
http://theses.gla.ac.uk/886/

Copyright and moral rights for this thesis are retained by the author

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given
I. On Process

David Andrew Hammond

Essay submitted in partial fulfilment of requirements of the University of Glasgow for the award of Doctor of Philosophy

University of Glasgow Music Department

June 2009
Volume I

Table of Contents

Acknowledgments .............................................................................................................. ii

List of Figures .................................................................................................................... iv

Chapter One. Introduction ................................................................................................. p.1

Chapter Two. The Portfolio ................................................................................................. p.9

1. Why Notated Chamber Music?

2. Technique

3. The Pieces

3.1. *Elegy For a Fir Tree*, for eight strings. 2004

3.2. *Coyote Nocturne*, for flute, piano and violin. 2006

3.3. *The Indian Fort Theatre*, for string quartet. 2006

3.4. *Three Moths*, for flute, bass clarinet and piano. 2006

3.5. *Catalyst or Filament*, for harp, harmonium and celesta. 2006

3.6. *Twister Season*, for vibraphone, marimba, two pianos, cello and double bass. 2006


3.9. *Stalking the Unseeable Animal*. for flute, Bb clarinet, piano and string quartet. 2007


Chapter Three. Thoughts in Conclusion .......................................................................... p.39

Bibliography ...................................................................................................................... p.42
Acknowledgments

I am grateful to my advisor, Bill Sweeney, for enabling this project to happen. Without his initial confidence in my abilities, I never would have come to the University of Glasgow. As far as his role is concerned, he has provided a constant model for the quality of discourse that is required in the life of a composer; he has introduced me to a wide array of new ideas and material; and perhaps most importantly, he has allowed for this project to on go in directions unforeseen at the outset.

The various dedicated practices of all of the staff at the University of Glasgow Music Department have constantly rejuvenated this project, and I am lucky to have been in contact with such a diverse range of activity. I am particularly indebted to my friend David Code for casting a stern, scholarly eye over the written essay accompanying this portfolio.

Many thanks go to my fellow research students in the department for supporting me both academically and personally. I am lucky to now call many of them close friends as well as colleagues.

This project would not have been possible without financial and emotional support from my closely-knit family, and more specifically from my father, Ray Hammond and my grandmother, Ruby (Memi) Gray.
And finally, I owe endless thanks to my best friend and wife Ashley Smith Hammond. Without her, not only would it have been almost impossible to complete this project, it would not have seemed worth doing in the first place.
List of Figures

Chapter One. Introduction

Figure 1. Duration cells in Bartok’s second dance in Bulgarian Rhythm.

Figure 2. The opening trio of Refrain by Franco Donatoni.

Chapter Two. The Portfolio

Figure 3. Symmetrical matrix from Elegy for a Fir Tree precompositional work

Figure 5. Use of interval set 1,5,6 in violin melody from Coyote Nocturne

Figure 6. Use of interval sets 1,5,6 and 1,4,5 in piano part from Coyote Nocturne

Figure 7. Hexachordal matrix from Three Moths

Figure 8. Disintegration of hexachordal matrix in Three Moths

Figure 9. Accumulation of material around “magnets” in Three Moths II: Callosamia prometea

Figure 10. Chromatic polychord based on minor triads from Three Moths III, Actias luna

Figure 11a. The use of magnets, bb. 42-49, Catalyst or Filament

Figure 11b. The use of magnets, bb. 115-122, Catalyst or Filament

Figure 12. The Twister in Twister Season by the author.

Figure 13. The use of “highlighters” in the finale of Twister Season.

Figure 14. Ascending bass-line treatment in Ruby My Dear, by T. Monk.

Figure 15. Chromatic movement of “sonorous figure” in Well You Needn’t by T. Monk.

Figure 16. Homage to Monk: Opening bars of Six Journeys by the author.

Figure 17. The 36-note matrix used in Six Journeys

Figure 18. Example of an “event series morph”, used in Six Journeys

Figure 19. The use of “event series morphs” in Six Journeys by the author.

Figure 20. Event duration cells in Horrificationalexander graham belladonna

Figure 21. Duration/event cells found in horrificationalexander graham bella donna

Figure 22. Chromatic self-harmonisation in horrificationalexander graham bella donna by the author.
Figure 23. Vertical and horizontal matrices for *Stalking the Unseeable Animal*

Figure 24. The “twister” in *The Lightning Bug Hour*

Figure 25. Durational cells applied to a “Twister”.

Figure 26. Mixing “undulating durations” and “event series morph” in the durational cells in the vibraphone part of *The Lightning Bug Hour*.

Figure 27. Source arpeggios for use of “undulating durations” in *The Lightning Bug Hour*.

Figure 28. Resultant durational cells in *The Lightning Hour*.

Figure 29. The use of “highlighters” in *The Lightning Bug Hour*.

Figure 30. Changing polyrhythms in the final section of *The Lightning Bug Hour*
Chapter One. Introduction

The dominant aesthetic and technical concerns of this composition portfolio are process. The central issues have materialized in process; the pieces emerged from process, and, as much as the completed works are independent of one another, they may be regarded as segments of a larger process. The practice shown here, while being reliant on post-war avant-garde composers, also reflects a society that has fundamentally changed since the mid 20th Century. The European avant-garde of that time acted in part in reaction to the fascism of the war years. My purpose in this commentary is certainly not to provide an overview of our current political and cultural situation and how we as artists should now be responding. Yet, it is necessary for me to make it clear that my concerns are not generally concurrent with the 20th Century avant-garde. The notion of compositional activity itself – not how it needs to change – comes into focus for me as much as the resulting scores and performances. I will therefore focus a great deal on process: its emergence in my practice as a composer, and the complex relationship it has to the finished pieces and to my notion of self-expression. I will show in this written commentary a balance of concern and attention between the pieces themselves – which can be regarded as finished products – and the processes, or the actions required to make the pieces, which as experiences have a degree of meaning that is free of specific expressive results.
To gain a sense of my artistic perspective on process I will narrate a particular incident. One of my many interests is butterfly photography. Digital camera technology has enabled me to examine these creatures without having to first kill them and mount them on a board. In April 2007, I encountered a Peacock butterfly outside the University of Glasgow Music Department. It was cold, the sun had gone behind some clouds, and the butterfly remained motionless for some minutes. In its torpor, I was able to use the camera to capture parts of it in almost microscopic detail, but the experience was curiously unfulfilling. By contrast, spending happy hours chasing butterflies in their lively state across fields in hopes of gathering one or two decent shots provided me with an activity that was not entirely about the pictures; it was about being there, in the world, at a particular moment. Photographing a stationary butterfly provided too much in the way of instant material results, and too little in the way of effort to give me this same feeling. Composition, regarded as a mental and physical activity, can provide this sense of Being, especially when it is realised that the material outcome of the activity, the score, is not all that is to be valued.

**Concern with process in compositional practice**

When approaching a compositional task, I often detect real antipathy among young students to discussing grammar. It is, for me, important that a dedicated approach to composition create its own grammatical field, that it be self-organised, and that the student learn not how to tick the correct aesthetic box, but, through process, how to develop a piece, and more importantly, a practice. I find when working with young people that their conceptualisation of
what a composer does has much to do with sounds, themes, textures or ideas being in some way spontaneously gifted to the composer (as evidenced by oft-used words such as “inspiration” or “muse”.) This attitude is unfortunate for the way it leaves many with the opinion that they are either stupid, or simply remain “un-chosen” by the powers-that-be. I hope to reply to this in a way that enlivens activity partly by emphasizing that the will to represent musically any idea, however simple, must take into account the change brought by the process of realising the representation, a process inside which the original idea in all of its purity is encased. The writer Annie Dillard puts it another way:

you are wrong if you think that in the actual writing, or in the actual painting, you are filling in the vision. You cannot fill in the vision. You cannot even bring the vision to light. [...] The vision is not so much destroyed, exactly, as it is, by the time you have finished, forgotten. It has been replaced by this changeling, this bastard, this opaque lightless ruinous work (Dillard, 1990, 584-585).

Dillard’s creative insight, in reference to the practice of writing, speaks of the distance between what she calls “vision”, the work as it is imagined or hoped for prior to its realisation, and what she calls, dramatically, “this opaque lightless ruinous work”. But what lies between? It is the work done to produce the work. Dillard is saddened that the vision is forgotten in the work, judging by the final sentence above. I find no cause for alarm in the fact that compositional and productive means command so much filtering and transmutation that they cannot be understood as a third party conduit, a clear
and impartial carrier of vision. These means must be acknowledged and
developed and never treated only as tool for transcribing vision.

I would like to now briefly examine a few earlier musical influences that have
shaped my attitude about the importance of process in composition. It will
then be possible to focus more directly on specific points of influence that
recently shaped this portfolio and the process that brought it about.

My early efforts at the keyboard revolved around J.S. Bach, Mozart,
Beethoven, Chopin, Debussy and Bartok. The first three of these generally
kept me on a path of “correct” tonal unfolding (which is in no way an
indictment of their value to me), and Chopin, while offering a kind of manual to
pianistic colour and ornamentation, for the most part also held me to a sense
of tonal inevitability. I understood harmony as existing entirely on a dramatic
spectrum of consonance and dissonance, which was accompanied by a
vague list of crude metaphors and cultural associations: good verses bad,
light verses dark, etc. The point was that despite all of the “bad” dissonances
along the way, which were necessary, we always ended up back in the
“good”, correct consonant intervals. It was not until I was handed the piano
music of Debussy, and later Bartok, that new possibilities emerged.

Debussy’s *La Cathédrale Engloutie* (from “Préludes”, Book 1, 1909-1910)
challenged me with an approach that was not about the working out of tonal
dramaturgy. This repertory was aesthetically transformative: where once
there was the linear spectrum of consonance and dissonance pressing
musical momentum ever forward, here now was the idea that music could ask
nothing of one’s memory or expectations, and instead direct attention to the
present moment. This, and subsequent encounters with his music, have been catalysts for my own conscious recognition of the persistent tendency toward tonal progression in the previous centuries of music written in the western tradition.

The encounter with Bartok initially brought with it a sense of vertigo. I understood a melody as something that could exist on its own, or in the contrapuntal texture found in the keyboard music of J.S. Bach, or perhaps most commonly, as a line supported by an explicit harmonic backdrop or accompaniment. But what I found in Mikrokosmos did not fit neatly into what I assumed was a complete roster of texture, or at the very least, I found that characterising the music according to these textures was not particularly illuminating. While undeniably the music was comprised of tones and contour, it was at least equally reliant on cells of repeated duration. I was possessed of a particular paradigm of texture until, specifically, I encountered No. 149 of Mikrokosmos (Figure 1).
The dilemma, not voiced as such at the time, but certainly felt, was where to focus my conceptualisation of the music. Of course, in terms of pitch material, there is a pentatonic melody that is interspersed with a repeated, accompaniment figure. But these are insignificant without the presence of this repeated “seven-ness” divided into twos and threes. A repeated rhythmic pattern that asserted itself – and that was not a characteristic of any one melody but rather a ubiquitous characteristic that could be represented in a number of ways – called into question my assumption that harmonic unfolding remained supreme in its dictation of musical structure. I began to regard control over duration as a previously undiscovered element of musical
construction, and my assumptions about duple or triple meter as the correct frameworks for the unfolding of tonal necessities began to dissolve.

I now know that decades before I was born, John Cage delivered a lecture at Black Mountain College in North Carolina entitled *Defence of Satie* (Kostelanetz, 1970, p.77 orig. 1948), in which he claimed in a polemical reference to Beethoven that “There can be no right making of music that does not structure itself upon the very roots of sound and silence – lengths of time”. This idea has made a significant mark on my approach to composing, as we will see later in a discussion of a number of duration-focused techniques. Although I do find it difficult agree with the statement entirely, particularly given the words “right making of music”, I have become fascinated with the possibility that music may be based on blocks of time, rather than tonal dramaturgy.

The ideas and works of John Cage have attracted and repulsed me and countless other composers, but his effects on me were at first felt indirectly. As a Master’s student I first encountered the late works of Franco Donatoni. The initial impression was simply that the music was like nothing I had heard before, and I wised to find out why. It was only through an examination of that which is explicitly visible in the score did I form some understanding of the relationship between this sound and the techniques that brought it about. In Figure 2 is some of the opening trio material from *Refrain* for eight instruments (1986).
Each harmonic coincidence between the viola and bass creates an incomplete chromatic cluster that is completed a semiquaver or demisemiquaver rest later by the marimba. Each coincidence event is approached by three-note cells in the bass, and precipitates in turn a response cell, often abridged, in the viola. It is difficult to know where the process begins, or what is antecedent and what is consequence, but the unfolding of a process, the sense of procedure, is undeniable. It would seem that Donatoni did not only conceive of this as music alone, or as exclusively aural, but rather as a procedure. The various relationships therein - the result of the application of a procedure - give rise to what we, at least in part through its performance, would hear.

This initial contact with Donatoni developed into a relationship to his work that has become central to this portfolio. The effect was at first comparatively superficial, as found in the short trio Coyote Nocturne. I was still asking at this point how I could construct a process in order to find a result like what I had found in pieces by Donatoni. I obtained in the experience a greater
understanding of the need to dedicate myself to the transformative means by which I arrive at a score, and to allow the piece to emerge in the process of composition instead of imagining that the work is subordinate to a preconceived vision. This would be, as we will see, a lesson that I would have to learn a few more times.

In the 1950’s Karlheinz Stockhausen once compared his approach to that of Pierre Boulez with the words “His objective is the work, mine rather the working” (Wörner, 1973, 229). The statement naturally draws my attention, but I am not engaged with fully automated, algorithmic writing. The idea that automated writing might be the way forward came first from experiences with the music of mid-century avant-garde composers, but the suggestion that this might be incomplete came by examining Donatoni’s life’s trajectory through the middle 20th century. As a young man after the Second World War, Donatoni was principally concerned with Bartok until a meeting with Maderna pointed him toward the legacy of Schoenberg and toward Darmstadt, where he first attended in 1954. The early fifties brought, not surprisingly in hindsight, imitations of Boulez and Stockhausen, but his career did not begin to evolve in a way that becomes pertinent here until, in 1959 at Luciano Berio’s home, he encountered John Cage.

Despite an initial distrust of the ideas Cage brought to Europe, Donatoni set himself on a course through the sixties and early seventies that would increasingly diminish his subjective involvement in his work (Osmond-Smith, 2008). The use of procedures with the “automatic character of a code”
(Patezzi, 2002, 9), devised in order to keep his ego in check, led him to the brink of utter aphasia, when, in 1974, he announced his intention to cease composing. Much has been written about what happened in the remainder of that decade, but it is enough to say that Donatoni did not live up to his word. A gathering of momentum, and, to use his words, a “recovery of the game-playing exercise in invention” (Gorodecki, 1993, 248) led to an impressively prolific second career that lasted until his death in 2000.

The change in Donatoni’s career in the mid seventies seems closely connected to his means of composition, as Gorodecki explains:

The automatic procedures, the “codes”, ceased being dry, and dessicating [sic] mechanisms. They became connected instead with precise, intuitively derived musical images. Donatoni practiced his craft of the code, constantly experimenting to see how the results of a particular set of “instructions” would differ from one group of notes to another; or, conversely, how the same piece of material would react to different codes (ibid., 248).

What seems to have changed was the connection of his “codes” or “instructions” to something more intuitively derived. Without this connection, there is a danger that the procedures may become faceless, vacant, “dry and desiccating mechanisms”.

The techniques used in this portfolio are constructed largely with this elusive relationship in mind. Despite the necessity to hold at bay the expressiveness
that is my natural, unfiltered inclination, this inclination remains linked to the conception of the methods and their intended outcome. I propose that these scores would be fundamentally different if either the intuition or the modifying techniques were excluded or given deliberate prominence.

In examining Cage’s effect on Donatoni, I find that my understanding of Cage’s ideas has evolved. His approaches, in all of their rigorous dedication to the ideas of diminished ego and Buddhistic awareness, remain thoroughly Cage-ean. In considering the gulf between Cage’s silencing approach and the approach of total serial organisation, one may aware of his critique of the way that many composers assume complete mastery over their materials. But Cage had his own assumptions, central to which was the faith that completely dissociating oneself from one’s ego is inherently beneficial. This assumption may have had value in his cultural context, and by the way that he came to his art, and by the process of exploring his own practice and his own universe of ideas. In the will to filter ones psychology, taste and history is revealed a creative will and a sense of control. It is precisely the presence of my own artistic will in opposition to the systematisation of notation that produces the complex results in my music. It is crucial that these complex results are not specifically self-expressive; in many ways I found them rather than created them, and as such, the making of a score becomes as much the sharing of an experience as it is an expression and affirmation of self.
Chapter Two. The Portfolio

1. Why Notated Chamber Music?

The necessity for musicians to interpret the scores in performance keeps me away from directly audible results while composing. There are stages, then, inherent in the activity of notated composition that tie directly into my fascination with complex processes. But the fascination with notation has older origins. My first creative conceit was graphic. As a child I drew maps of my house, my neighbourhood, places that I had made up, and then when I was older, the region around my hometown. I believe now that I was acting on a desire to understand and reveal spatial relationships, and later, geography. Despite the apparent non-coincidence of the graphical and the musical, the concern with visual presentation has persisted through my practice. Indeed, the visual is not only relevant, but also central to how I currently approach composition. The desire for this portfolio to remain notated-only partly has its foundations in my first conception of the creative act, as visual, illustrative and representative. The desire holds sway both in presenting ideas for realisation in performance, and crucially, as a device for the proliferation and transformation of temporal structure. I think of manuscript not only as the place where music is scored, but also as a graphical workspace or playground where ideas are explored and manipulated. In practice, this means repeating a cycle of writing music, photocopying it, annotating the photocopy with a list of instructions, and re-writing it on new manuscript.
The music here is scored for chamber ensembles, the largest being the string octet used in *Elegy for a Fir Tree*. I was fortunate to rehearse and record my symphonic work *Carpenter Creek* with the BBC Scottish Symphony Orchestra as a master’s student, but it soon became clear that this was a rare opportunity that was not likely to be repeated. Therefore it seemed inevitable that a continuation of symphonic writing would have necessitated the retraction of a holistic compositional process at the expense of performance. Sticking by chamber work, on the other hand, has given rise to a number of opportunities for performances and workshops with smaller ensembles.

This was a matter of circumstance, and not the only reason for the restriction. My methods have in the past relied heavily on adding more lines to a texture to vary it, rather than trying to make the most out of limited material. In *Carpenter Creek* the material was harmonically and rhythmically layered in an orchestral setting, which may have worked to some degree in that situation, but I became wary of a desire to have ever-growing forces at my command. The restriction, then, has much to do with the desire to develop a varied and constructive approach with limited physical resources.

2. *Technique*

In the following section, I will discuss each piece individually, along with a number of techniques that have been developed in the process of creating this portfolio, and that I have come to regard as pieces of delineable work in themselves. This is important to highlight, because for the most part, I have
come to start compositions by designing technical and procedural systems rather than asking myself what kind of sound I would like to make. How the piece will sound, aesthetically, emerges instinctively through the process of executing these techniques. There is a question, then, of balance between the sanctity of the designed system and my instinctive decision-making. My methodology can largely be described by the attempt to find this balance, as I do not entirely trust either purely technical or purely instinctive approaches to alone produce satisfying results.

3. The Pieces

3.1 Elegy For a Fir Tree

for eight strings

2004

Originally performed by the Scottish Ensemble in a workshop at the Centre for Contemporary Arts in Glasgow.

This piece is thoroughly delineated, both in approach and in the resulting form. In the first part (to b. 124), I was concerned with controlling the structure through the use expanding overlapping patterns; the second section is more instinctively constructed; and the third then returns to the more systematic approach of the first (from b. 161).

I began, as I often have done, with a simple sonority: in this case an 0,1,5 pitch-class set, which, in tonal terms, points to a major 7th chord in 3rd
inversion. In seeking greater variety, I added 0,4,5, which is an inverted version of the set and of course describes the same intervals: 1,4,5. I combined these two to form my primary row by separating the two original sets by two semitones, as this is an interval not described in the individual sets. It also interested me that the row began and ended at on the same note: B,C,E,F#A#. It is important here, as with any of my precompositional harmonies, that the sonority as well as the structural characteristic of the row is interesting to me. This beginning section of the piece is basically a building of this sonority on the page with a set of repeated rhythmic patterns, employing a series of inversions from a 36-note matrix created from the row described above. (See figure 3.) On three occasions during this section melodic material joins the building texture (from b. 17-violin 1, from b. 47-cello 1, and from b. 78-violin 1 and cello 1 together). This material differs in the fact that it is not controlled similarly through formative devices like the textural material. It is instinctively composed and set against its more mechanical backdrop.

\[
\begin{array}{cccccc}
0 & 1 & 5 & 7 & 11 & 0 \\
B & C & E & F# & A# & B \\
A# & B & D# & F & A & Bb \\
F# & G & B & Db & F & Gb \\
E & F & A & B & D# & E \\
C & Db & F & G & B & C \\
B & C & E & F# & A# & B \\
\end{array}
\]

Figure 3. Symmetrical matrix from *Elegy for a Fir Tree* precompositional work
In contrast, in the following material, bb. 124-162, I am concerned with instinctive expression. Its rhetoric is designed from my assumptions about the psychology of gesture and harmony. It was written at the piano with a harmonic identity remembered from the first section, resulting in very limited evidence of the precompositional working. I have provided below the original harmonic framework for the first 3 phrases of the middle section of the piece (bb. 124-147). Note how I began writing from the primary row of the matrix but soon left strict adherence in favour of the original 0,1,5; 0,4,5; and 0,1,5,7 harmonies, with added “passing sonorities”, which cannot be adequately explained using the precompositional workings.

Figure 4. Harmonic framework of middle section of *Elegy for a Fir Tree*
The writing re-focuses on systematic rhythmic procedures from b. 161 through to the end of the piece. During this section the use of harmony becomes sparser while the use of timbral variation from string technique becomes denser.

The piece serves as an appropriate introduction to the portfolio as it foreshadowed and galvanized my developing methodology. Writing it was one of the first occasions that I deliberately mixed heavily polarised approaches. Though here, unlike in the latter half of the portfolio, the polarised approaches are mostly partitioned in time, their resulting materials juxtaposed and not superimposed.

The title and inspiration for the piece stem from the tragedy of the last stands of Canadian taiga fir trees in Southern Appalachia. For the past 30 years these trees have been dying by the millions above a particular elevation due to the *balsam woolly adelgid*, an exotic parasite that nests in their bark. There are arguments to be made about the impact and implications of yet another loss of biodiversity, but the arguments would be lifeless for me if the loss of these trees did not make me profoundly sad. In the attempt to abstract this dichotomy by dividing my approach between the systematic and the intuitive, I hit upon what would become a guiding principle for the portfolio.
3.2. *Coyote Nocturne*

for flute, piano and violin

2006

First performed by students in the Contemporary Music Ensemble at the University of Glasgow Concert Hall.

This dates from the time when I was drawn toward Donatoni’s works from the late seventies. This first response was created in reaction to the sound of these works, rather than intimacy with his evident compositional procedure. However, the intuited response does have discreet, recognisable connections, particularly in the attempt at a lightness and mobility of line, and the registral “fixing” found bb. 39 – 77.

The approach to harmony resembles the kind of intuitive writing found in the middle section of *Elegy*, with the exception being that I created no precompositional matrix to guide me through transpositions and inversions of a set. I instead adhered loosely to a series of intervals and an idea of sonority, residing around the pitch-class set $0, 6, 11/0, 4, 11$ and its inversion $0, 5, 11/0, 7, 11$, which both describe in closed or normal position the interval sets $1, 5, 6$ and $1, 4, 5$. In the examples given below, I have outlined instances where I used this intervalllic identity to create melodic material for the piece.

From the middle section, b. 55, in the violin part:
And from b. 72 in the piano (clusters here are added as a kind of ornamentation to the melody):

The impetus for writing the piece, which is tied into an ongoing period in my creative life that has been dominated by nostalgic references to my home in Kentucky, is a memory of sleepless nights with a particularly bad summer flu. Coyotes filled the woods and fields outside my opened window with incessant, yippy chatter. Half asleep and feverish, I dreamt of a savage, bloody freedom.
3.3. *The Indian Fort Theatre*

for string quartet

2006

The Indian Fort Theatre rests deep in the woods near Berea, Kentucky. What is striking about this place is the disintegration of human art and artifice at the hands of the fecundity of a Kentucky summertime. Weeds grow through the stage and have to be hacked back for performances; mosquitoes cause outbreaks of spontaneous self-flagellation; startled deer interrupt dramatic soliloquies; and with a little luck, a lively thunderstorm cancels the show halfway through. In writing the piece, I wanted to access a crumbling of dramatic human intention. What is important to me about this crumbling, is that it allows for the world outside of human intention, something I often regard as much more beautiful. Through the piece, the expressive material, based on the same 1,5,6, interval set, gradually gives way to the more systematic writing found in the “mechanical, expressionless” postlude.

The work was originally through composed, with none of the small movements and interludes that are now delineated and named. This came at the end of the process of writing the piece as a kind of annotation to the way the piece is structured. Each movement (or section, before I thought of it as a movement) takes the 1,5,6, interval identity, typically in the contour 1,0,7, as its starting point and develops it into different forms. VII and VIIa are two different attempts to develop the material into the more controlled, homophonic lines of VIII. The decision to use both, along with the decision to
break the piece up into movements, comes from my desire to fragment obvious attempts to progress or develop material into some other material, which keeps the piece more in the “vignette” style that its form would suggest up to that point.

The interludes are progressive variations based on a more vertical deployment of the interval identity. Expressively, there is a deliberate levity in the interludes that is more a self-mocking game than a sincere gesture.

3.4. Three Moths

for flute, bass clarinet and piano

2006

First performed at the Royal Scottish Academy of Music and Drama by the Symposia Ensemble.

Due to a performance deadline, I was forced to commit to simple, purposefully designed devices that would enable more automated writing. This time I refocused on manipulating previously used pitch material through a mediated process of manipulation and variation. The pitch material used dates from 2003 when, during the course of writing music for my master’s degree, I began to use a chord sonority based on a minor-major ninth chord from the album “Sketches of Spain” by Miles Davis and Gil Evans. The chord, F,Ab,C,E,G, could be expanded into two minor triads by adding a major 3rd to
the end: F,Ab,C/ E,G,[+B]. I used the hexachordal matrix below to provide a passacaglia-like framework for the piece.

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Ab</th>
<th>C</th>
<th>E</th>
<th>G</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>F</td>
<td>A</td>
<td>C#</td>
<td>E</td>
<td>G#</td>
<td></td>
</tr>
<tr>
<td>Bb</td>
<td>Db</td>
<td>F</td>
<td>A</td>
<td>C</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>F#</td>
<td>A</td>
<td>C#</td>
<td>F</td>
<td>Ab</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>D#</td>
<td>F#</td>
<td>A#</td>
<td>D</td>
<td>F</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>D</td>
<td>F#</td>
<td>Bb</td>
<td>Db</td>
<td>F</td>
<td></td>
</tr>
</tbody>
</table>

Figure 7. Hexachordal matrix from *Three Moths*

From this matrix I utilised trichords by following them left to right, then top to bottom (FAC, EGB, DFA, etc.) and hexachords from top to bottom (FACEGB, DFAC#EG#), which also gave me a general skeletal melodic framework based on the first note of each triad (F,E,D,C#,Bb,A,F#, etc…). In the writing of *Three Moths*, the matrix was initially used in this manner strictly, though, as we can see in this passage, the passacaglia begins to disintegrate.
From the beginning the second movement of *Three Moths* (p. 38), a technique is established that would be recycled in a variety of ways over the next few years. The technique involves organising musical events around fixed points in time, or “magnets”, which are so-named by the way that the points are used to accumulate musical events that are either drawn toward the magnets or are pushed away, much the same as the attraction and repulsion properties of magnets. In the following examples, we may see how this technique is used to build the opening section of the second movement of *Three Moths*. The large arrows show the magnets placed at the beginning of every other bar.
Figure 9. Accumulation of material around “magnets” in *Three Moths II: Callosamia prometea*
By the final movement I have left aside the sequential use of the 36 note matrix and takes on a more limited, harmonically static expansion on one instance of the hexachord: B,D,F#/Bb,Db,F. Here the triads are not used sequentially, as before, but are overlapping in the texture. The expansion initially occurs by adding chromatically adjacent triads. In the piano figure from the first four bars (p. 47, bb. 1-4), we can see how portions of these triads are deployed to form a richly chromatic polychord: B,D,F# - Bb,Db,F – and C,Eb,G (Figure 10).

The writing of this piece originates from an experience on holiday in West Virginia in a cabin on the Cacapon River. My interest in American silk moths sent me searching the woods in hopes of spotting one. I was unsuccessful until, when returning to my cabin, I discovered the slaughtered remains of a Prometheus Moth outside the cave-like den of a cone-web-weaver spider. I found it horrifying and beautiful. I kept the wings.
3.5. *Catalyst or Filament*

for harp, harmonium and celesta

2006

Dr. David Code curated a concert in the autumn of 2006 in conjunction with Glasgow’s Charles Rennie Mackintosh Festival. Composers were challenged with responding to a frieze by Margaret MacDonald entitled *Seven Princesses*. The ensemble was that of Arnold Schoenberg’s *Herzgewächse*, op. 20 (1911), which was performed alongside works written by postgraduates in the department. I was, at this point, more dedicated to a system of expressiveness-diminishing procedure than at any other point during the writing of the portfolio. I spent the summer of 2006 reading John Cage, and the approaching to writing this piece is greatly influenced by his ideas of philosophical silence. In many ways I was encouraged by the attempt to deny my own intuition in this piece, but there was something about this level of self-control that that felt unsustainable, much in the same way as the over-expressive control had felt in earliest pieces. Additionally, I do not particularly like the piece. In hindsight I believe that I still need to find a way to indulge my own aesthetic desires, even if they need to be kept in check and constantly interrogated. Despite my problems with it, the writing of it represents much that was learned, both in developing my own complex approach to composition, and in maturing my relationship with the ideas of John Cage.

The ambiguity indicated by the title, *Catalyst or Filament*, is a response to the ambiguity of line Margaret Macdonald’s *Seven Princesses*. In the frieze, the
ambiguity lies in the use of line to both indicate structure and represent figuration. In my piece melodic and arpeggiated line, while being used in the procedures employed in the process of writing the harp part, also triggers, or catalyzes the other parts. This is an example of parts being composed from an already written part, the existing part providing a structure for organising new material. The harp part was given a series of “magnets” – a technique that originated in the writing of Three Moths – that occur on the note D. These magnets go on to provide a way of temporally accumulating or smearing material in the celesta part. The following examples show two ways in which the magnets are employed. Note that in the second example, the magnet series that was once based in the harp part is now rooted in the celesta, and that only every second magnet is attracting the harp arpeggios.

Figure 11a. The use of magnets, bb. 42-49, Catalyst or Filament
I set out to erode an intuitively-derived harmonic identity through a system of pitch replacement so that the original arpeggiated hexachords, Db, G, C, Eb, A, D are often only seen through the repetition of varied, yet similar, arpeggios. The harp and celesta parts of the central section of Catalyst, starting at b. 42 (figure 11.a) show the original arpeggiations, which I treated as the central event of the piece and composed outward from there. I have often employed techniques to change the ornamentation, register, dynamics, duration and general order of material, but in the writing of Catalyst or Filament I sought to obscure the specific intervallic identity of the piece.

3.6. Twister Season

for vibraphone, marimba, two pianos, cello and double bass

2006

I returned here to a more heterogeneous approach. The procedures are designed with a hedonistic, intuitive sonic goal in mind, and not with the sole intention of obscuring my creative will. We find here the first use of a
procedure that I had been struggling to develop, and which would remain and mature for the rest of the portfolio. “Twisters”, as I have come to call them only in reference to their use in Twister Season (and not vice versa), are simple generative techniques that involve arranging two pitch-class sets. These are either superimposed, to create a series of dyads, or in a monophonic back-and-forth succession to create melodic material. I will also refer to the resulting series as a “twister”, which may be deployed in a number of ways. The originating rows in Twister Season were Eb, Gb, Ab, Bb and D, E, F, G, A. I do not mind the obviousness here of a starting point based on black and white keys.

![Diagram of intervals and twister creation](image)

Figure 12. The Twister in Twister Season by the author.

One is immediately aware of a chopped-up and partially obscured presence of twisters in the piano parts of the first pages of Twister Season (p. 59). The construction of a new twister in the second piano part emerges through the
centre of the first section (bb. 73-79, p. 63), which remains fully formed and repeated through the end of the section (to b. 93, p. 64).

Another technique that emerged in the writing of Twister Season I have come to call “highlighters”, in reference to both the use of a highlighter pen to mark events in musical material that might, in a sense “trigger” other events in other instruments, and to the way the technique has parts “highlighting” moments in other parts. The technique has expanded so that marked simultaneities may affect the articulation or dynamics of events, or in any number of other ways alter the musical information in my effort to make individual parts seem energetic, charged and reactive. Take this example from the end of Twister Season:

Figure 13. The use of “highlighters” in the finale of Twister Season.
The long accented notes in the strings trigger activity in the first piano and vibraphone, which then trigger in turn activity in the marimba. This technique provides a manner of organic growth that became important to the writing of the second half of this collection (they are later frequently used in *The Lightning Bug Hour*).

This is a springtime piece, written longingly during the autumn and winter. My thoughts were occupied with weather and seasons, and specifically with that year’s outbreak of tornadoes in the Ohio Valley, which lead to a desire to create a way of arranging and transforming these discrete, wildly active “twisters”.

3.7. *Six Journeys*

for bass clarinet and piano

2006/2007

Performed at the 2007 Musica Nova festival in Glasgow by the Symposia Ensemble.

When comparing this score to the earliest scores in the portfolio, where instinctive and procedural writing occur in the pieces successively, one may note that technique and intuition can mostly be seen in *Six Journeys* as a superimposition. Here I would first operate instinctively, and then
superimpose methodical procedural changes to that instinctively derived material.

The first movement is an exception to this layered method; it was written in my guise as a pianist, instinctively, controlling only the vertical, sonorous characteristic. Here we find a harmony approach that has close ties to my training as a jazz pianist. The compositions of Thelonious Monk have had a great effect on my approach to harmony, and the source material for *Six Journeys* is certainly no exception. Many of Monk’s compositions have an approach to harmony that is unique in the jazz idiom. A formally educated classical musician may accept that a chromatically ascending bass line should be treated something like this:

![Image of musical notation](image1)

Monk provided for me an alternative that I find very compelling.

![Image of musical notation](image2)

*Figure 14. Ascending bass-line treatment in* *Ruby My Dear*, by T. Monk.*

(Monk, from *Ruby My Dear* transcription by D. Hammond)
In traditional textbook counterpoint vertical sonority arises from a proper treatment of preserved lines. In Monk, a conservation of sonority, what one might call a *sonorous figure*, creates another aural experience. This is also found in ways that are accompanied by repeated melodic figuration. Take this example, in Figure 15, from *Well You Needn’t* (beamed for clarity):

![Figure 15. Chromatic movement of “sonorous figure” in Well You Needn’t by T. Monk. (Monk, from Well You Needn’t, transcription by author)](image)

This vertical figuration, combined with static, non-leading sonorities (i.e. suspended chords, 4ths and 5ths) has become so ubiquitous in my harmonic thinking that it is now an almost unnoticed second nature. In the beginning of *Six Journeys* (Figure 16), we can see something of a subconscious homage to Monk’s harmony.
Figure 16. Homage to Monk: Opening bars of *Six Journeys* by the author.

I was attempting to capture a rotating collage of similar sonorities cast through a chromatic spectrum. On reflection, the following three-note sonorous figures, and the matrix they produce, have their origins in a familiarity with Monk tunes.

<table>
<thead>
<tr>
<th>C</th>
<th>F</th>
<th>G</th>
<th>Gb</th>
<th>Ab</th>
<th>Db</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>C</td>
<td>D</td>
<td>Db</td>
<td>Eb</td>
<td>Ab</td>
</tr>
<tr>
<td>F</td>
<td>Bb</td>
<td>C</td>
<td>B</td>
<td>C#</td>
<td>F#</td>
</tr>
<tr>
<td>F#</td>
<td>B</td>
<td>C#</td>
<td>C</td>
<td>D</td>
<td>G</td>
</tr>
<tr>
<td>E</td>
<td>A</td>
<td>B</td>
<td>Bb</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>B</td>
<td>E</td>
<td>F#</td>
<td>F</td>
<td>G</td>
<td>C</td>
</tr>
</tbody>
</table>

Figure 17. The 36-note matrix used in *Six Journeys*

After the first movement, the following five movements were technical variations in unordered degrees of distance from their intuited antecedent. A technique I have come to call an “event series morph” becomes prominent
here. The practice has its origins in *Twister Season*, but its clear and committed use is first found in *Six Journeys*. I use number cells to dictate the density of, or number of notes in, specific musical events, while maintaining an often intuitively proportional relationship to the duration surrounding the music events. The change, or “morph”, is a method of diminishing or augmenting these cells over a period of time. Execution may involve sequentially restating versions of the series, which have been incrementally diminished, in this case minus 1 per digit, until all four digits have collected at zero.

![Figure 18. Example of an “event series morph”, used in Six Journeys](image)

The originating number set for this technique, 6593, also used in various ways in *Twister Season*, comes from the elevation in feet above sea level of a personally important childhood mountain holiday spot in Tennessee. Though the number was initially arbitrary, it is important that, through experimentation, it presented satisfying results, both from a strictly subjective, sonic aesthetic perspective, and from a more abstract, proportion-based way of thinking.

This technique first serves to unfold the harmonic material in the second movement by organising itself around points in time, with piano grace notes leading up to the points in time, and bass clarinet trilled notes being triggered
by these points in time. A close examination will show that, while I was strict with the numbers in the piano part, the bass clarinet part serves more as an approximation of the series, and is sometimes left out altogether. Further analysis will show various amounts of ornamentation applied to the realised cells. Shown in figure 19 are the original 4 digits followed by the first diminished permutation (numeric divisions are given in triangle enclosures).
The morph runs its course to the end of the second movement and is restarted for the third (from b. 51, p. 83) with the addition of rising chromatic seventh appendages on each statement from the series, and a meter-enforced transformation half way through the movement. The series, like any numeric sequential approach, is easily reversed (0010, 0020, 0030, 1040, etc...), and one may see such a reversion at work from the beginning of the fourth movement (from b. 81, p. 86).

In short, the morphing technique used here has little to do with what happens, and everything to do with when whatever it is that is happening takes place, and how that changes over time.

I understand composition partly as exploration, or expedition. The title here comes from the un-fixing effect that walking through the varied neighbourhoods of Glasgow has on my thinking. I am drawing a line that connects the idea of wandering and discovering with the idea of
experimentation in writing music. This piece is, in a sense, six different journeys through a similar but varying landscape.

3.8. *horrificationalexander graham belladonna*

for flute, electric guitar and bass clarinet

2006/2007

This piece is unique in a few obvious ways, but not the least in the trajectory it followed during the course of writing it. In 2006 I was asked by an instrument inventor in Boston to write something for his trio, which included flute, electric guitar and his remarkable, prototype 3 note didgeridoos. It was a worthy project, but by the time I had finished, or thought that I had finished, he had had a falling out with the other trio members and any opportunity for performance evaporated. I was left with a piece of music that represented a lot of work and the coming together of a number of techniques that I had been trying to develop. I felt I needed to rewrite it into something, which became the piece now found in this portfolio. This history is worth mentioning because the three original rows, or modes as I seem to have called them in my sketches, are based on the three notes playable on the didgeridoos. It certainly is not the piece that it once was, but I like the fact that it has a harmonic imprint of its quirky inception.

The modes based on didgeridoo notes B, C, D are as follows:

[B, D, D#, F, A#]  [C, Eb, E, Ab, Bb]  [D, F, F#, A, D#]
I will now examine how these modes are used in conjunction with another number technique to create the material in the flute part starting on b. 25 (p. 102). Here I have used duration/event cells based a contiguous set of integers (1,2,3,4,5… etc), where non-prime numbers indicate the playing of a three-note, upward arpeggio, and prime numbers indicate the playing of a held note. The note can be either held for the entire duration of that prime, or that duration can be given a rest as well. Here is the number series in its expanding durational cells:

\[
1,2,3,2,1 \quad 1,2,3,4,5,4,3,2,1 \quad 1,2,3,4,5,6,7,6,5,4,3,2,1
\]

\[
1,2,3,4,5,6,7,8,9,10,11,10,9,8,7,6,5,4,3,2,1 \quad \text{etc}...
\]

Figure 20. Event duration cells in Horrificalexander graham belladonna

Note that the extent of each cell (e.g., the highest number) is based on the prime number series.

Figure 21. Duration/event cells found in horrificalexander graham bella donna

There is a harmonisation technique used in this piece that is not directly derived from the precompositional materials, occurring rather in the building of harmonic cells after applying the precompositional material. These
harmonic cells could be anything. For example, I could to build a series of 4ths over a given melodic line, or I could build a series of sonorities, or a “chord sonority colour”, over a melodic line. In the following flute and guitar statements (Figure 22), I built a chromatic pitch-class cluster around the notes in the pre-existing bass clarinet solo. The technique is used to ornament the melodic material with clusters placed in the octaves above the melody.

Figure 22. Chromatic self-harmonisation in *horrificationalexander graham bella donna* by the author.
The harmonisations in the guitar and flute part form lines that, once established, become musical objects in themselves that are expanded outward in time through the section.

The text is derived from a word game that requires the replacement of logical syntax with one based on common words or syllables, thus “horrific – fictional – alexander graham bell – belladonna”. It is not unrelated to more visual surrealist games such as Consequence and Exquisite Corpse. It has always struck me that in music composition, one may abstract the idea of syntax, leaving it up to a different logic based on tradition and assumption or, as is often the case in my practice, any number of purpose-built syntactical conventions. The setting of text here is far less concerned with the tradition of song, and far more with creating a connection between this reassignment of musical syntax and the above-mentioned game. The connection lies largely in the use of a series to dictate the number of syllables in each word or phrase as well as the duration of much of the musical material. The message, partly didactic, is intended to be that according to traditional, classical formal arrangements, “you can’t get there from here”.
3.9. *Stalking the Unseeable Animal*

for flute, Bb clarinet, piano and string quartet

2007

First performed at *Sound Thought 2007* at the University of Glasgow Concert Hall.

Wendell Berry’s poem *To the Unseeable Animal* provided for me a compelling connection between what I am trying to do in composition and his idea of the “unseeable”, which is rooted in his idea of wilderness. In a sense, the writing of this piece was an attempt to become utterly immersed in process – lost in the wilderness, as it were – in search of something I knew I would never fully find. It is a comment on process as the point in compositional practice, with specific attention to the words “That we do not know you is your perfection and our hope”. “You”, in my self-serving interpretation, has come to mean the finished piece, it as we will see again, not knowing the nature of the thing I am trying to make is important to me.

I derive a row from the primary hexachord from *Three Moths*, which, when taken as an ordered set of intervals, feels much more melodic or linear than the originating hexachords. Therefore F, Ab, C, E G, B becomes E, F, G, Ab, B, C, or what was grouped in 3rds is now groped in seconds. A rearrangement of all of the non-inverted hexachords represented in the original matrix was used in *Stalking*, and it together with its source counterpart, provided the harmonic reservoir for the piece (Figure 23).
In the opening section of the piece, the hexachords from the original matrix and these six new hexachords were used simultaneously, the first providing a basis for the vertical harmonies of the piano and string parts, and the second providing the elongated melodic material of the woodwinds. In the second section of the first movement (from b. 73) the woodwinds return to the passacaglia-like playing of the triads from the first matrix, though superimposed in a way that diminishes the minor triad sonority.

In the final movement, the material dwells in a far more static harmonic world. Rhythmically, I am employing expanding and contracting numeric cells to produce the material, but the harmony is firmly founded on F. Forays into more distant pitch material, from the perspective of tonality, are achieved by travelling various distances through the circle of fifths.

I had a lot of hopes for this piece, which were in many ways unfulfilled by the writing of it. It is not that the goal was too lofty the problem. Rather, the problem was that what I really want in composition is to be from the start
open minded, exploratory, and to always allow for the piece to emerge from the act of writing it. I faltered in the writing of this piece. I wanted instead to reflect strictly on my preordained interpretation of the Wendell Barry poem, so the process was embedded with its own domineering belief system from the start, disallowing any divergence from the chosen path. Initial insight had already ossified before I set pencil to paper and would dominate any subsequent insights. Hegel (1910, p. 561) long ago posited the idea that pure insight is at the first instance devoid of content, and the dictating principle of *Stalking* did not leave room for this absence in the process of composing.
3.10. *The Lightning Bug Hour*

for flute, vibraphone and piano

2008

I therefore needed to continue. In writing *The Lightning Bug Hour*, the use of the Annie Dillard quote, as well as the final section to which it largely relates, were not employed from the start, but instead emerged from the process. The title and the text came from an act of discovery, and were not dictated by a pre-conceived vision of the piece.

To start, I set about examining the suspended chord harmonies, C,F,G/Gb,Ab,Db, from *Six Journeys*. An inverted transposition of both triads gave me G,C,D/Ab,Db,Eb, This provided the initial building block for this piece, which I put into a row in the first instance using the “twister” technique. As we have seen, the procedure was generated for, and developed during, the writing of *Twister Season*, and was at first simply a playing technique for the piano. But the possibilities as a tool for permutation became obvious, so here the technique re-emerges here. The cells, G,C,D and Ab,Db,Eb,(Ab) are mixed, or superimposed, giving a repeated Ab to the second cell. The following row emerges from the permutation.

![Figure 24. The “twister” in *The Lightning Bug Hour*](image-url)
This material is then divided with inserted space using a series of “undulating durations”, a technique with origins in *Horrifictionary* and *Stalking the Unseeable Animal*, which deploys a sequential prime number series that expands or contracts in cells. Here are the first two cells used, the result of which can be found in b. 39 of the vibraphone part in *The Lightning Bug Hour*, p. 147. Note that the durations oscillate between being represented by notes and rests.

```
cell 1
5.3.2.3.5.7.5.3.2.3.5
```

![Figure 25. Durational cells applied to a “Twister”.

The duration series is then subject to the “event series morph” technique, which originates from *Six Journeys*, whereby the cells proceed by diminishing through a series of odd and even numbers crossed with the idea of prime and non-prime numbers, with 2 providing the most common ground. ‘In Figure 26, note numbers are in square enclosures and rest numbers are in round enclosures.
cell 1 | cell 2 | cell 3
---|---|---
5.3.2.3.5.7.5.3.2.3.5 | 4.2.1.2.4.8.4.2.1.2.4 | 3.2.3.5.3.2.3

Figure 26. Mixing “undulating durations” and “event series morph” in the durational cells in the vibraphone part of *The Lightning Bug Hour*.

The most demonstrative, almost self-evident example of these undulating durations can be found in *The Lightning Bug Hour*, starting at b. 155, p. 153. The technique deploys an insistent arpeggio and its altered counterpart:

![Original and Inverted Arpeggios](image)

Figure 27. Source arpeggios for use of “undulating durations” in *The Lightning Bug Hour*.

The alternating arpeggios are gradually exposed in the duration series, taking a semiquaver as equal to 1. I modified the technique in this instance by separating the cells with semiquaver rests, as seen here in Figure 28. (R=semiquaver rest)
Figure 28. Resultant durational cells in *The Lightning Hour*.

Though much of the material in *The Lightning Bug Hour* is derived from these partitioned durational techniques, there are some instances where the material is “grown” on the staves, similar to the self-harmonisation technique used in *Horrifictional*. In the example below, from bb. 87-89, the longer durations in the piano part precipitate ascending and descending chromatic gestures from the vibraphone and flute.

Figure 29. The use of “highlighters” in *The Lightning Bug Hour*. 
We can see in this example how this kind of harmonisation can create melodic material. While the vibraphone 5ths are created a pitch-class semitone away from the source 5ths in the piano part, the corresponding flute line is created by octave responses that oscillate between the upper and lower notes of the newly-created descending vibraphone chords, resulting in new arpeggiated material. The 5ths and arpeggios in the vibraphone and flute parts are not, then, derived directly from the precompositional workings, but rather emerge after those workings have been deployed in the piano part.

In the final section (p. 168, b. 241) I attempted to write music that imitates a natural soundscape, which is something that I rarely do. I wanted to create a sense of shifting polyrhythm by setting steady semiquavers against rhythms that are constantly in flux. The fluctuation of these rhythms occur in reference to the steady pulse, insomuch as they are seen in the beat subdivided naturally, or in triplets, or as an ornamental grace notes. The dotted-line beaming of grace notes is used to show the continuity of these morphing rhythms.

![Figure 30. Changing polyrhythms in the final section of The Lightning Bug Hour](image-url)
The sound that is being imitated, and thus the title and the use of the Annie Dillard quote, occurs on warm summer evenings in my father’s back yard in Kentucky. Here we find the sounds of the town dying, and the sounds of the town’s non-human inhabitants becoming more assertive. Specifically, there is a natural polyrhythm made by the steady chirping of crickets and the more erratic sounds of tree frogs. At this time the lightning bugs begin their remarkable courtship in the twilight.

I would sit there, as the world does what it does in spite of us, and then go back into the house. This feeling of returning to a technological cocoon that featured, among other things, bright lights and the sound of television game shows instigated the writing of the final bar of this piece, which is deliberately facetious and underdeveloped. I wanted in some way to communicate this jarring psychology of the industrialised human agenda amidst a non-human world that still holds sway.
Chapter Three. Thoughts in Conclusion

I have become in many ways more concerned with means than with results. There is an argument that the movement toward a concern with means of transformation is a superficial change; that the means are simply another kind of product or piece to be sequestered and analysed. But it is precisely the presence of two objects, both the noun “work”, which is the piece itself, and the elemental structures that make up the piece; and verb “work”, or the procedures that deploy these elemental structures, which allows for complex, unexpected emergences. I would like to engage with this complexity, as I engage with the world, not to own it, or attempt to control it, but to live with it and be a part of it. A gardener may feel that they are controlling a part of the world. But through their efforts, they are perpetuating the lives of any number of plants that have species-specific agendas, which renders the gardener a kind of servant to biological necessity. A composer, similarly, is subject to their work, inseparable from it, and living it. I am highly concerned with the finished product, and I have no desire to separate myself from the scores, but rather from them as a simple and singular indication of the reason for, and worth of, compositional practice.
A passage from Wendell Berry’s *The Unforeseen Wilderness* has hung in my thinking from the beginnings of this portfolio:

What is to be known is without limit, and it is endlessly changing. Knowing it is therefore like breathing: it can happen, it stays real, only on the condition that it *continue* to happen. As soon as it is recognized that a river – or, for that matter, a home – is not a place but a process, not a fact but an event, there ought to come an immense relief: one can step into the same river twice, one can go home again (Berry, 1991, 49).

Berry is, of course, writing of objects in the world: home, the land, wilderness, and the environment. Having blended his meaning with what I do, I have become wary of an assumed truth that resides in fixed objects such as scores and recordings, and have found myself most ill-at-ease when worrying about whether they alone will stand up to scrutiny. I have directed my attention in this portfolio to what must be recognised as well: the doing, the living of a practice, and the complex integrated process of composition. Tens of thousands of composers are now making hundreds of thousands of scores; we have long since entered an era of extreme variety and of the disunity of archetypical models. The question of what composition, as practice, *does* for practitioners now stands equally with society’s need for new pieces. I realise that significant concern for the finished product is a must, but the domination of this consideration at the expense of all others would be fatal, as it would exclude that which occupies and focuses my attention to the present moment.
I have come to regard the most awe-inspiring, mind-boggling heights of artistry as superficial in the face of anything that may free a person from despair. I make no claims on enlightenment, nor do I claim that compositional process is an intrinsically enlightening path, but I feel strongly that an utter devotion to the subjective quality, or assumed objective quality in the finished object belies a kind of self-worship through achievement. This devotion, and the assertion that what I have made is more important than what I am doing, flies in the face of gratitude for the privilege of undertaking composition, and this only tends toward hopelessness. Rather, I turn my attention to what, in 1851, Thoreau succinctly called “The art of spending a day” (Canby, 1946, 20). I have found no better words for what I seek.
Bibliography

Cited

Secondary Sources


Listening Repertoire


II. Portfolio of Compositions

David Andrew Hammond

Portfolio submitted in partial fulfilment of requirements
of the University of Glasgow for the award of
Doctor of Philosophy

University of Glasgow Music Department

June 2009
Volume II

Portfolio of Compositions

Elegy For a Fir Tree ................................................................. p.1
Coyote Nocturne ........................................................................ p.17
The Indian Fort Theatre............................................................ p.24
Three Moths ............................................................................. p.38
Catalyst or Filament ................................................................ p.49
Twister Season ........................................................................ p.57
Six Journeys............................................................................. p.80
horrificationalexander graham belladonna .............................. p.97
Stalking the Unseeable Animal ................................................ p.113
The Lightning Bug Hour .......................................................... p.142
Elegy for a Fir Tree
for eight strings

Score

Drew Hammond

2004
Elegy for a Fir Tree

for eight strings

Score

Violin 1, Violin 2, Violin 3
Viola 1, Viola 2
Cello 1, Cello 2
Bass

- All players are to be seated in a crescent shape. Left to right from the audience perspective = Violins to Bass.
- Accidentals affect only notes before which they appear, except in the case of immediate repetitions, of which there are many.
- Performance time is approximately 10 minutes.
Elegy for a Fir Tree (8)

115

124 Tranquil
Elegy for a Fir Tree (10)

151

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vlc. 2

Vla. 2

Vlc. 1

Cb.

poco accel.

rall.

160

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vlc. 2

Vla. 2

Vlc. 1

Cb.

tempo

senza sord.
senza vib.

sul pont.
Elegy for a Fir Tree (11)
Coyote Nocturne
for flute, piano and violin

Score

Drew Hammond

2006
Coyote Nocturne
for flute, violin and piano

Score

-Accidentals affect only the notes before which they appear.

-In all parts grace notes are to be played as quickly as possible without losing clarity, or blurring notes together on the piano.

-Performance time approximately 6 minutes and 30 seconds.
Coyote Nocturne
for flute, piano and violin
Drew Hammond
2006

♩=55 Slow, dreamlike
Quick, Feverish
\[ \text{\begin{center} \textit{Coyote Nocturne}(5) \textbf{\textit{\$55 \ Slow, dreamlike}} \textit{\end{center}}} \]
The Indian Fort Theatre
for string quartet

Score

Drew Hammond

2006
The Indian Fort Theatre

for String Quartet

2006

-Accidentals affect only the notes before which they appear, except in the case of immediate repetition.
-The tempo markings are not to be interpreted too strictly.
-The pauses between sections are to be interpreted somewhat liberally.
-Performance time is approximately 10 min.

I. Fevered, edgy
Interlude I. Somewhat gloomy, with rubato
II. Fevered, edgy
Interlude II. Gloomier, with rubato
III. Fevered, edgy
Interlude III. Gloomier still, with rubato
IV. Fevered, edgy
Interlude IV. Somewhat gloomy, with rubato
V. Sad, expressive
Interlude V. Sad, expressive
VI. Very Agitated
Interlude VI. Somewhat harsh and austere
VII. Very Agitated
VIIa. Very Agitated
Interlude VII. Sad, expressive
VIII. Somewhat more optimistic in outlook
Postlude. Mechanical, expressionless
The Indian Fort Theatre
for String Quartet
Drew Hammond
2006

\( \frac{\text{Fevered, edgy}}{\text{Somewhat gloomy, with rubato}} \)

\( \frac{\text{I}}{\text{Violin I}} \)

\( \frac{\text{Cello}}{\text{Viola}} \)

\( \frac{\text{Sul pont.}}{\text{Normal}} \)

\( \frac{\text{pp}}{\text{mf}} \)

\( \frac{\text{mp}}{\text{f}} \)

\( \frac{\text{pp (echo)}}{\text{rapid}} \)

\( \frac{\text{(pause)}}{\text{(pause)}} \)
\[ \frac{\text{Fevered, edgy}}{\text{Gloomier still, with rubato}} \]
Fevered, edgy

With increasing agitation

(no pause)
Somewhat gloomy, with rubato

The Indian Fort Theatre (5)
Sad, expressive

V

115

(no pause)

121

INTERLUDE

V

126

(long pause)
\[ \text{\textcopyright 1959 by The Indian Fort Theatre (7)} \]

\begin{center}
\textbf{VI}
\end{center}

\textbf{132} \textit{su pont. on the strings}

\textbf{138} \textit{SF}

\textbf{144} \textit{(no pause)}

\textbf{149} \textit{sf}

\begin{center}
\textbf{149} \textit{80 Sowewhat harsh and austere}
\end{center}

\textbf{INTERLUDE}

\begin{center}
\textbf{VI}
\end{center}

\begin{center}
\textbf{149} \textit{sfizz}
\end{center}

\begin{center}
\textbf{(pause)}
\end{center}

\[ \textbf{\textit{\textcopyright 1959 by The Indian Fort Theatre (7)}} \]
The Indian Fort Theatre (12)

(4\(=\)) Mechanical, expressionless

POSTLUDE

\(\sum\)
Three Moths
for flute, bass clarinet and piano

Score

Drew Hammond

2006
Three Moths

*for flute, bass clarinet and piano*

Score

- Accidentals affect only the notes before which they appear, except in the case of immediate repetition.
- Tempo markings are not to be interpreted too strictly.
- Performance time is approximately 12 minutes.

I. Automeris io

II. Callosamia promethia

III. Actias luna
I. Automeris io

Flute

Bass Clarinet

Piano

B. Cl.

Pno.

ppp

q = 90

slow roll

\( \frac{\text{ppp}}{\text{pp}} \)

\( \text{sim.} \)

\( \text{no rubato} \)

\( \text{espr., rubato} \)

\( \frac{\text{ppp}}{\text{pp}} \)

\( \text{pp} \)

\( \text{ppp} \)

\( \text{mf} \)

\( \text{f} \)

\( \text{mm} \)

\( \text{pp} \)

\( \text{p} \)

\( \text{ppp} \)

\( \text{f} \)

\( \text{pp} \)

\( \text{ppp} \)

\( \text{f} \)

\( \text{pp} \)

\( \text{ppp} \)

\( \text{f} \)

\( \text{pp} \)

\( \text{ppp} \)

\( \text{f} \)

\( \text{pp} \)

\( \text{ppp} \)

\( \text{f} \)

\( \text{pp} \)

\( \text{ppp} \)

\( \text{f} \)

\( \text{pp} \)

\( \text{ppp} \)

\( \text{f} \)

\( \text{pp} \)

\( \text{ppp} \)
Three Moths (2)
II. Callosamia promethea

Flute

Bass
Clarinet

Piano

\[ \text{Fl.} \]

\[ \text{pp delicately} \]

\[ \text{Gradually more animated} \]

Three Moths (3)
Three Moths (5)
Three Moths (7)
Catalyst or Filament
for harp, harmonium and celesta

Score

Drew Hammond

2006
Catalyst or Filament
2006

Score

-Accidentals affect only the notes before which they are placed, except in cases of repeated notes.

-All tremolos are to be measured except where marked "trem" (harmonium typically.)

-Performance time is approximately 6 minutes.

Preferred positioning:
(Harmonium and Celesta are to be turned inward slightly)

Harp

Harmonium          Celesta

(Audience)
Catalyst or Filament
for harmonium celesta and harp
Drew Hammond 2006

\[ \begin{align*}
\text{Harmonium:} & \quad \text{pp} \\
\text{Celesta:} & \quad \text{mp} \\
\text{Harp:} & \quad \text{pp}
\end{align*} \]

\[ \begin{align*}
\text{Meandering, plaintive} & \\
\text{pp} & \quad \text{mp} \\
\text{s} & \quad \text{m}\downarrow
\end{align*} \]
press both pedals and hold allowing harmonium to empty the air from its bellows
Twister Season
for vibraphone, marimba, two pianos, cello and double bass

Score

Drew Hammond
2006
Twister Season
for vibraphone, marimba, 2 pianos, cello and bass

Score

-Metronome markings are for general orientation only.
-Time signatures are for orientation and coordination. They do not indicate the phrase or rhythmic structures of the music.
-Accidental affect only the notes before which they appear, except in the case of obvious repeats.
-Vertical dotted lines are intended to provide a director/conductor with guidelines for coordinating and orchestrating the parts.
-Performance time is approximately 11 minutes.

Suggested Positions

* If possible.
Twister Season (19)
Six Journeys
for bass clarinet and piano

Score

Drew Hammond
2006/2007
Six Journeys
*for B flat Bass Clarinet and Piano*

Score in C

- Accidentals affect only the notes before which they appear.

- The dynamic range is *ppp* to *fff*. Occasionally *fff!* and *ppp!* are used to indicate that a passage is to be played as loudly or as quietly as possible.

- The tempo markings are guidelines and not to be interpreted too strictly. The pauses between sections (given in seconds) are to be regarded similarly.

- A horizontal arrow above a staff typically indicates that a change is to occur as gradually as possible.

- Performance time approximately 10 minutes.

**BASS CLARINET**

- >————— Indicates a note with a strong attack and a very slightly delayed trill. This is typically followed by a diminuendo.

- ———————— Indicates a trill with a longer delay. The delay is to be interpreted by the performer based on the distance from the beginning of the note.

- >————————— Indicates a note with an accented attack and a similarly delayed trill. The delay is to be interpreted by the performer based on the distance from the beginning of the note.

- From bar 81, I am looking for a special harmonic effect with clear tones disintegrating into (fairly uncontrolled) upper partials and then snapping back into a ‘correct’ tone at the *sf*.

**PIANO**

- There are no pedal indications in the piano part. The performer is to use the sustain pedal at their own discretion.
Six Journeys
for bass clarinet and piano
Drew Hammond
2007

\( \frac{d}{\text{bass clarinet}} \)
\( \frac{d}{\text{piano}} \)
\( \text{ppp} \)
\( \text{mf} \)
\( \text{p} \)
\( \text{pp} \)

Somewhat Peaceful in Outlook
with rhythmic flexibility

\( \text{poco accel.} \)
\( \text{(tempo)} \)

\( \text{rall.} \)

~ 6 SECONDS
Six Journeys (4)

43

46

49

~ 3 SECONDS

51

Slightly Faster and More Playful

III
Six Journeys (7)
A little faster, frantic (∴ 78)

Six Journeys (10)
Six Journeys (12)

140

Brighter, stronger

4 SECONDS

= legato line
with increasing serenity

rit.

tempo

rit.

tempo
Distant, Restless

VI

with rhythmic flexibility

accel.

(tempo)

sf honk!

(tempo)
More agitated, very frantic! (\( \frac{3}{4} = c.55 \))
horrifictionalexander graham belladonna

for flute, guitar and Bb Bass Clarinet

Score

Drew Hammond

2006/2007
The words used here are an execution of a free association game. One participant starts with one word or phrase and the next participant has to find a new word or phrase that is tied to the original by a pivotal word or syllable at the end of the first word or phrase. The pivots are highlighted or underlined below.

In this case, I controlled the syllable duration outcome of this game with a series of predetermined prime numbers, which is closely related to how much of the musical material was obtained as well. I also allowed myself to create statements that are not immediately recognisable, which is unlike what one would typically do when playing the game.

I think of the game as a kind of journey where the travellers haven’t the foggiest clue where they are going. As such, the text and the music are meant to be anti-formal and anti-narrative. I simply want it to be clear that “you can’t get there from…”

you can’t get there from
hereafter, at any time
is always on our
side of the
road through the blue ridge
mountains have always been my
homeless people are often blamed for their own
Situationist Bauhaus

horrifictionalexander graham bella donna, often called deadly night shade-ing and abetting a Crimean Tatar

Fraser Firs are dying out do to an invasive
exotica, part of the first world value
systematise, then destroy

you can’t get there

terrafirmaterialistriptichothraphyeloquenttainingLyon, the gastronomic capital of France

the speed of sound is is extremly slow when compared to
the average size of the world’s animals is just smaller than a house
fly with me, let’s float down to Peru, in lama land
locked nations are never world
powers of deduction can not help
you can’t get there from
here and now
**Bass Clarinet**
--The x’d out notes in the bass clarinet part indicate a lip popping sound at that pitch. The effect is to be as much like striking the end of a pvc pipe as possible.
-In the final section (page 9, system 4 – end) the clarinet player is required to sing, or hum through the droning parts. This is to be done without too much concern, particularly in the long glissandi, with pitch accuracy.

**Flute**
- Straightforward, standard notation.
- Spoken parts are written out on the same staff due to a flutist’s inability to talk while playing.

**Guitar**
- A large hollow-body electric guitar with a tube amplifier should be used. The tone should be warm without too much high end.
- The spoken parts and the played parts are written on the same staff until the final section (pages 9 and 10).
- The tremolo in the guitar part should be played very fast, except where specifically indicated (pages 7-9, measures 134-172.) A plectrum may be useful with the very fast tremolo depending on the guitarist’s technique.

**Voice**
- All spoken parts use x’ed out note heads on a one-line staff. The line indicates the natural centre of the voice range for any given instrumentalist; the melodic contour given is merely a guideline to the rise and fall of the performer’s natural speaking voice. Rhythms should, however, be interpreted strictly.
- The expression indications above the spoken parts are to be taken very seriously to achieve a not-so-serious outcome. My hope for this piece is that it approaches a kind of musical theatre.
- I am not at all concerned with classical voice quality in this piece. The performers should use their most natural, relaxed voice for the singing parts. Any sung parts that are too low may be transposed into whatever octave is easiest.

**General**
- Accidentals affect only the notes before which they appear with the exception of repeated notes.
- Tempo markings are merely a guideline.
- **chuffed** adj. Someone who describes themselves as being chuffed is generally happy with life. (http://english2american.com/dictionary/c.html)
- Performance time is approximately 7 minutes.
horrificationalexander graham belladonna

Drew Hammond
2007

Flute

\[ \frac{75}{\text{mp (confused)}} \]

you can't get there from

<table>
<thead>
<tr>
<th>Bass Clarinet</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ \frac{ppp}{\text{mf ppp}} ]</td>
</tr>
</tbody>
</table>

Guitar

<table>
<thead>
<tr>
<th>Fl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ \frac{pp}{\text{mf pp}} ]</td>
</tr>
</tbody>
</table>

\[ \text{flz.} \]

breath at anytime

B.C.}

\[ \frac{pp}{\text{mf ppp}} \]

is always on

\[ \frac{pp}{\text{mf ppp}} \]
horrificationalexander graham belladonna (6)
horrifiction
alexander graham belladonna (11)
(smarmy)

188

193

End
Stalking the Unseeable Animal
for flute, Bb clarinet, piano and string quartet

Score

Drew Hammond
2007
Stalking the Unseeable Animal

for flute, clarinet, piano and string quartet

Score

1. Accidentals affect only the notes before which they appear.
2. The pianist is to use the sustain pedal at their discretion where no pedalling is marked.
3. Tempo markings need not be followed too strictly
4. Performance time is approximately 15 minutes.

I. Self
II. Forest
III. Forgetting

To the Unseeable Animal

My Daughter: "I hope there's an animal somewhere that nobody has ever seen, and I hope nobody ever sees it."

Being, whose flesh dissolves at our glance, knower of the secret sums and measures, you are always here, dwelling in the oldest sycamores, visiting the faithful springs when they are dark and the foxes have crept to their edges. I have come upon pools in streams, places overgrown with the woods' shadow, where I knew you had rested, watching the little fish hang still in the flow; as I approached they seemed particles of your clear mind disappearing among the rocks. I have waked deep in the woods in the early morning, sure that while I slept your gaze passed over me. That we do not know you is your perfection and our hope. The darkness keeps us near you.

Wendell Berry
Stalking the Unseeable Animal (4)
Stalking the Unseeable Animal (6)
Stalking the Unseeable Animal (9)

faster and more fluid (\(\ddot{\text{b}}\) 100)

\[\]
Stalking the Unseeable Animal (10)
II. Forest

\( \frac{\text{\textit{Distant, mysterious}}}{48} \)

Flute

Clarinet

Piano

Violin 1

Violin 2

Viola

Cello

Stalking the Unseeable Animal (14)
A little faster, more motion  \( \frac{5}{5} \)

*Fl.*

*Cl.*

*Pno.*

*Vln. 1*

*Vln. 2*

*Vla.*

*Vlc.*

*Vla.*

*Vlc.*

Stalking the Unseeable Animal (16)
III. Forgetting
(no pause)
Stalking the Unseeable Animal (18)
Stalking the Unseeable Animal (23)
The Lightning Bug Hour
for flute, vibraphone and piano

Score

Drew Hammond

2008
The Lightning Bug Hour
for flute, vibraphone and piano

SCORE

- Accidental only affect the notes before which they appear, except in the case of obvious repeated notes.

- Tempo markings need not be interpreted too strictly.

- The frequent use of vertical lines indicates important points of coordination between the parts. These are to be exploited in the interpretation by the performers.

Vibraphone:
- Pedal indications, where they are given, are to be interpreted strictly. All other pedal phrasing is to be played to the best of the performer’s ability.

Piano:
- Pedal indications in the first section (bars 1-30) are to be strictly interpreted. The sostenuto pedalling is to be treated similarly. All other pedalling is to be used at the performer’s discretion.
- The frequent use of $f f z$ on isolated major 7th and minor 9th chords in the piano part is to be played as loudly as possible (e.g. bars 30, 57 and 101).

Flute:
- In the final section, bars 244-271, grace notes are given with a dotted line connecting them to the other parts. Depending on where the line falls, the grace notes are to be played on the beat or in the standard way, just before the beat, and as quickly as possible in both cases.

- Performance time is approximately 15 minutes.

performance layout:

PIANO

VIBRAPHONE

FLUTE

Cicadas [...] were out in full force. Their stridulations mounted over the meadow and echoed from the rim of the cliffs, filling the air with a plaintive, mysterious urgency. I had heard them begin at twilight, and was struck with the way they actually do “start up”, like an out-of-practice orchestra, creaking and grinding and all out of synch. It had sounded like someone playing a cello with a wide-toothed comb. The frogs added their unlocatable notes, which always seem to me to be so arbitrary and anarchistic, and crickets piped in, calling their own tune which they have been calling since the time of Pliny, who noted bluntly of the cricket, it “never ceaseth all night long to creak very shrill.”

-Annie Dillard
A Pilgrimage at Tinker Creek
The Lightning Bug Hour (2)
The Lightning Bug Hour (7)
The Lightning Bug Hour (vi)

\( \text{Tempo} \ 1 \)

\( \text{q} \ 107 \)

\( \text{pp} \)

\( \approx \)

Quiet, pensive
The Lightning Bug Hour (15)
The Lightning Bug Hour (17)
The Lightning Bug Hour (18)
The Lightning Bug Hour (19)
The Lightning Bug Hour (20)
The Lightning Bug Hour (21)
The Lightning Bug Hour (22)

Very animated!
The Lightning Bug Hour (27)