5* *5*

110

Vib. *mp* *f*

Fl. *p* *3*

Cl. *p* *3*

Vln. *pp* *sul pont.*

Vc. *p* *sul tasto*

113 $\text{♩} = 70$

Vib. *p* **accel.**

Fl. *mf* **accel.**

Cl. *mf* Sul tasto *spiccato*

Vln. *mf* *spiccato* sul tasto

Vc. *mf*

116 **Allegro** $\text{♩} = 120$

Vib. *mf* **fff**

Fl. **Allegro** $\text{♩} = 120$ *f sempre*

Cl. *f sempre*

Vln. *f sempre* **marcato**

Vc. *f sempre* **marcato**

119

Vib.

Fl. *f sempre*

Cl. *f sempre*

Vln.

Vc.

121

Vib.
Fl.
Cl.
Vln. sul pont.
Vc. sul pont. *p*

124

Vib.
Fl.
Cl.
Vln. *ppp*
Vc. *ppp*

Accretion and Acrylics

For orchestra

Patrick Egan

2016

Program note

Accretion is defined as growth or increase by the gradual accumulation of additional layers or matter.

The title refers to a style of art that involves the pouring of acrylic paint often resulting in incredibly vibrant mixtures and combinations of colour.

This piece consists of three contrasting movements however the concepts of the process of accretion and acrylic style art are represented in all three.

Notes to performers

INSTRUMENTATION:

Piccolo

2 Flutes

2 Oboes

2 Clarinets in B flat

2 Bassoons

2 Horns in F

2 Trumpets in B flat

2 Trombones

2 Tubas

3 Percussion

Timpani

Bass drum

Chimes

Glockenspiel

Vibraphone

Cymbals

Harp

Pianoforte

2 Violin

2 Viola

2 Cello

2 Contrabass

Percussion

Movement 1

Percussion player 1 - Bass drum and timpani

Percussion player 2 - Chimes, Glockenspiel

Percussion player 3 - Vibraphone

Movement 2

Percussion player 1 - Cymbals

Percussion player 2 - Bass drum

Percussion player 3 - Vibraphone

Movement 3

Percussion player 1 - Bass drum

Percussion player 2 - Vibraphone

General notes for performers

All accidentals apply for the duration of the bar.

Pay special attention to dynamics in all three movements.

Mutes are to remain until instructed otherwise.

Duration 16 minutes

5

Fl. 1 *ppp* *mf* *p* **B** *p* *mf* *p*

Fl. 2 *mf* *mp* *ppp* *mp* *ppp*

Ob. 1 *mp* *ppp* *mp* *ppp*

Ob. 2 *mf* *ppp* *mp* *ppp*

Cl. 1 *mf* *mf* *mf* *mf*

Cl. 2 *mp* *p* *ppp* *mf* *mp* *mf*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1 *p* *p*

Tpt. 2 *p*

Tbn. 1

Tbn. 2

Tba.

Tba.

B

Timp.

B. D.

Chim. *> ppp* *p* *p*

Glock.

Vib. *p* *p* *p*

Hp. *ppp* *mp* *ppp* *ppp*

Pno. *f* *mp* *f* *mf* *mp*

B

Vln. I *fff ppp* *mf* *mp* *pp* *ppp*

Vln. II *fff ppp* *mf* *mp* *ppp*

Vla. *fff ppp* *fff ppp* *mp* *ppp*

Vla. *fff ppp* *mf* *ppp* *mp* *ppp* *ppp*

Vc. *ppp* *sul pont.*

Vc.

Cb.

Cb.

16 C

Fl. 1 *mp* *mp* *mp* *mf* *mf* *f*

Fl. 2 *pp* *pp* *p* *mp* *mf* *f* *mf*

Ob. 1 *ppp* *ppp* *mf* *f* *mf*

Ob. 2 *ff* *ff* *ppp* *mf* *f* *mf*

Cl. 1 *ppp* *fff* *f* *p* *f* *p* *ppp* *mp* *mp* *mf* *mf*

Cl. 2 *mf* *ppp* *mf* *mp* *f* *f*

Bsn. 1

Bsn. 2

Hn. 1 *ppp* *fff*

Hn. 2 *ppp* *fff*

Tpt. 1 *f* *ppp* *fff* *f* *ppp* *fff* *mp* *f*

Tpt. 2 *f* *ppp* *fff* *f* *ppp* *fff* *mp* *f*

Tbn. 1 *mp* *f*

Tbn. 2

Tba.

Tba.

Timp. C

B. D.

Chim.

Glock.

Vib. *ppp* *mp* *ppp*

Hp. *ppp* *mf* *ppp*

Pno.

Vln. I *ppp* *nat.* *gliss.* *gliss.* *ppp* *sul pont.* *ppp* *sul pont.*

Vln. II *ppp* *sul pont.* *ppp*

Vla. *sul pont.* *ppp*

Vla. *sul pont.* *ppp*

Vc. *3*

Vc.

Cb. *ppp*

Cb. *ppp*

ppp

26 **E**

Fl. 1
Fl. 2
Ob. 1
Ob. 2
Cl. 1
Cl. 2
Bsn. 1
Bsn. 2

Hn. 1
Hn. 2
Tpt. 1
Tpt. 2
Tbn. 1
Tbn. 2
Tba.
Tba.

E

Timp.
B. D.
Chim.
Glock.
Vib.
Hp.
Pno.

E

Vln. I
Vln. II
Vla.
Vla.
Vc.
Vc.
Cb.
Cb.

F

30

Fl. 1 *mp* *mf* *ppp* *f*

Fl. 2 *mp* *ppp* *mf* *mp* *f*

Ob. 1 *mf* *mp* *mf* *mp* *f*

Ob. 2 *ppp* *mf* *mp*

Cl. 1 *mp* *ppp* *mf* *p* *mp*

Cl. 2 *mp* *ppp* *mf* *ppp*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tba. *mf* *ppp*

Tba. *mf* *ppp*

F

Timp.

B. D. *mp* *ppp* *p* *ppp*

Chim. *ppp*

Glock.

Vib. *mf* *f* *p*

Hp. *ppp*

Pno. *ppp* *f* *ppp*

F

Vln. I *ppp* *fff* *ppp* *fff* *ppp* *fff*

Vln. II *fff* *ppp* *fff* *ppp* *fff* *ppp*

Vla. *fff* *ppp* *fff* *ppp* *fff* *ppp*

Vla. *ppp* *fff* *ppp* *ppp* *ppp*

Vc. *ppp* *fff* *ppp* *fff* *p* *ppp* *nat.*

Vc.

Cb. *mf* *ppp*

Cb. *mf* *ppp*

35

Fl. 1 *ppp* *p* *ppp* *pp* *ff* *ppp*

Fl. 2 *ppp* *mf* *ppp* *ppp* *ppp* *f*

Ob. 1 *ppp* *mf* *ppp* *ppp* *mp* *ppp* *ppp*

Ob. 2 *mf* *ppp* *mf* *ppp* *p* *ppp*

Cl. 1 *mf* *ppp* *mf* *mf*

Cl. 2 *mf* *ppp* *p*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tba.

Tba.

Timp. **G**

B. D.

Chim.

Glock.

Vib. *mf* *p*

Hp.

Pno. *f* *mp* *mf* *p* *f sempre*

Vln. I *ppp* *mf* *ppp* *mf* **G**

Vln. II *ppp* *nat.* *mf* *ppp* *mf*

Vla. *ppp* *mp* *ppp*

Vla. *ppp* *mf* *ppp*

Vc.

Vc.

Cb.

Cb.

39

Fl. 1 *mp*

Fl. 2 *pp* *pp* *pp* *mf* *ppp*

Ob. 1 *ppp* *ppp* *ppp* *ppp* *mf*

Ob. 2 *ff* *ff* *ff* *ppp* *mf*

Cl. 1 *p* *f* *p* *f* *p* *f* *ppp*

Cl. 2 *p* *mf* *mf* *mf*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

Tba.

Tba.

Timp. *ppp* *mp* *ppp*

B. D.

Chim.

Glock.

Vib.

Hp. *p* *mp* *ppp*

Pno. *ppp* *ppp* *ppp*

Vln. I *ppp* *ppp* *mf*

Vln. II *ppp* *ppp* *mf*

Vla. *ppp* *mp* *ppp*

Vla.

Vc. *ppp* *mp* *ppp*

Vc. *ppp* *mp* *ppp*

Cb.

Cb.

This page contains a musical score for measures 47 through 50. The instruments listed on the left are: Fl. 1, Fl. 2, Ob. 1, Ob. 2, Cl. 1, Cl. 2, Bsn. 1, Bsn. 2, Hn. 1, Hn. 2, Tpt. 1, Tpt. 2, Tbn. 1, Tbn. 2, Tba., Tba., Timp., B. D., Chim., Glock., Vib., Hp., Pno., Vln. I, Vln. II, Vla., Vla., Vc., Vc., Cb., and Cb. The score is written in 4/4 time with a key signature of one sharp (F#). The music features a variety of dynamics, including *ppp*, *p*, *mf*, and *pp*. There are several trills and triplets throughout the piece. The piano part (Pno.) is particularly complex, featuring dense textures with many triplets and trills. The strings (Vln. I, Vln. II, Vla., Vc., Cb.) play a rhythmic accompaniment, with some parts marked *p* and others *ppp*. The woodwinds and brass parts are mostly silent or play simple accompanimental figures. The percussion parts (Timp., Vib., Glock., Hp.) provide a steady rhythmic accompaniment. The overall texture is dense and intricate.

51 **I**

Fl. 1 *-f* *ppp* *ppp* *p*

Fl. 2 *ppp* *mp* *ppp* *ppp*

Ob. 1 *ppp* *mp* *ppp* *mp* *ppp*

Ob. 2 *ppp* *mp* *ppp* *mf sempre*

Cl. 1 *ppp* *mp* *ppp* *mf sempre*

Cl. 2 *ppp* *p* *ppp* *f*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2 *ppp* *mp* *ppp*

Tpt. 1 *ppp* *mp* *ppp* *mf*

Tpt. 2 *ppp* *mf*

Tbn. 1 *mf*

Tbn. 2 *mf*

Tba. *mp* *ppp*

Tba. *ppp*

I

Timp.

B. D.

Chim.

Glock.

Vib. *mf*

Hp. *mf* *f*

Pno. *mp* *p* *mp* *f* *ppp*

I

Vln. I *ppp* *fff mf* *nat. ppp* *fff mf* *ppp* *fff* *ppp* *fff mf* *ppp* *fff mf*

Vln. II *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *fff* *ppp* *fff*

Vla. *ppp* *fff* *ppp* *fff*

Vla. *ppp* *mf* *ppp* *fff* *ppp* *fff* *ppp* *fff*

Vc. *f*

Vc. *f*

Cb.

Cb.

55 **J**

Fl. 1 *ppp* *mf*

Fl. 2 *ppp* *mf*

Ob. 1 *mf* *ppp* *ppp* *mf*

Ob. 2 *ppp* *ppp*

Cl. 1 *mf sempre*

Cl. 2 *mf sempre*

Bsn. 1 *mf sempre*

Bsn. 2 *mf*

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2 *p*

Tba.

Tba.

J

Timp.

B. D.

Chim.

Glock.

Vib.

Hp.

Pno. *f* *mf* *p* *mf*

Vln. I *mf* *f* *ppp*

Vln. II *mf*

Vla. *mf* *ppp*

Vla. *ppp*

Vc. *sul pont.* *mf* *p*

Vc. *sul pont.* *mf* *rp*

Cb. *mf*

Cb. *ppp*

58 **K**

Fl. 1 *ppp* *mf* *ppp* *ppp*

Fl. 2 *ppp* *mf* *ppp* *ppp*

Ob. 1 *ppp* *mf* *ppp*

Ob. 2 *ppp* *mf* *mp*

Cl. 1 *mf sempre* *ppp* *ppp*

Cl. 2 *mf sempre* *ppp*

Bsn. 1 *ppp* *mf* *ppp*

Bsn. 2 *ppp* *mf* *ppp*

Hn. 1 *ppp* *mp* *ppp*

Hn. 2 *ppp* *p* *ppp*

Tpt. 1

Tpt. 2

Tbn. 1 *p* *mp* *p*

Tbn. 2 *mp* *ppp* *ppp*

Tba.

Tba.

K *ppp* *mp* *ppp*

Timp.

B. D.

Chim.

Glock.

Vib.

Hp.

Pno. *p* *mf*

Vln. I *mf* *ppp* *mf* *ppp*

Vln. II *ppp* *mf* *ppp* *mf*

Vla. *mf* *ppp*

Vla. *mf* *ppp*

Vc.

Vc.

Cb.

Cb. *ppp*

69 **L**

Fl. 1 *mf* *ppp*

Fl. 2 *mp* *ppp* *ppp* *mp*

Ob. 1 *ppp* *mp* *ppp*

Ob. 2 *mf* *pp*

Cl. 1 *pp* *mf* *pp*

Cl. 2 *ppp* *p* *ppp* *ppp* *p* *ppp* *ppp* *p*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1 *mf* *pp*

Tpt. 2 *ppp*

Tbn. 1

Tbn. 2

Tba.

Tba.

L

Timp.

B. D.

Chim.

Glock. *ppp*

Vib. *f*

Hp. *f sempre* *mp*

Pno. *f sempre* *mp*

Vln. I *senza sord.* *ppp* *mf* *ppp*

Vln. II *senza sord.* *ppp* *mp* *ppp* *ppp*

Vla. *senza sord.* *pp* *mf* *pp*

Vla. *senza sord.* *ppp* *f* *ppp* *p* *ppp* *ppp* *p* *ppp*

Vc.

Vc.

Cb.

Cb.

81

Fl. 1 *ppp*

Fl. 2 *ppp* *mf* *f* *mp*

Ob. 1 *ppp* *mf* *mf*

Ob. 2 *mf* *ppp* *mf*

Cl. 1 *mp* *p* *pp* *ppp*

Cl. 2 *mp* *p* *mp* *ppp*

Bsn. 1

Bsn. 2

Hn. 1 *mp* *p* *pp* *p*

Hn. 2 *p* *mp* *ppp* *pp*

Tpt. 1 *mf* *pp* *ppppp*

Tpt. 2

Tbn. 1

Tbn. 2

Tba.

Tba.

Timp.

B. D.

Chim.

Glock.

Vib. *p* *ppp*

Hp. *ppp* *ppp*

Pno.

Vln. I *mf* *ppp*

Vln. II *mf* *ppp*

Vla. *mf* *ppp*

Vla. *mp* *mp*

Vc. *mp*

Vc.

Cb.

Cb.

Accretion and Acrylics
Movement II

Patrick Egan

Allegretto $\text{♩} = 100$ Jagged, spikey

Flute 1 *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff fluttertongue

Flute 2 *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff

Oboe 1 *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff

Oboe 2 *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff

Clarinet in B \flat 1 *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff *ppp* ff

Clarinet in B \flat 2 *mp* *ppp* *mf*

Bassoon 1

Bassoon 2

Horn in F 1

Horn in F 2

Trumpet in B \flat 1

Trumpet in B \flat 2

Trombone 1

Trombone 2

Bass Trombone

Tuba

Allegretto $\text{♩} = 100$ **A**

Timpani

Cymbals

Bass Drum

Glockenspiel

Vibraphone Use bow until instructed otherwise *ppp* *mf* *mp* *ppp* *mf* *mp*

Harp

Piano

Allegretto $\text{♩} = 100$ **A**

Violin I

Violin II

Viola

Viola

Violoncello *ppp*

Violoncello *ppp* *pizz.*

Contrabass *mp* *pizz.*

Contrabass *mp*

10

B **C**

Fl. 1 *fff* *ppp* *mp* *nat.*

Fl. 2 *ppp* *mp*

Ob. 1 *ppp* *mf* *mp*

Ob. 2 *ppp* *p*

Cl. 1 *mf* *ppp* *ppp* *mf* *p* *mf* *p*

Cl. 2 *p* *ppp* *mf* *p* *mf* *mp*

Bsn. 1

Bsn. 2 *ppp* *mp* *ppp*

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2 *ppp*

Tbn. 1 *ppp* *mp* *ppp*

Tbn. 2

B. Tbn.

Tba.

B **C**

Timp.

Cym.

B. D. *fff*

Glock.

Vib. *ppp* *fff* *mp*

Hp.

Pno.

B **C**

Vln. I

Vln. II

Vla.

Vla.

Vc. *mf* *sul tasto* *gliss.* *gliss.* *gliss.* *gliss.*

Vc. *mf* *sul tasto* *gliss.* *gliss.* *gliss.* *gliss.*

Cb. *mp sempre* *col legno*

Cb. *mf* *fff* *mf* *mp sempre*

29

Fl. 1 *p sempre* *mp*

Fl. 2 *p sempre* *mp*

Ob. 1 *p* *mp*

Ob. 2 *p*

Cl. 1 *ppp* *mp*

Cl. 2 *ppp* *mp*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

Timp.

Cym.

B. D. *mf* *fff*

Glock.

Vib.

Hp.

Pno.

Vln. I *gliss.* *mf* *f*

Vln. II *mf* *fff*

Vla. *arco* *mp* *mf* *fff*

Vla. *gliss.*

Vc. *mp* *gliss.* *mf* *gliss.*

Vc. *mp* *gliss.* *mf* *gliss.*

Cb.

Cb.

F **G**

32

Fl. 1 *fff* *f ppp* *fff*

Fl. 2 *mf* *f p f p f p f ppp* *fff* *f ppp* *fff* *f* *ppp*

Ob. 1 *f p f f p f f p f* *f p f p f p f ppp* *fff* *f ppp* *fff* *f* *ppp*

Ob. 2 *p f p f p f* *f ppp* *fff*

Cl. 1 *fff*

Cl. 2 *fff*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

F **G**

Timp.

Cym.

B. D.

Glock.

Vib.

Hp.

Pno.

F **G**

Vln. I *>mp* *fff* *ppp* *ppp* *fff*

Vln. II *>mp* *fff* *ppp*

Vla. *>mp* *ppp* *arco* *gliss.* *fff* *ppp*

Vla. *ppp* *fff* *ppp*

Vc. *gliss.* *ppp* *fff*

Vc. *gliss.* *ppp* *fff*

Cb. *ppp* *fff*

Cb. *ppp* *fff* *pizz.* *fff*

37 **H**

Fl. 1 *f ppp < fff* *p f p f p f ppp < fff* *f ppp < fff* *f ppp < fff* *f ppp < fff* *f*

Fl. 2 *fff* *f ppp < fff* *f ppp < f* *mp* *f ppp < fff* *f ppp < fff* *f ppp < fff* *f ppp < fff* *f ppp < fff*

Ob. 1 *fff* *f ppp < fff* *f ppp < f* *f ppp < fff* *f ppp < fff* *f ppp < fff* *f ppp < fff* *f ppp < fff*

Ob. 2 *f ppp < fff* *p f p f p f ppp < fff* *f ppp < fff* *f ppp < fff* *f ppp < fff* *f ppp < fff*

Cl. 1 *mp*

Cl. 2 *mp* *ppp*

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2 *ppp* *mp*

Tpt. 1

Tpt. 2 *ppp*

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

H

Timp.

Cym.

B. D. *f*

Glock.

Vib.

Hp.

Pno.

Vln. I *ppp < fff* *col legno* *arco* *ppp < fff* *ppp < fff*

Vln. II *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff*

Vla. *ppp* *gliss.* *ppp < fff* *arco* *ppp < fff* *ppp < fff* *ppp < fff*

Vla. *ppp* *gliss.* *ppp < fff* *arco* *ppp < fff* *ppp < fff* *ppp < fff*

Vc. *ppp* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff*

Vc. *ppp* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff*

Cb. *ppp* *arco* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff*

Cb. *ppp* *gliss.* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff*

Cb. *ppp* *arco* *ppp < fff* *ppp < fff* *ppp < fff* *ppp < fff*

f nat. *p*

This page of a musical score, page 8, contains the following instruments and parts:

- Flutes (Fl. 1, Fl. 2):** Flute 1 has two parts, I and J. Flute 2 has two parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *p*.
- Oboes (Ob. 1, Ob. 2):** Oboe 1 has two parts, I and J. Oboe 2 has two parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *p*.
- Clarinets (Cl. 1, Cl. 2):** Clarinet 1 and 2 parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *p*.
- Bassoons (Bsn. 1, Bsn. 2):** Bassoon 1 and 2 parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *p*.
- Horns (Hn. 1, Hn. 2):** Horn 1 and 2 parts, I and J. Dynamics include *ppp* and *mp*.
- Trumpets (Tpt. 1, Tpt. 2):** Trumpet 1 and 2 parts, I and J. Dynamics include *mp* and *ppp*. Includes *gliss.* instruction.
- Trombones (Tbn. 1, Tbn. 2, B. Tbn., Tba.):** Trombone 1 and 2 parts, I and J. Bass Trombone and Tuba parts, I and J. Dynamics include *mp*, *f*, and *fff*. Includes *gliss.* instruction.
- Timpani (Timp.):** Timpani part, I and J. Dynamics include *mf*, *f*, and *mp*.
- Cymbals (Cym.), B. D., Glock., Vib., Hp., Pno.):** Cymbals, Bells, Glockenspiel, Vibraphone, Harp, and Piano parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *mp*.
- Violins (Vln. I, Vln. II):** Violin I and II parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *mp*. Includes *gliss.* instruction.
- Violas (Vla.):** Viola parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *mp*.
- Violoncellos (Vc.):** Cello parts, I and J. Dynamics include *ppp*, *fff*, *f*, and *mp*. Includes *gliss.* instruction.
- Double Basses (Cb.):** Double Bass parts, I and J. Dynamics include *f*, *ppp*, *fff*, *f*, and *mp*. Includes *pizz.* and *arco* instructions.

48

K **L**

Fl. 1 *f ppp* *mp* *ppp* *fff* *ppp* *fff*

Fl. 2 *f ppp* *mp* *ppp* *fff* *ppp* *fff*

Ob. 1 *f ppp* *mp* *ppp* *fff* *ppp* *fff*

Ob. 2 *f ppp* *mp* *ppp* *fff* *ppp* *fff*

Cl. 1 *f ppp* *p* *ppp* *ppp* *fff* *ppp* *fff*

Cl. 2 *f ppp* *mp* *ppp* *ppp* *fff* *ppp* *fff*

Bsn. 1

Bsn. 2

Hn. 1 *f*

Hn. 2 *f*

Tpt. 1 *f*

Tpt. 2 *mf*

Tbn. 1 *mf*

Tbn. 2 *mf*

B. Tbn. *mf*

Tba. *mf*

Tim. *mf* *fff* *ppp* **K** **L**

Cym. *ppp* *mp* *ppp* *mp* *ppp*

B. D. *ppp* *fff* *fff*

Glock.

Vib. *mf*

Hp.

Pno.

Vln. I *f marcato* *fff* **K** **L**

Vln. II *f marcato* *fff*

Vla. *gliss.* *ppp* *fff* *ppp* *fff*

Vla. *gliss.* *ppp* *fff* *ppp* *fff*

Vc. *f marcato* *ppp* *fff* *ppp* *fff*

Vc. *f marcato* *ppp* *nat.* *fff* *ppp* *fff*

Cb. *ppp* *gliss.* *ppp* *fff*

Cb. *ppp* *nat.* *fff* *ppp* *fff*

57

M N

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

M N

Timp.

Cym.

B. D.

Glock.

Vib.

Hp.

Pno.

M N

Vln. I

Vln. II

Vla.

Vla.

Vc.

Vc.

Cb.

Cb.

70

P **Q**

Fl. 1 *p sempre*

Fl. 2 *p f p f p f p f p f p f p f p f p* *p sempre*

Ob. 1 *p f p f p f p f p f p* *p sempre*

Ob. 2 *p sempre*

Cl. 1 *p sempre*

Cl. 2 *p sempre*

Bsn. 1 *f p*

Bsn. 2 *f p*

Hn. 1 *ppp fff ppp*

Hn. 2 *p fff ppp*

Tpt. 1 *p fff ppp*

Tpt. 2 *mp fff ppp*

Tbn. 1 *gliss. mp fff ppp*

Tbn. 2 *gliss.*

B. Tbn. *fff mp*

Tba. *fff mp*

Tim. *mf P Q*

Cym.

B. D.

Glock.

Vib.

Hp.

Pno.

Vln. I *mf ppp gliss. mf ppp pp ppp mf ppp* **Q** *ppp*

Vln. II *mf ppp gliss. mf ppp pp ppp mf ppp*

Vla. *mp f gliss. mp f ppp mf ppp mf*

Vla. *mp f gliss. mp f ppp mf ppp mf*

Vc. *mp f ppp mf ppp mf*

Vc. *mp f ppp mf ppp mf*

Cb. *f marcato*

Cb. *f marcato*

S

T

Fl. 1 *p f p f p f p f p f ppp fff f ppp fff mf ppp mf mp ppp mp f p f*

Fl. 2 *p f p f p f p f p f ppp fff f ppp fff mf ppp mf mp ppp mp f p f*

Ob. 1 *p f p f p f p f p f ppp fff mf ppp mf mp ppp mp*

Ob. 2 *p f p f p f p f p f ppp fff mf ppp mf mp ppp mp*

Cl. 1 *p sempre*

Cl. 2 *p sempre*

Bsn. 1 *p sempre*

Bsn. 2 *p sempre*

Hn. 1 *ppp p*

Hn. 2 *ppp p*

Tpt. 1 *ppp p*

Tpt. 2 *ppp p*

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

S

T

Timp.

Cym.

B. D.

Glock.

Vib.

Hp.

Pno.

S

T

Vln. I *ppp*

Vln. II *ppp*

Vla. *ppp*

Vla. *p*

Vc. *ppp*

Vc.

Cb.

Cb.

86 **U**

Fl. 1 *p f p f p* *mp ppp mp* *mf ppp mf f ppp fff f ppp fff f ppp fff f ppp fff f ppp fff*

Fl. 2 *p f p f p f* *mp ppp mp* *mf ppp mf f ppp fff f ppp fff f ppp fff f ppp fff*

Ob. 1 *mp ppp mp mf ppp mf f ppp fff f ppp fff f ppp fff* *f p*

Ob. 2 *mp ppp mp mf ppp mf f ppp fff f ppp fff f ppp fff* *f p*

Cl. 1 *p f p f p f ppp fff mf ppp mp ppp mp*

Cl. 2 *f p f p f ppp fff mf ppp mp ppp mp*

Bsn. 1 *ppp p ppp p*

Bsn. 2 *ppp p ppp p*

Hn. 1 *ppp pp ppp p*

Hn. 2 *ppp pp ppp p*

Tpt. 1 *ppp pp ppp p*

Tpt. 2 *ppp pp ppp p*

Tbn. 1

Tbn. 2

B. Tbn. *ppp p ppp*

Tba.

U

Timp.

Cym.

B. D.

Glock.

Vib.

Hp. *ppp 8^{va}*

Pno.

Vln. I *ppp* *senza sord.* *f p*

Vln. II *ppp* *senza sord.* *f p*

Vla. *ppp*

Vla. *ppp*

Vc. *ppp* *senza sord.*

Vc. *ppp* *senza sord.*

Cb. *ppp*

Cb. *con sord. nat.* *ppp mf p mf*

V **W**

95

Fl. 1 *mp* *mf ppp* *mf* *f ppp* *fff* *f ppp* *fff* *f ppp* *fff*

Fl. 2 *mp* *mf ppp* *mf* *f ppp* *fff* *f ppp* *fff* *f ppp* *fff*

Ob. 1 *fff* *f ppp* *fff* *f ppp* *fff* *mp* *mf ppp* *mf* *f ppp* *fff* *f ppp*

Ob. 2 *fff* *mp* *mf ppp* *mf* *f ppp* *fff* *f ppp*

Cl. 1 *ppp* *p* *mp ppp* *mp* *mf ppp* *mf* *f ppp*

Cl. 2 *ppp* *p* *mp ppp* *mp* *mf ppp* *mf* *f ppp*

Bsn. 1 *pp* *ppp* *p* *mp ppp* *mp* *mf ppp*

Bsn. 2 *pp* *ppp* *p* *mp ppp* *mp* *mf ppp*

Hn. 1 *p* *fff*

Hn. 2 *p*

Tpt. 1 *pp* *p*

Tpt. 2 *pp*

Tbn. 1 *mp* *mp*

Tbn. 2 *mf*

B. Tbn. *fff* *mf* *fff* *mf*

Tba. *fff* *mf*

Timp. *fff* *mf* *ppp*

Cym.

B. D.

Glock.

Vib. *f* *p* *f* *p* *f*

Hp. *f sempre*

Pno.

V **W**

Vln. I *fff* *mf* *f* *ppp* COL LEGNO *nat.* *mf sempre*

Vln. II *mf* *fff* *ppp* COL LEGNO *nat.* *mf sempre*

Vla. *mf sempre* COL LEGNO *senza sord.*

Vla. *mf sempre* COL LEGNO *senza sord.*

Vc. *f* *mf* *mp*

Vc. *mf* *f* *mf*

Cb. *p* *pp* *mp* *pp* *mf* *pp*

Cb. *p* *pp* *mp* *pp* *mf* *pp*

98

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

Timp.

Cym.

B. D.

Glock.

Vib.

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vla.

Vc.

Vc.

Cb.

Cb.

ppp

mf

f

fff

p

pp

mp

mf

fff

p

103

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

Timp.

Cym.

B. D.

Glock.

Vib.

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vla.

Vc.

Vc.

Cb.

Cb.

mf

ppp

ppp

Accretion and Acrylics
Movement III

Allegretto Gently

Patrick Egan

1 $\text{♩} = 100$

Flute 1 *ppp*

Flute 2 *ppp*

Oboe 1

Oboe 2

Clarinet in B \flat 1 *mf* *p* *ppp*

Clarinet in B \flat 2

Bassoon 1

Bassoon 2

Horn in F 1

Horn in F 2

Trumpet in B \flat 1

Trumpet in B \flat 2

Trombone 1

Trombone 2

Bass Trombone

Tuba Harmon mute *ppp*

Timpani $\text{♩} = 100$ Allegretto *ppp*

Bass Drum

Vibraphone All notes bowed until instructed otherwise *f* *mf* *ppp*

Harp *p* 8^{va}

Piano *ppp* 8^{va}

Violin I $\text{♩} = 100$ Allegretto 8^{va}

Violin II

Viola

Viola

Violoncello

Violoncello

Contrabass *ppp* sul tasto *ppp* *pp* *ppp*

Contrabass *ppp*

5 **A**

Fl. 1 *ppp*

Fl. 2 *ppp* *ppp*

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1 *ppp* *pp*

Bsn. 2 *ppp* *ppp* *p*

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1 *p* *p*

Tbn. 2 *ppp*

B. Tbn. *ppp*

Tba. *ppp*

A

Timp.

B. D.

Vib. *ppp* *mf*

Hp. *mp*

Pno. *ppp* *p* *ppp*

A

Vln. I *ppp* *p* *ppp*

Vln. II

Vla.

Vla.

Vc. *ppp* *mp*

Vc. *ppp*

Cb. *pp* *ppp* *p* *pp* *p* *pp*

Cb. *ppp*

mute

open

Harmon mute

con sord.

sul tasto

8 B

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

Timp.

B. D.

Vib.

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vla.

Vc.

Vc.

Cb.

Cb.

open

p

mp

Harmon Mute

ppp

Harmon Mute

ppp

mp

ppp

mf

open

mf

open

mf

ppp

open

mf

ppp

mp

mf

sul tasto

ppp

f

pp

3sul pont.

ppp

f

mp

pp

mp

ppp

mf

mp

pp

pp

pp

pp

p

C

Fl. 1 *ppp* *p* *ppp*

Fl. 2 *mp* *pp*

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2 *ppp*

Hn. 1 *ppp* *mp* *ppp* *pp*

Hn. 2 *ppp* *mp* *ppp* *pp*

Tpt. 1 *ppp* *mp* *ppp* *pp*

Tpt. 2 *ppp* *mp* *ppp* *pp*

Tbn. 1 *ppp* *mp* *ppp* *pp*

Tbn. 2 *ppp* *mp* *ppp* *pp*

B. Tbn. *ppp* *mp* *ppp* *pp*

Tba. *ppp* *mp* *ppp* *pp*

Timpani

B. D. *ppp*

Vib. *p* *f* *mp* *p* *ppp* *p* *mp* *mf*

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

Piano *ppp*

Vln. I

Vln. II

Vla. *ppp* *mp* *ppp* *ppppp* *sul pont.*

Vc. *pp* *mp* *pp* *p*

Vc. *pp* *mp* *pp* *p*

Cb. *p* *ppp* *p* *ppp* *p* *ppp*

Cb. *ppp*

D **E**

Fl. 1 fluttertongue

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1 *ppp*

Bsn. 2 *mp*

Hn. 1 *pp*

Hn. 2 *pp*

Tpt. 1

Tpt. 2

Tbn. 1 *p* *ppp*

Tbn. 2 open *ppp*

B. Tbn.

Tba. Harmon Mute *p* *ppp*

Timp. **D** **E**

B. D.

Vib. *p* *ppp* *mf* *mp* *p* *mf*

Hp. *mp* *mf* *mp*

Pno. *ppp*

rubato try to not accentuate any one note, aim to produce an indistinct mesh of sound

Vin. I **D** **E**

Vin. II

Vla. sul pont. *ppp*

Vc. *pp* *p* *pp* *p* sul pont. *ppp*

Vc. *ppp* *pp* *p* *ppp* *p* *ppp*

Cb. *p* *ppp* *pp* *p* *ppp*

Cb.

24 nat. **F**

Fl. 1 *p* *ppp*

Fl. 2 *p* *ppp*

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1 *ppppp*

Bsn. 2 *ppp*

Hn. 1 Harmon mute *pp*

Hn. 2 Harmon mute *pp*

Tpt. 1 *pp*

Tpt. 2 *pp* *p*

Tbn. 1

Tbn. 2 *p* *ppp*

B. Tbn. *ppp* *p* *ppp*

Tba. *ppp*

Plunger mute *ppp*

Plunger mute *ppp*

F

Timp.

B. D. *ppp* *p* *ppp*

Vib. *pp* *mf* *f* Bowed

Hp. *f* *mp* *p*

Pno. *mf* *f*

Vln. I **F**

Vln. II

Vla. *ppppp* sul pont.

Vla. *p*

Vc. *ppppp* sul tasto

Vc. *ppppp* sul tasto

Cb. *ppp*

Cb. *ppp*

G

36

Fl. 1 *mp*

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2 *p*

Bsn. 1

Bsn. 2 *ppp* *p* *ppp*

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2 *ppp*

Tbn. 1 *ppp*

Tbn. 2 *p* *ppp* *ppp* *p* *ppp*

B. Tbn.

Tba. *p* *ppp*

G

Timp. *p*

B. D. *ppp* *p*

Vib. *mf* *p* *mf* *mp* *p* *mf*

Hp. *p* *mp*

Pno. *ppp* *p* *ppp*

G

Vln. I

Vln. II

Vla. *ppp* *mp*

Vla. *p*

Vc. *ppp* *mp* *ppp* *mp* *ppp* *mp*

Vc. *mp* *ppp* *mp* *ppp*

Cb. *mp* *ppp* *mp* *ppp*

Cb. *p* *mp* *ppp* *mp* *ppp*

H

Fl. 1
Fl. 2
Ob. 1
Ob. 2
Cl. 1
Cl. 2
Bsn. 1
Bsn. 2

Hn. 1
Hn. 2
Tpt. 1
Tpt. 2
Tbn. 1
Tbn. 2
B. Tbn.
Tba.

Plunger mute
Plunger mute
Plunger mute
Plunger mute
Plunger mute

open
ppp
mp
p
ppp
p
ppp
ppp
p

H

Timp.
B. D.
Vib.
Hp.
Pno.

> ppp
ppp
mp
p
p
mf
mf
p
ppp

H

Vln. I
Vln. II
Vla.
Vla.
Vc.
Vc.
Cb.
Cb.

con sord.
con sord.

ppp
mp
ppp
mp
ppp
ppp
mp
ppp

55

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1
Plunger mute
ppppp

Tpt. 2
p

Tbn. 1
Harmon mute
ppp

Tbn. 2
Harmon mute
ppp

B. Tbn.
ppp

Tba.
ppp

Timp.

B. D.

Vib.

Hp.
mf p mf ppp

Pno.
ppp mf

Vin. I

Vin. II

Vla.

Vla.

Vc.
ppp mp ppp

Vc.
mp ppp

Cb.
mp ppp

Cb.
mp ppp

senza sord.

senza sord.

J

65 **K** **L**

Fl. 1 *ppp* *mp* fluttertongue

Fl. 2 *ppp*

Ob. 1 *ppp*

Ob. 2 *ppp*

Cl. 1 *ppp* *mp*

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1 Plunger mute, gradually opening open *ppp* *mp*

Tpt. 2 open *ppp* open *mp*

Tbn. 1 *ppp* open *p* *ppp* *ppp* *p*

Tbn. 2 *ppp* open *p* *ppp* *ppp* *ppp*

B. Tbn. open *ppp* open *p* *ppp* *ppp* *p* *ppp*

Tba. *ppp* open *p* *ppp* *ppp* *p* *ppp* *p*

K **L**

Timp.

B. D. *p* *ppp*

Vib. *ppp* Use mallets *ppp*

Hp. *mf* *p* *mf* *ppp*

Pno. *mf* *ppp*

K **L**

Vln. I

Vln. II

Vla. *ppp*

Vc. *ppp* *mp* *ppp* *mp* *ppp*

Vc. *ppp* *mp* *ppp*

Cb. *ppp* *mp* *ppp*

Cb. *ppp* *mp* *ppp*

mp *ppp* *mp* *ppp*

N

O

Fl. 1 *ppp* *nat.*

Fl. 2

Ob. 1 *ppp*

Ob. 2

Cl. 1 *ppp*

Cl. 2

Bsn. 1

Bsn. 2

Hn. 1

Hn. 2

Tpt. 1 *ppp* *mp* *ppp* Plunger mute, gradually opening open

Tpt. 2 *ppp* *mp* *ppp* harmon mute open

Tbn. 1 *ppp* *p* *ppp* *ppp* *p* *ppp* harmon mute

Tbn. 2 *ppp* *p* *ppp* *ppp* *p* *ppp* *ppp* *p* *ppp* harmon mute

B. Tbn. *ppp* *p* *ppp* *ppp* *p* *ppp* *ppp* *p* *ppp* harmon mute

Tba. *ppp* *p* *ppp* *ppp* *p* *ppp* *ppp* *p* *ppp* harmon mute

N

O

Timp.

B. D. *ppp* *p* *ppp* *ppp*

Vib. *mp* *p* notes bowed until instructed otherwise

Hp. *ppp*

Pno.

N

O

Vln. I *ppp*

Vln. II

Vla. *ppp* Gradually moving from sul tasto to sul pont

Vc. *ppp* *mp* *ppp* *mp* *ppp* *mp* *ppp* *mp* *ppp* con sord.

Vc. *mp* *ppp* *mp* *ppp* *mp* *ppp* con sord.

Cb. *mp* *ppp* *mp* *ppp* *mp* *ppp* *ppp* *p*

Cb. *mp* *ppp* *mp* *ppp* *mp* *ppp*

110

Fl. 1

Fl. 2 *nat. 3* *ppp* *p*

Ob. 1

Ob. 2

Cl. 1 *p* *ppp*

Cl. 2

Bsn. 1 *mute* *ppp* *mp*

Bsn. 2 *mute* *ppp*

Hn. 1

Hn. 2

Tpt. 1

Tpt. 2

Tbn. 1 *Plunger mute* *ppp*

Tbn. 2 *Plunger mute* *ppp* *p*

B. Tbn. *ppp* *mp*

Tba. *ppp*

Timp.

B. D.

Vib.

Hp. *mf* *fff*

Pno. *mp*

Vln. I *con sord.* *ppp* *p*

Vln. II

Vla.

Vla.

Vc. *ppp*

Vc. *senza sord. sul tasto* *ppp*

Cb. *pp* *ppp* *p* *pp* *p* *pp*

Cb.

121

Fl. 1 *f* *nat.*

Fl. 2 *f*

Ob. 1 *f*

Ob. 2 *f*

Cl. 1 *f*

Cl. 2 *f*

Bsn. 1 *p* *p* *mf* *p*

Bsn. 2 *p* *mf* *p* *p* *mf*

Hn. 1 *mf* *f* *ppp* *p* *f*

Hn. 2 *fff* *ppp* *p* *f*

Tpt. 1 *fff* *mp* *p* *f* *p*

Tpt. 2

Tbn. 1 *mp*

Tbn. 2 *ppp*

B. Tbn. *mp* *mf* *fff* *mf* *fff* *mf*

Tba. *f* *mp* *mf* *fff* *mf*

Timp.

B. D. *mf*

Vib. *p* Use mallets

Hp. *mp*

Pno. *mp*

Vln. I *fff* *sul pont.*

Vln. II *fff* *sul pont.* *gliss.* *gliss.*

Vla. *mf* *sul pont.* *mp* *f* *ppp* *p* *mf*

Vla. *mf* *sul tasto* *fff* *ppp* *p* *mf*

Vc. *fff* *sul pont.* *mp* *f* *ppp* *p*

Vc. *sul pont.* *p* *p* *ppp*

Cb. *p* *ppp* *p* *ppp* *gliss.* *gliss.*

Cb. *ppp*

T
130

Fl. 1
Fl. 2
Ob. 1
Ob. 2
Cl. 1
Cl. 2
Bsn. 1
Bsn. 2
Hn. 1
Hn. 2
Tpt. 1
Tpt. 2
Tbn. 1
Tbn. 2
B. Tbn.
Tba.

T

Timp.
B. D.
Vib.
Hp.
Pno.

T

Vln. I
Vln. II
Vla.
Vla.
Vc.
Vc.
Cb.
Cb.

mp *p* *ppp*
>mp
ppp 7
ppp
mp *p* *ppp*
fff *p* *fff* *fff*
fff *p* *fff* *p* *fff*

Detailed description: This page of a musical score covers measures 130 to 132. It features a large ensemble of instruments. The woodwind section includes two flutes, two oboes, two clarinets, two bassoons, and two horns. The brass section consists of two trumpets, two trombones, a baritone, and a tuba. The percussion section includes timpani, a bass drum, and vibraphone. The keyboard section includes harp and piano. The string section includes two violins, two violas, two violas, two violas, two cellos, and two double basses. The score is marked with various dynamics such as *mp*, *p*, *ppp*, *>mp*, *fff*, and *p*. There are also articulation marks like accents and slurs, and some fingerings are indicated with numbers like 3, 5, and 7. A section marker 'T' is present at the beginning of the page and above the string section.