

**MIMESIS, MEMORY, AND BORROWED
MATERIALS: A PORTFOLIO OF COMPOSITIONS**

by

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Declaration

I declare that the nine musical compositions and the accompanying commentary that constitute this submission are my own work and that, to the best of my knowledge and belief, they contain no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the University of London or other institution of higher education.

9/v/13

Abstract

This thesis consists of a portfolio of nine musical compositions with accompanying recordings and commentary. The works included range from solo chamber music to large ensemble and explore the notions of mimesis, memory, and borrowed materials in musical composition. The commentary begins by providing a framework and historical context to the portfolio and in particular explores mimesis as an aesthetic device across the centuries and art forms. *Music for amateurs* and *multiple tempi* are then presented as two sub facets within the main research before a detailed exploration of the various source materials ensues. The commentary examines different approaches taken to an eclectic mix of source materials including popular music, hymns and plainchant, and music from the classical canon. Questions raised by writing music with multiple tempi or for amateurs are addressed before a general conclusion examining approaches to melody, harmony, rhythm, and form, across the portfolio.

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PORTFOLIO OF COMPOSITIONS

Orchestral Music

Through Glass Mountains (2010-2012) *c1 hour Chamber Orchestra*

Epithalamium (2010) *c8 mins Chamber Orchestra **

What shall I do... (2011) *c7 mins Cl., Vla, Pno **

An evening hymn (2011) *c14 mins Fl., Ob., Cl., Per., Pno, Vln, Vla, Cel. **

...to show how much I love her? (2012) *c9 mins Fl., Bsn, Tpt, Tbn.*

I see she flies me ev'rywhere (2012) *c15 mins Chamber Orchestra **

Choral Music

A peace all too fair (2009) *c15 mins SSSAAATTTBBB & Organ*

Hope of the Hopeless (2009) *c10 mins SSAATTBB & Organ **

Three Haiku – Under a hushed moon (2011) *c14 mins SATB & Organ*

paradise sinks hence *c6 mins*

under a hushed moon *c8 mins*

Music for Ensemble

Tongue and Groove (2008) *c8 mins Ob., Cl., Hrp, Vla, Cel. **

Entrainment (2008-2009) *c8 mins Oboe & Percussion **

Allegory (2009) *c6 mins Fl., Ob., Cla., Bsn, Per., Vln, Vla, Cel., D. Bass **

Gyres (2010) *c15 mins Electric Guitar, Bass Guitar, Percussion, Computer*

Tamesis (2012) *c20 mins Fl., Ob., Per., Vln, Cel. & Five Dancers **

Solo Music

...a seal upon thine heart (2010) *c7 mins Clarinet & Piano **

Prelude from *Celebration Suite* (2010) *c4 mins Solo Piano **

Two Pieces for Solo Harp (2011) *c12 mins.*

Resonating Light *c7 mins **

Fade to Black *c5 mins.*

Thy Heavenly Grace Inspyre (2012) *c8 mins Solo Organ **

[* recording on enclosed CDs]

Track Lists for Compact Disks of Portfolio

CD 1: *Through Glass Mountains*

1. Epithalamium
2. What shall I do
3. An evening hymn
4. I see she flies me ev'rywhere

CD 2:

1. Hope of the Hopeless
2. Tongue & Groove (extracts)
3. Entrainment
4. Tamesis
5. ...a seal upon thine heart
6. They Heavenly Grace Inspyre
7. Resonating Light – from Two Pieces for Solo Harp
8. Allegory
9. Prelude from *Celebration Suite*

CHAPTER 1 – INTRODUCTION & CONTEXTUAL ISSUES

“Mimesis makes it possible for individuals to step out of themselves, to draw the outer world into their inner world, and to lend expression to their interiority.”

(Gebauer & Wulf, 1995, p.2)

The Journey Towards Mimesis

I have been drawn frequently to the above quote throughout my compositional studies. I believe that what I find attractive is the concept of drawing the outer world in, occasioning the stepping out of oneself. This notion pervaded my thoughts during the latter juncture of my Masters studies and I concluded that the many facets of *mimesis* and its possible links to music were worthy of doctoral study. Before contextualising the term *mimesis*, it is first important to examine my compositional thoughts and methods prior to 2008, the start of my PhD research.

My compositional axiom has always been one of balance. Often this manifests in the manipulation of dichotomous themes or elements such as light-dark, dissonance-consonance, sound-silence, objective-subjective. The final pairing has always been of particular interest to me in pre-compositional work and throughout the composition process. I define the objective-subjective model as a balance between generative compositional process (objective crafting) such as serialist, systematic, or algorithmic methods; and intuition (subjective crafting) or inspiration. This area of thought permeates Western classical music throughout history. Indeed, many of the procedures involved in early voice-led counterpoint and baroque functional harmony can be reduced to algorithmic tendencies, as many an A-level music student will attest. For centuries, composers have striven for a balance between systematic approaches, such as the rules of voice leading, and intuition or what is frequently termed inspiration. What I find fascinating is that both subjective crafting and its antithesis ultimately lead to and define style. The objective rules of early counterpoint (such as those discussed in the famous treaty by Fux, (translated Mann, 1971)) helped to define the ‘baroque style’ as much as the individual voice of the great composers of that time.

Style itself must warrant great concern for any young composer beginning their career at the start of the 21st century. The plethora of compositional styles and methods brought about by the modernist and post-modern schools of the 20th century demonstrate how quickly styles developed and changed in a relatively short space of time. Possibly Stravinsky best illustrates the ever-changing landscape of style owing to his “rare form of kleptomania” (Stravinsky, Craft, 1960, p.110) allowing him to absorb divergent idioms with astonishing agility. Zev Gordon notes: “In trying to plough a creative furrow at the end of the 20th century and into the 21st, I have been confronted, inevitably, by a bewildering galaxy of stylistic, expressive and structural possibilities” (2001, p.7). I was not immune to such apprehension on my journey through various academic institutions in which the preponderant mantra was all too often one of striving to find one’s own voice. My time during Degree and Masters study was therefore one of exploration with a conscious effort during the latter to obtain that elusive goal of a personal voice.

During this period (2006-2008), my compositional interest intertwined with balance consisted of bringing together facets of contemporary popular music with contemporary classical thinking. Adopting postmodern precepts, I reacted against strict ‘objective’ generative musical process in favour of freedom of influence and expression. In this period, I was significantly influenced by the works of Tansy Davies (*Neon*, 2004), Thomas Adès (*Asyla*, 1997), Heiner Goebbels (*Surrogate Cities*, 1994), and Donnacha Dennehy (*Glamour Sleeper*, 2002; *Junk Box Fraud*, 1997; *Streetwalker*, 2003). The works cited above demonstrate how the composers allowed influences of popular music to permeate their work through naturalistic means (freely rather than imposed). By way of illustration, Rob Witts says of Davies’s music: “This is Stravinsky for the club generation, modernist collage built from twisted funk riffs” (Witts, 2004). My interest in popular music technology and coalescing styles was further whetted by my then composition teacher Brian Lock. Lock’s *Concerto for Clarinet, Percussion, Birds & Computer; Sonata for Cello and Mixing Desk*; and *Concerto for the Sound of a Harp & Other Sounds* (2007) denote a development of what Lock calls a “hybridisation of genres” (Muso, 2007). The titles (*Concerto, Sonata*) reflect their classical pedigree whilst the musical syntax and technology employed betray Lock’s peregrination into popular music.

The influence on my music of ‘hybridisation’, the technology that popular music brings, and the freedom afforded by a postmodern attitude, can be clearly heard in the works of 2006-2008. *Apelion: Concerto for Piano, Computer & Orchestra* (2007) and *Diverging Lines: Symphony for Chamber Orchestra & Electronics* (2008) attest to the influence of the

aforementioned composers through the inclusion of other-worldly looped patterns; digital effects and the processing of acoustic instruments; and beat-driven textures akin to popular dance music, although with a contemporary twist. It was whilst working on the symphony that I embarked on a summer course which introduced me to the notion of borrowed materials. I was able to make the cognitive link between what I was currently examining in my Masters and this new interest in borrowed materials. I concluded that my thesis of allowing eclectic influences (gained through my enjoyment of popular musics) to spark my creativity was essentially a facet of wider endeavours of mine, that of balance and also of arranging¹. For the final part of my Masters I decided to investigate this further to ascertain if borrowed materials could be the crux of further study. I produced the work *Wounding Dart* (2008), borrowing Dowland's *Come Again! Sweet Love Doth Now Invite* as a starting point. This experiment, coinciding with reading into memory and allusion, proved fruitful.

During my exploration of borrowed materials and intertextuality I encountered Erich Auerbach's seminal book *Mimesis* (2003) which documents the dichotomy of rhetoric and realism in Western literature and, of more interest to the current study, the "antithetical fusion" (p.134) of high and low idioms. His famous opening comparison of reality as characterised in the Bible and Homer's *Odyssey* began my exploration into the many and wide uses of the term *mimesis*.

Mimesis takes on different guises in different historical contexts and no one connotation can evoke the complexity of its interpretation and meaning (Gebauer & Wulf, 1995; Potolsky, 2006). *Mimesis* (Ancient Greek: μίμησις (*mīmēsis*), from μιμεῖσθαι (*mīmeisthai*), "to imitate," from μῖμος (*mimos*), "imitator, actor") is a philosophical term which is often employed to denote representation of reality, imitation, mimicry, the act of expression, and the presentation of the self (Gebauer & Wulf, 1995). Its diverse meanings can be traced from Plato (*The Republic*, Book X), in which he describes the artist's twice removal from truth (God creates truth, man imitates, the artist imitates man), to current day theorists such as Baudrillard (1994). *Mimesis* has been applied to many fields including (most naturally) literature, anthropology, and psychology. It is the concept of re-defining reality or expounding another's reality that was of great interest to me. The retelling of another's story through one's own aesthetic can be well illustrated through drama:

¹ I had long worked with amateur musicians in both my role as a secondary school teacher and as conductor of numerous community music groups. It was for such groups that my interest in arranging and bringing together musical materials was founded.

consider Bernstein & Sondheim's *West Side Story*. This musical famously has its roots in Shakespeare's *Romeo & Juliet* which in turn can be traced through *Palace of Pleasure* by William Painter (1582), *The Tragical History of Romeus and Juliet* by Arthur Brooke (1562), *Mariotto and Gianozza* by Masuccio Salernitano (1476), *The Ephesiaca* of Xenophon (3rd century), to Ovid's *Metamorphoses* (AD 8). In relation to art and music, Adorno (1984) projects *mimesis* as the reflection of what has been, which itself is a reflection, rather than the mimicry or imitation of what has been. I postulate that at its best, *mimesis* in music can be regarded as the extension of history's influence on one's own aesthetic and veneration of past masters; at its worst it is plagiarism, either unconsciously or consciously through arranging.

The significance of *mimesis* in its various guises in art and music cannot be underestimated: "There are many different ways into the thematic complex of *mimesis*, but for Western culture at least, there has been no way out of it" (Potolsky, 2006, p.161). It is with this thought in mind that I turn to my own research and interpretation of *mimesis*. Given that Plato in *The Republic* purports that all art is mimetic, it is essential that my interpretation and reasoning for using the term is explicated in order to avoid any tautological concerns. The following section seeks to address this by first contextualising borrowed materials in music affording my definition of *mimesis* to be illustrated fully. The chapter will then close by briefly exploring the two sub-constituents of my research: multiple tempi, and music for amateurs.

Borrowed Materials

In my own research I bring the notion of *mimesis* to music through borrowing both musical and non-musical materials, commingling them with objective and subjective processes to create new works. It is the intent behind my compositional method that distinguishes my research and output in this folio from the notion that all art is mimetic. By consciously endeavouring to address mimetic philosophy through my compositional practises I am distancing myself from art which is inherently mimetic through its representation of truth and reality. Mindfully addressing *mimesis* and borrowing material in the creation of new musical works is by no means a modern construct. The *plainsong* and *Cantus Firmus* masses of the 15th (Dufay, *Missa Se La Face Ay Pale*) and 16th centuries (Palestrina, *Missa L'Homme Armé*) demonstrate the borrowing of sacred and secular melody. Indeed, in the Renaissance period alone over 40 settings of the Ordinary of the Mass are entitled *Missa L'Homme Armé* (Grout, 1996). A detailed history of the

borrowing of material is beyond the scope of the current discussion². For this reason, what follows is a brief examination of the philosophy and contemporary endeavours that have enriched my compositional thinking and output in this folio.

It has been noted that for Plato *mimesis* defines the reflecting or copying of the world outside the artwork: all art is therefore mimetic. Aristotle took this notion further purporting that art is self-contained and in fact simulates the world rather than reflects it. Potolsky states that: “If the first idea is true, art is like a mirror turned to the world. If the second idea is true, it is like a mirror implicitly turned to the spectator and his or her beliefs” (2006: p.4). The Aristotelian view proves more profitable in relation to literature and, in my view, music. Aristotle in *Poetics* elaborates upon the notion of simulation by suggesting that through its formation of methods and conventions *mimesis* in art not only raises the status of art but also makes it worthy of critical study. It is the Aristotelian interpretation of the term which I assert through my research.

The course of *mimesis* allows the artwork to reflect the observer as well as simulate the world. The observer/listener is limited by their experience and schema of the reality represented or called to mind. This proves fascinating to me as experience and the development of a schema are inexorably tied to memory.

The notion of ‘memory’ and various treatments thereof was the creative driving force behind some of the recent works of Michael Zev Gordon. Zev Gordon explores memory in its various guises including false memory, layers of memory, distortion, embellishment, and suppressed memory; as well as nostalgia and allusion. In a seminar at Royal Holloway (2011) on borrowed materials he quotes Sebald: “When memories come back to you, you sometimes feel as if you were looking at the past through a glass mountain” (2001, p.224). This quote well illustrates Zev Gordon’s approach in pieces such as *On Memory* (2003-2004). This set of 12 piano pieces explores memory and levels of knowing. The level of borrowing and quotation is varied throughout enabling the listener to perceive the material through various ‘glass mountains’. In *...distant charms*, Couperin’s *La Séduisante* is treated through processes of octave displacement, re-constructed rhythmic gesture, and tonal reconfiguration through the removal of salient cadences. Despite such processes (and the addition of a formal process of moving the material from the bass of the instrument to the treble), the original Couperin is clearly

² For an in-depth examination of borrowed material in music, see *Largely a work of reference: a creative investigation into the use of borrowed musical materials in contemporary compositional practice*. (Cox, 2007).

discernible at times, mainly owing to the pitch material maintaining its original integrity. The aural effect is of the memory of Couperin being perceived as if through a haze. This is further developed in *...unbitten in the palm* in which Bach's *Sarabande* from *Partita No.2* is treated in retrograde with the odd gesture employed forward. This is particularly evident at the end in which the opening motivic gesture of Bach appears forward, creating a retrospective false memory about the piece preceding it. Nostalgia is evoked in *...sepia-coloured--the white mare...far, far down by the stream* in which direct quotes of *Moon River*, *Mother Goose* (Ravel), and Janáček float above a bell-like cyclic pattern. Finally, Zev Gordon turns his attention to what contemporary audiences would term 'mashup' (the blending of two or more existing pieces) in *...forbidden fruit*. This piece agglutinates *Berceuse in D^b* by Chopin and *Peace Piece* by Bill Evans – transposed to match the Chopin – by initially using alternate bars of each followed by both horizontal and vertical techniques of borrowing. The effect of this juxtaposition creates a network of memories in the listener in which one idea sparks another.

Zev Gordon develops notions of memory and particularly nostalgia in his most recent piece *Bohortha – Seven Pieces for Orchestra* (2012). In the first movement there are quotes from Berlioz *Symphony Fantastique* movement three, adding a pastoral quality to the section before it closes with a direct quote from the opening of Mahler's fifth symphony, movement four. In the blog Zev Gordon wrote whilst writing the piece he notes his concern about blending tonal worlds as the opening moves from triadic tonal harmony through pentatonicism and atonality. He also muses over the difficulty of bringing together disparate found musical objects. The Mahler quote seems to naturally present a resolution to both problems as it accords with the pentatonic inflections of the opening. The second movement contains a vast plethora of musical quotations but utilizes them in a manner far removed from the collage technique seen in pieces like Berio's *Sinfonia* (1967-1969). Music as disparate as Bach's cantata *Ich Habe Genug* rubs shoulders with a snippet of *The Sound of Music*. The effect of this movement is one of a plural internal world with a mind hopping from idea to idea: "from feeling to feeling, one object eliding with or juxtaposing with another, one thought or memory reminding one of another" (Zev Gordon, 2012).

I was fascinated by the various treatments of memory in *On Memory* and wanted to devise my own methods of sparking memories through my musical language. All music relies on repetition and memory to a certain degree, most commonly thematic or motivic, in order to provide a musical narrative, listening journey, or at least to make the aural

experience intelligible. In my own work I question whether memories could be created and manipulated through texture, harmony and instrumentation.

Re-mixing and concealment techniques have been employed by Thomas Adès and Mark-Anthony Turnage. Adès weaves Dowland's *In Darkness Let me Dwell* into a web of ghostly tremolandi and accents in *Darkness Visible* (1992) and alludes to Schubert, Mozart, and Elgar in his playful *Arcadiana* (1994) for string quartet. Turnage caused a media storm with his Proms commission of 2010 *Hammered Out*, directly quoting and orchestrating *Single Ladies* by R&B artist Beyoncé. Both mimetic pieces employ levels of memory and allusion. The treatment of allusion can be thought of as concealed or unconcealed. Musically, this is better expressed in two dimensions: surface-core. In *Darkness Visible* and *...unbitten in the palm* the composers seek to conceal or at least disguise the borrowed material. In *Hammered Out* our two-dimensional model would place the material closer to the core than the surface. In contrast, Turnage places the material on the surface for the initiated audience member to discover.

In some cases, the borrowed material is treated as a found object and approached in an almost formulaic (objective) manner. Tansy Davies employs a Bach two-part invention for *Inside Out II* (2003). Davies notes: "Both parts of the invention are treated in distinctly different ways: the left hand line becomes a bass line, of which there are three versions, all heard together in counterpoint; the right hand was used to create vertical harmony by extending notes outwards from each original pitch. Having formed strips of material, I then knitted them into layers of counterpoint, which stop and start at different times, allowing for different densities in the texture" (Davies, 2008). In this piece Davies's use of Bach is at the core of the work (according to our model), indecipherable to the average listener and employed in dense contrapuntal lines. I took such a 'core' approach to *Wounding Dart* (2008), employing extracted number sequences, and concealed pitch material from Dowland warped through a complex generative system. Whilst I was still attracted to the process utilised, I wanted to explore further more surface-based borrowing and strike a balance with subjective composition.

Aside from borrowing material from the classical world, two other sources emerge from the music studied: sacred music and popular music. Popular music is possibly the most ubiquitous source for composers across the ages from the borrowing of secular melodies by composers of Masses to the re-sampling and arranging permeating today's remixes. Folk music as a branch of popular music has also seen a resurgence in recent decades in musical borrowing. Berio employed numerous original folk songs in his transcriptions

and compositions, most notably *Folk Songs* (1964). This piece is of double interest to my research as there are aspects of multiple tempi included. More recently, Woolrich in *The Death of King Renaud* makes use of the Norman folk song of the same name. As with Davies, the approach is sub-surface with five distinct fragments chosen from the folk song as the basis of the five sections of the piece.

I have been most taken by the contemporary ambient composer James Kirby. In his long-running project in which he uses the pseudonym *The Caretaker* he explores memory in a vastly different manner to Zev Gordon. With the ballroom scene from Stanley Kubrick's "The Shining" as his starting point, he manipulates recordings of 1920s and 1930s dance music from old 78s into a haunting collage of amnesia. He notes that in his album *Theoretically Pure Anterograde Amnesia* (2009) he "was trying to make a collection which was very hard to remember, an audio fog in many ways. Trying to grasp a memory but failing each time" (Kirby, 2011). The use of unsettling loops collapsing into white noise, hiss, and rumbles, well conveys the decline into dementia. In *An empty bliss beyond this world* (2011) The Caretaker loops fragments of his source material almost endlessly, often stopping them in what feels like mid-thought or jumping backwards or forwards. This is more a venture into how memory works than an exercise in nostalgia.

Sacred music has also frequently been used as starting points by contemporary composers. My interest in sacred music led me to discover how rich plainsong is as a source of material: this portfolio consists of three pieces which utilise chant as starting points. It is not surprising that organists over the centuries have engaged with plainsong in their improvisations. The compositions of organist Naji Hakim reveal his improvisational approach to composition with plainsong (Hernandez, 2008). James MacMillan demonstrates a less improvised approach in *Meditation* (2010), decorating the chant with eastern-style ornamentation and heterophony. Hymns are also a source for organ improvisation and general composition, another aspect I address in my own work. Gavin Bryars places *Nearer my God to Thee* at the core of his long-term project *The Sinking of the Titanic* (1969-1994). I was attracted to his use of texture in this quartet as it is carefully controlled to allow the hymn to seep through at poignant moments of the work. This technique I explore in my own work.

In conclusion, *mimesis*, borrowed material and memory are intertwined and the following chapters delineate how I have tackled borrowed materials across the portfolio. The principal piece in this portfolio is *Through Glass Mountains*. The five movements which embody *Through Glass Mountains* were written between 2010 and 2012 and are based on

selected arias from the English composer Henry Purcell (1659-1695). The piece was planned so that individual movements can be played separately or as a whole cohesive set. Aside from the movements' shared genesis in Purcell, other unifying constructional devices were adopted engendering a musically interrelated set with an overarching narrative. The narrative for the set relates directly to the facets of memory that were discussed above. The borrowed material is at the core of the work in the movement entitled *Epithalamium*, hardly perceivable and has the trajectory of moving towards the surface as the set progresses. By the final movement (*I see she flies me ev'rywhere*) the material is often very close to the surface to the point where the main melody from Purcell's *What shall I do to show how much I love her?* is played with minimal variation by the brass (bb.318-353), strings (bb.356-383), and woodwind (bb.384-393) as the piece closes.

In addition to the narrative of the work, a macro structure was created for the five movements. First, the instrumentation was carefully controlled so that the full ensemble frames the whole work. The internal movements (2-4) were orchestrated to utilise the resources of the full ensemble with instrumental interest produced by selecting different groups. Second, the harmony, tonality, and melodic construction for the piece were based on altered harmonic series, the only exception being when a borrowed melody is treated at the aural surface in which case Purcell's original pitches were employed. The form of the set was also controlled by the macro structure. The structures of the original Purcell pieces were borrowed and developed by processes of expansion and contraction for the odd numbered movements (*Epithalamium*, *An evening hymn*, *I see she flies me ev'rywhere*). The middle and longest movement (*An evening hymn*) is also framed by two pieces which are based on the Purcell piece *What shall I do to show how much I love her?* and from where their titles are derived. Finally, *I see she flies me ev'rywhere* utilises formal processes employed throughout the cycle and includes references to the other pieces in its second half (see Chapter 2).

Other pieces in the portfolio borrowed material in a similar manner to *Through Glass Mountains* although their source material is greatly varied and reflects my eclectic influences. Source material from plainchant and hymns are discussed in Chapter 3 with detailed analysis of *A peace all too fair*, *Hope of the Hopeless*, *Three Haiku*, and *Thy Heavenly Grace Inspyre*. Borrowing techniques in these pieces include the use of intervallic relationships, source material as found objects, cantus firmus structuring, and devices exploring levels of memory and allusion. Chapter 4 illustrates how popular music has

been reinterpreted through *mimesis* in forming *Entrainment* and *Two Pieces for Solo Harp*. Constructivist processes were used extensively in *Entrainment* to create rhythmic gestures and tonal centres from *Time* by Pink Floyd. Freer more subjective techniques were employed in exploring the music of Evanescence in *Two Pieces for Solo Harp*.

Alongside *Through Glass Mountains*, a number of pieces explore levels of memory: nostalgia, memory distortion, suppressed memory and memory haze.*a seal upon thine heart* and *Prelude from Celebration Suite* examine nostalgia with the latter placing a partial phrase from Satie against an unfolding harmonic background. Distorted memories are evoked in *Thy Heavenly Grace Inspyre* in which the *Veni Creator Spiritus* plainchant is treated as an object in a landscape. In this piece all appearances of the chant maintain their original pitch structure but are explored in a quasi-modal landscape. Suppressed memory is evoked in *Tongue & Groove* in which the structure and devices employed are designed to bring to mind baroque techniques (the source material is Bach). Memory haze is explored in *Hope of the Hopeless*, and *A peace all too fair* in which the material is veiled just below the surface in a bed of clusters.

Finally, non-musical borrowing is considered in *Tamesis*, *Entrainment*, and *Tongue & Groove*. Whilst the pitch material for *Tamesis* is derived from Haydn string quartets, the overall form and controlling body is the path of the river Thames from Eton to the Thames estuary. The physics phenomena of entrainment is the guiding structural narrative for the piece of the same name, whilst *Tongue & Groove* reinterprets a construction process in carpentry in a musical manner.

Multiple Tempi

In 2008 I attended a Stockhausen concert held at the Royal Albert Hall as part of the Proms season; the featured work of the programme was *Gruppen* (1955-57). As a listener I was enthralled by spatial effects created by the use of three orchestras and conductors. The piece – true to Stockhausen’s style – is full of contrast, energy, and colour. However, my readings on Stockhausen have taught me that integral to his aesthetic was the disintegration of pulse: as a direct result, it is normally impossible to detect a sense of pulse in his music because of the layering of multi temporal phrases or asymmetric rhythms. I was interested in how Stockhausen had dealt with the issue of multiple tempi. Study of the score revealed that Stockhausen had gone to great lengths to establish strict controlling patterns and rules for almost all aspects of the piece

including rhythm and tempo. Also, his use of irregular and asymmetric rhythms throughout the score suppresses any sense of pulse that may underpin individual gestures. Therefore, on the one hand Stockhausen strictly controlled tempo and established very complex tempo relationships, but on the other his rhythmic devices obscured the sense of pulse. The aural effect of this is one where, owing to the lack of a sense of pulse, it is nearly impossible to detect the divergent tempi. Consequently, the tempo relationships could be described as being at the core of the work rather than the surface. Possibly repeated listening (particularly with the score) might elicit the tempo relationships, but it is also possible that Stockhausen might not have been concerned with this issue. I felt however that the area of multiple tempi could be explored further, particularly in relation to surface gestures.

In my research, a number of composers (aside from Stockhausen) and pieces have influenced the decisions I have made and compositional pathway I have taken in relation to tempo.

Multiple tempi in the 20th century began with Ives's *Unanswered Question* (1906) in which he explored juxtaposition: angular against smooth, tonal against atonal, one tempo against another tempo. It is the juxtaposition of disparate elements in this piece and their allocation to different instrumental groups that enables the listener to hear the tempo contrast. There is no attempt at synchronisation in *Unanswered Question* and each performance will therefore be slightly different. A similar device is employed by Birtwistle in *Pulse Sampler* (1981) in which the pulse for the melodic material (oboe) is set by a series of mobiles performed on claves. Friction is created between the two parts as the oboe is always one step behind the claves: as the oboe reaches the new tempo set by the claves, the claves begin the next. Birtwistle's score is musically closer to Stockhausen than Ives as the intended effect is not always evident to the listener owing to the complexity of the material. That said, the contrast of sound material (pitched/unpitched) does aid tempo recognition in a way that is not always apparent in *Gruppen*, despite the spatial construction.

Thomas Adès has approached multiple tempi by exploiting complex metric relationships. In his *Piano Quintet* (2000) recondite metres are multi-layered, creating the aural effect of divergent tempi. Within the first five pages, time signatures such as 4/6 (four triplet crotchets), 3/5 (three quintuplet crotchets), and 3/7 (3 septuplet crotchets) are encountered. The musical material is very carefully constructed and allocated between the divergent metres, enabling the listener to perceive the tempo layers at the surface of

the piece. Similar methods of combining complex rhythmic relationships to produce the effect of multiple tempi have recently been explored by Jonathan Harvey (*Weltethos* 2012) and Zev Gordon (*Bohortha – Seven Pieces for Orchestra* 2012). In the case of all three pieces mentioned, the effect of multiple tempi is an illusion as all layers are centrally controlled by a uniform metric system.

Finally, more recently Simon Holt utilises contrasting timbre to delineate different tempi to great effect in *Everything Turns Away* (2010). Based on the Auden poem 'Musée des Beaux Arts', Holt's piece describes Icarus' plunge to earth – unnoticed by anyone. The quartet performs their music unaffected by the cacophony executed by the late-arriving pianist. The music is notated with separate scores for both the quartet and the piano, the latter performing frenetic music in its own tempo. The effect is quite startling and the tempo relationships between the opposing forces are on the surface (easily detectable to the listener).

Music for Amateurs

The second subcomponent of the research is music for amateurs. My interest in composing for amateurs stems from my work as a secondary school music teacher and as conductor of numerous community choirs and groups. Writing music for amateurs is not a common contemporary pursuit. Historically, composer-teachers would often write pieces for their students. I wish to separate this school of writing from that which I investigated. My interest is more aligned with Britten and Maxwell Davies who often wrote music that was technically and musically challenging but suitable for amateur performance. For example, Britten's cantata *St. Nicolas* (1948) was written especially for the centenary of Lancing College in Sussex. The piece is designed so that the only professional players need be the tenor soloist, a string quartet to lead the strings, and a percussionist. What is interesting is how Britten manages these constraints whilst not sacrificing his individual aesthetic. Maxwell Davies on the other hand had the experience of working closely with children when he was master of music at Cirencester Grammar School (1959-1962). During this period he wrote numerous works specifically for school children including *Variation on a Theme of Chords* (1959), *Magnificat and Nunc Dimittis* (1960), as well as making arrangements for school orchestras of numerous contemporary and early pieces. Maxwell Davies's subsequent career and work list demonstrates his ongoing interest in music for amateurs. A brief examination of his output would include several children's operas (*Cinderella* 1980, *The Great Bank Robbery*

1989, *The Spider's Revenge* 1991, *A Selkie Tale* 1992) as well as instrumental music. Indeed, his recent *Fanfare: A salute to Dennis Brain* (2007) was written for Grade VI (ABRSM) trumpet. Maxwell Davies has never shied away from exploring popular styles within his work and what is of interest in the current discussion is his ability to blend this interest in works for amateurs whilst not sacrificing his own methods and voice.

More recently, CoMA (Contemporary Music for Amateurs) was established to champion contemporary music. When the group formed there was a dearth of contemporary music suitable for amateurs. CoMA began by commissioning Michael Finnissy and Diana Burrell to write music “without any compromise in musical style or quality” (CoMA, 2012). Other composers commissioned include Philip Cashian, Jonathan Harvey, Michael Nyman, John Tavener, and Stephen Montague: their website notes that some of these compositions have been honoured at the British Composer Awards.

It is both CoMA's ethos and the propensity that Britten shows in writing music suitable for amateurs whilst not compromising style or quality which is of particular interest to me and will be the subject of discussion in Chapter 6 – Music for Amateurs.

Closing Thoughts

This chapter has illustrated my development as a composer charting my growing interest in *mimesis* and its relationship with borrowed materials during my Masters study through to the formulation of the research topics for this PhD. What has been most illuminating in the process of writing this thesis is the recognition that I have gained of my own compositional voice through the analysis and discussion of the works presented. This will be addressed further in Chapter 7.

CHAPTER 2 – THROUGH GLASS MOUNTAINS

This chapter will examine in detail the principal piece of this portfolio *Through Glass Mountains*. Each of the five movements will be discussed in turn exploring the mimetic devices exploited and delineating aspects of harmony, melody, rhythm, and form.

Chapter 1 briefly explored how a macro structure was adopted in *Through Glass Mountains* to afford homogeneity across the movements. The macro structure controlled formal devices, instrumentation, harmony, tonality, and provided a memory narrative in which the borrowed material was moved from the core of the music to the surface as the movements progressed. Throughout the chapter, reference will be made to the original Purcell source pieces. A copy of these can be found in Appendix B.

The central unifying device controls the harmony and tonality of the work through the use of altered harmonic series. My interest in the harmonic series developed through my listening to works of the French spectral school³ (G rard Grisey, Tristan Murail) and to the electronic works of English composer Jonathan Harvey (particularly, *Mortuos, Plango, Vivos Voco*, 1980). I decided to adopt a fresh approach, shedding the more rigorous application of the harmonic series and developing a new altered harmonic series. The traditional harmonic series is created from whole number ratios. When the indices are whole numbers in a consecutive pattern, the traditional harmonic series is produced (Figure 1: Harmonic series and its whole-number ratio).

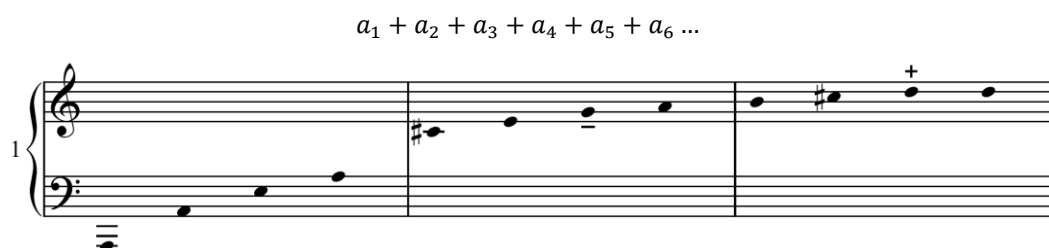


Figure 1: Harmonic series and its whole-number ratio

This 'natural' harmonic series is found in the physical world and determines not only the pitch of every sound but also its characteristics. By virtue of its construction, microtones are ubiquitous from the tenth partial upwards.

³ Spectral composers employ analysis of sound spectra (frequencies, wavelengths, and the harmonic series) to inform their compositional decision making.

I wished to fashion and experiment with artificial harmonic series that have no basis in the physical world. My experiments led me to create two altered harmonic series employing 0.7 (Figure 2) and 0.9 (Figure 3). These numbers were chosen as they produced interesting musical results: 0.7 produces a series in which the 4th-6th partials form a diminished chord, 0.9 creates a series where the flavour of a minor chord with major 7th appears in the first seven partials. In Figure 2 and Figure 3 the appearance of '+' and '-' denote a microtone sharpening or flattening of the written pitch. For the most part, I wished to avoid microtones in *Through Glass Mountains* as their use is incongruent with my current aesthetic concerns. I therefore stuck to the written pitches. The two altered series were transposed creating 12 series of 0.7 and 12 of 0.9 with fundamentals based on each note of the chromatic scale respectively. The complete 24 series can be found in Appendix A: *Complete altered harmonic series*.

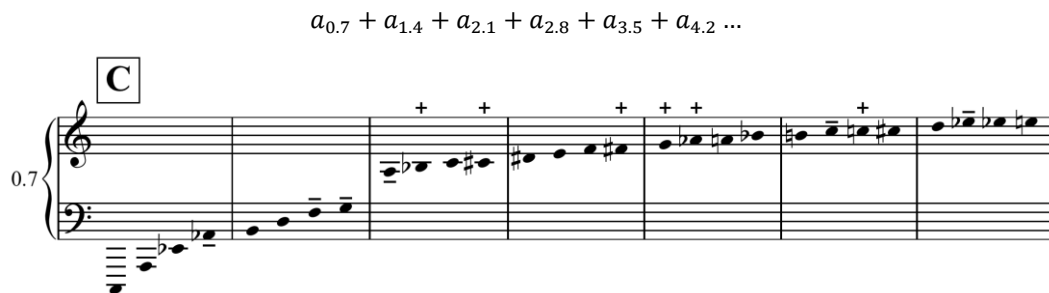


Figure 2: Harmonic series based on 0.7

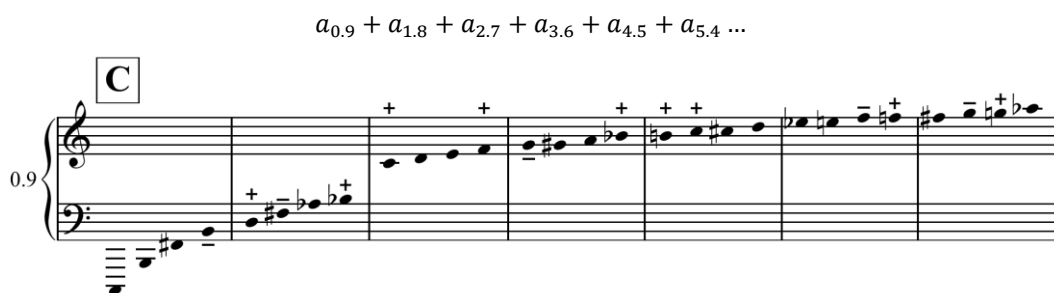


Figure 3: Harmonic series based on 0.9

In addition to the harmonic homogeneity, a scalic gesture is employed throughout the whole set which explores the altered scales. It can be seen at bb.176-178 (hrp.) in *Epithalamium*, bb.14-17 (pno.) in *What shall I do...*, bb.34-38 (pno.) *An evening hymn*, bb.35-39 and bb.268-305 *...to show how much I love her?*, and throughout *I see she flies me ev'rywhere*. In addition, the rhythmic gesture of a written-out accelerando is used extensively in every piece.

a first section in which the voice enters alternating between agitated declarations accompanied by the introduction's groove, and recitative passages. The second section of the piece changes style and metre, becoming a dance (Table 1).

Intro	Rhythmic	Recit	Rhythmic	Recit	Dance		
15+16	5 bars	13 bars	3 bars	6 bars	3 bars	12 bars	18 bars
31 bars	27				33		

Table 1: Purcell's structure

I decided to remove the dance section of the piece after making the initial sketches as I found it too removed from the groove established by Purcell in the introduction and first section.

A timeline for the complete piece was constructed digitally, enlarging Purcell's form by four and making note of where the original melodic contour and where tonal changes took place. Table 2 shows how the original Purcell introduction structure of Table 1 has been enlarged. The bar numbers refer to the new piece and the harmony (extracted from Purcell (see Figure 5)) maintains its original rhythm within the structure.

	Prelude I						Prelude II						LINK bb132-135
	bb.1-68						69-131						
Harmony	Gm	E ^b	Cm	Dm	B ^b	Gm	Gm	E ^b	Cm	Dm	B ^b	Gm	
bar	1	13	19	24	44	48	69	84	88	92	108	112	

Table 2: Preludes I & II

I decided that the first two sections of the piece would be a prelude to the whole set. Rather than a direct repeat (as in Purcell's introduction), I thought it expedient to create a narrative for this opening. The first prelude would be marked by an increase in musical tension with the general contour of the music reflecting that of Purcell's (↑ b.1, ↓ b.3.4, ↑ 6.2, ↓ 8.3, ↑ b.14). The melodic lines first ascend (b.1), begin to descend (b.13), ascend (b.25), descend (b.37), and ascend (b.53).

Tonal centres for both Preludes are controlled by the harmonic rhythm of the enlarged tonal structure. For example, bb.1-12 employ the altered harmonic series with the fundamental G, bb.13-18 altered harmonic series fundamental E^b, and so on. Prelude I uses the altered series 0.7, while Prelude II uses 0.9. This was to enable further harmonic variation. The melodic material of this section borrows the upper-neighbour note figure

found in Purcell's introduction as well as the salient intervals present in the original (b.1 of Purcell features per. 5^{ths}, min. 6^{ths}, min. 2^{nds}, as reflected in harmonic and melodic construction at bb.13-19.5).

0.7

♩=120 with a jazz groove

Harp

Double Bass

pizz

p

E♭ G♭

F♯ A♭

E♭ E♭ A♯

B♭

Figure 6: Series Gm.7 and bb.1-6 (harp)

Figure 6 demonstrates how the harp part of the opening is constructed from G.7 and how the melodic contour is ascending. In addition, a similarity between the left hand of Figure 4 and the double bass and the harmonic gesture of the original groove and the harp should be noted.

The second Prelude (bb.69-131) portrays a relaxation of tension after the build up in Prelude I. This section employs the same process as its predecessor: the tonal scheme, melodic contours and rhythmic gestures of the Purcell are enlarged and used as starting points in the new structure.

The second section of *Epithalamium* is constructed in much the same way as the Preludes. Motivic relationships between the source and the new piece were created with the hesitant vocal material being initially reflected by the clarinet's line. Salient intervals from the source (as shown in Figure 5) are employed in the development of melodic lines and the tonal/harmonic structure remains intact. Figure 7 illustrates how the original bass line was enlarged, its control of the tonal centre, and its relationship with the bass part to *Epithalamium*.

Figure 7: Comparison of source with new

The melodic material at this point reflects the five Purcell phrases (both in interval and characteristics) in much the same way as shown in Figure 8. The two staves at the bottom detail the basso part and the vocal part enlarged respectively.

Figure 8: bb.136-142

The mimetic devices employed in this movement result in the source material being buried at the piece's core. There are indeed moments where the bass line or a melodic line seem to reflect the Purcell more closely, and this would create a memory haze or possibly a sense of false memory. The above demonstrates how the devices employed are closer to the objective end of the spectrum. That said, a balance between the objective and subjective was always striven for, with rules often being broken. An example of this would be the inclusion of a linking section at b.132 which does not feature in the Purcell.

By far the most constructivist device was employed for rhythm in the Preludes. I adopted an L-system or *Lindenmayer system* in order to change quavers into triplet quavers. An L-system is a parallel rewriting system developed by biologist Lindenmayer in 1968 to illustrate the growth of simple multicellular organisms. L-systems produce

What shall I do...

The second movement of *Through Glass Mountains* allows the borrowed material closer to the surface. In accordance with the macro structure for the whole piece, *What shall I do...* employs the first section of the Purcell source material. The structural process for this movement differs significantly to *Epithalamium* employing a device I shall label 'compound variation'.

Figure 11 outlines the form for the movement. Three numbers were adopted from Purcell. First it was noted that his opening section consists of 16 bars divided into two subsections: a theme and its variation. In addition, the three-note motif which opens the Purcell (↓min. 3rd, ↑maj. 2nd) was traced through the first section, noting that Purcell uses it and varies it five times. These three numbers (16, 5, 2) were taken as a starting point for creating the structure. The overall structure (as shown in Figure 11) uses a layering approach in which 16 textural/instrumental sections are layered over five harmonic sections and two formal sections. In addition, various textural combinations (solo, duet, trio) were ascertained for the three instruments for which the piece was written and a symmetrical number sequence was constructed: **3**,2,3,**3**,**3**,1,2,**3** / **3**,2,1,**3**,**3**,3,2,3. These numbers would control the number of instruments playing in each of the 16 sections with '3' representing triple counterpoint and the bold 3s indicating all three instruments playing, with either one or two taking the limelight.

tonality of E.7. When this melodic material is varied in section 14, the same material will be varied according to instrumentation (3-part counterpoint) and harmony E.9. This creates even more interesting effects when a harmonic change occurs midway through a section (4, 7, 10, 13). The chart in Table 3 enables one to see how this process relates to the final piece.

A								A1							
3	2	3	3	3	1	2	3	3	2	1	3	3	3	2	3
b.14	b.22	b.26	b.33	b.42	b.56	b.74	b.81	b.99	b.109	b.114	b.120	B124	b.132	b.138	b.155

Table 3: Bar references in *What shall I do...*

Two final points to be noted are that the sections in A1 are often expanded or contracted in relation to their A counterparts. Also, whilst this formal approach could be deemed ‘objective’, I actually regarded it as a set of rules to be broken when subjective processes took over.

As noted, the source material from Purcell is allowed much closer to the surface in this piece. The clarinet in b.17 performs a melodic gesture that is almost the same as the original. In addition, the construction of the introduction further plays on the concept of false memory by layering Purcell’s [A] and [A1] melodic material in counterpoint (this device will be explained further in the section on *...to show how much I love her?*).

Finally, the use of compound variation form allowed me to work with the notion of formal and harmonic memory as described in Chapter 1. The listener is taken on a carefully controlled journey where texture and harmony is as important to the memories created as the melody.

An evening hymn

This section will carefully document the construction of *An evening hymn* as the borrowing processes involved in the whole set can be most clearly defined through this particular movement. Throughout *Through Glass Mountains* Purcell’s original forms go through three potential transformations: expansion, contraction, and a mix of expansion and contraction. The current piece falls into the third category using a multi-layered approach. *An evening hymn* attempts to play on the concept of vague memories. Employing the Purcell piece of the same name as its starting point, *An evening hymn* first borrows Purcell’s unusual five-bar 14-note ground bass (see Figure 12). The new piece uses this ground as the basis for the whole structure, employing it throughout. The ground was examined and considered in terms of its intervallic structure and emerging

motifs: the patterns of four consecutive falling 3^{rds} (minor: g-e, major f#-d, major e-c, minor d-b) and interlocking lower and upper auxiliary figures (f#-e-f#, e-f#-e, d-e-d etc.) were all considered and taken forward as material for the new piece. The technique of ground bass is re-conceptualised in this piece as a cantus firmus, weaving its way through the texture and pitch range and expanding and contracting in duration, although always maintaining its original structure and internal relationships as noted above.

In addition to the original ground, the structure of Purcell's piece was also closely analysed and can be tabulated as follows:

Purcell Structure	Intro.	Section I	Link	Section II	Link	Section III	Link
	bb1-5	bb6-30 (25)	b31 (1)	bb32-36 (5)	b37 (1)	bb38-52 (15)	b53 (1)
Ground:	X1	X5	-	X1	-	X3	-
Tonality:	G maj	G maj	-	B min	-	D maj	-
Purcell Structure	Section IV		Hallelujah I	Hallelujah II (repeat of I)	Hallelujah III		
	Main	Link			Link	Main	
	bb54-63 (10)	bb64-68 (5)	bb69-78 (10)	bb79-88 (10)	b89 (1)	bb90-114 (25)	
Ground:	X3		X2	X2	X5		
Tonality	G maj		G maj	G maj	G maj		

Table 4: Form of Purcell's *An evening hymn*

The harmonic and formal structure of the Purcell was used as a template when constructing the new piece. The formal structure of Purcell (Intro, Section I, Link, Section II, Link, Section III, Section IV, Hallelujah I-III), along with its tonal structure, was employed as a framework upon which the new piece was mapped. Each section expands or contracts the original form according either to strict ratios or freely, depending on the aesthetic intention of the given section. The integrity of the ground in relation to the whole structure was maintained throughout.

The ground-cantus, along with harmony and tonality, adopts altered harmonic series but attempts to maintain the original shape of the Purcell. The starting note of the ground within the series was carefully selected so that when using consecutive notes the lowest point in the original ground corresponds with the fundamental of the altered series. This produces the following new grounds:



Figure 12: Purcell's ground bass and the new ground-cantus

Purcell's introduction was expanded from four bars to 41. The expansion takes place according to a strict ratio employing numbers significant to the original ground bass (5 bars and 7 (division of 14)). The original ground is stretched by $(7 \times 2) \times 5$ where the 5 represents quintuplet crotchets in the new tempo of 87bpm. This results in each new note of the ground appearing every 14 quintuplet crotchets. The introduction helps to establish the ground, the harmonic series employed, and sets a nocturnal atmosphere with high pitches, sparse texture and repetition. In order to convey the pitch series employed for the piece, the introduction uses harmonic fields with each pitch locked according to register. The ground is presented as a 'pad' of overlapping sustained notes. Whilst the ground is rhythmically static (14X5), the rhythmic organisation of the melodic material intensifies as the repetition focuses towards b.34 when the penultimate note of the ground is presented by the piano. This is significant structurally and harmonically as the ground was reconstructed enabling the 13th note to present the fundamental ('G') to the altered harmonic at exactly this arrival point. This moment is anticipated by the 'E^b' which occurs in the glockenspiel part therefore breaking the harmonic field and drawing attention to this important structural moment within the ground.

In Purcell's first section the ground is presented five times (see Table 4) further highlighting the significance of the number in Purcell's construction. The current piece presents the ground only twice and moved to a high pitch range. It is presented first by the vibraphone but with the former rhythmic ratio reduced by '5' to create a 9X5 relationship (bb42-50). After five notes of the ground are presented, the rhythm further contracts to 7X5 (bb51-59) and finally to 4-crotchet beats for the final four notes of the ground. The ground continues on the vibraphone but reduced to 3-crotchet beats (bb64-69) and finally to 6X5 for the final few notes of the second presentation (bb69-75).

The melodic material of the section employs the number five. Purcell's first section includes five performances of the ground over which the soloist sings. The solo material

was analysed to ascertain a single salient feature from each of the five iterations of the ground. The features extracted are:

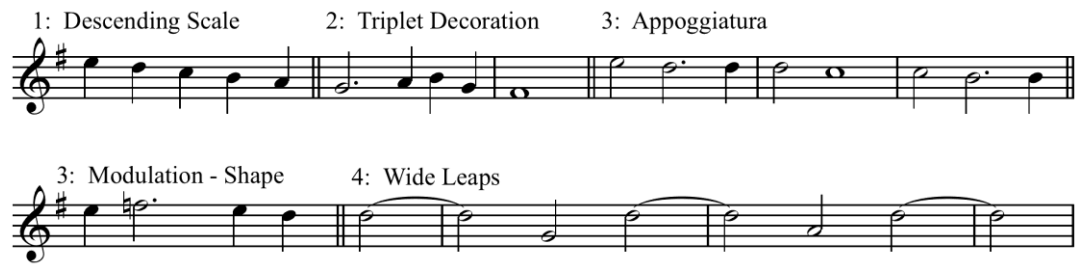


Figure 13: Features extrapolated from Purcell Section 1

Spiral form was employed in this section with the material's definition and textural density increasing towards the end of the section. Five spirals occur announced by the entry of instruments (1 ob.; 2 afl.; 3 vln. & vla. duet; 4 vc.; and 5 fl. cl. ca. trio). With each sweep a new motif from the list above is added culminating in the final trio's dense motivic construction. The technique of extracting salient features from a source material and employing them to control formal design was borrowed from *The Death of King Renaud* by John Woolrich. As documented in Chapter 1, Woolrich constructs each section of his piece around motifs extracted from the borrowed material.

As noted, Purcell's form goes through a process of expansion and contraction in this piece. Often, his repetition of the ground is reduced but the lengths of each section increase to compensate. Likewise, the linking passages are extended and linked thematically. The first link (bb75-87) begins with a descending triplet figure. This employs Purcell's original link (a distant memory) motif followed by bell-like figures and piano tremolandi built on fundamentals provided by the altered ground and a harmonic pallet taken from the altered harmonic series of 0.9.

In order to disguise the join between *link 1* and *section 2*, the melodic material for the second section begins before the link has finished. The ground returns, marking the structural beginning of *section 2* in b88. Five bars previously the viola begins exploring material from Purcell's *section 2* at the surface (b83). Purcell's material is therefore considered and explored between bb83-112 which also overlaps the next structural marker (*link 2*) and is announced by the piano in b109. The piano begins by re-introducing the falling three-note figure before the oboe performs a decorated version of the link theme (bb.114-121). Another layer is added to cover this join in the clarinet part with a bubbling motif appearing (b.105) which gains dominance in the rest of *link 2*.

Re-harmonized chorale over ground: G fundamental 0.7 [4a]

Chorale over ground: G fundamental 0.7 [4b] employing 2nds

Re-harmonized chorale over ground: G fundamental 0.7 [4c] employing 4ths

Figure 15: Variations of the chorale

The ground initially uses the harmonisation taken from *section 3* transposed (4a - bb.162-171), then the second harmonisation (4b – bb.172-181), and finally the third (4c – 182-191). As these three sections progress, the chorale begins to fall apart as the individual voices move towards greater counterpoint. This was constructed to represent the disintegration of memory. The ground is also allowed to expand and contract freely, making each of the three repetitions vary in overall length and internal structure. The melodic material of this section is given to the oboe (4a-4b) and piano (4c). This is very closely related to Purcell’s original melodic material at the same point in the piece therefore creating a memory paradox (disintegration/allusion). The spiral technique of *section 1* is reintroduced with the first two sweeps (4a, 4b) adding intervallic and motivic material from the original. The narrative of moving closer to Purcell’s original continues. Bars 59-64 of Purcell are explored with minor adjustments to account for the new harmonic series and to introduce further rhythmic interest. In addition, 4c (182-191) removes the melody leaving just the chorale, ground, and importantly nearly a replica of the realisation of the original figured bass presented by the piano.

The current piece briefly breaks away from Purcell’s structure by adding a bridge at this point (192-197) after which *Hallelujah 1* begins. The movement through the ground is governed by the numbers 14 and 5, reflecting the significant numbers of Purcell’s original. The metres of 5/8 and 7/8 reflect this with each down-beat marking a new note from the ground. A metric modulation provides consistency across the section change

before the melodic material is given to the low range of the piano and closely resembles the Purcell. Upon the second repeat of the ground (b218), counterpoint through rhythmic canon is employed in the piano part to thicken the line as well as additional motifs from the original Purcell. The Purcell includes a repeat of *Hallelujah 1* which I have called in the table above *Hallelujah 2*. This is marked by the wind trio of bars 238-260 (ground in piano lh) where further motifs are added.

The linking passage that follows (bb258-281) expands Purcell's two-bar link (bb89-90 in Purcell). The realisation of the original figured bass is again used to provide material for this link. As with the Purcell, the ground briefly disappears in this section before *Hallelujah 3* begins (bb.282). The ground is placed in the highest register of the piano against a rocking accompaniment which gradually fragments. Each performance of the ground alternates between 0.9 and 0.7 (bb282-295 = 0.9, bb296-309 = 0.7, bb310-323 = 0.9, bb324-337 = 0.7, bb338-351 = 0.9, bb352-367 = 0.7). The melodic material for this section is almost a facsimile of Purcell consequently completing the narrative journey for the piece. The flute begins performing Purcell's *broad* melody before the clarinet joins in hocketing the original between the two instruments. The melody is only a simple variation on the Purcell, altered to fit the harmonic series being used and with minor decoration added. Finally, the rhythmic organisation of string harmonics matches the 14X5 presentation of the ground in the introduction. Furthermore, the piano and glockenspiel material gradually transforms into the motifs of the introduction as the piece concludes, again reinforcing the memory journey.

As illustrated, *An evening hymn* represents a microcosm of *Through Glass Mountains*. The use of techniques and concepts that are employed across the whole set can be summarised as: expansion/contraction, variation, spiral/unfolding, harmonic processing, narrative: core-to-surface, and distant memories.

...to show how much I love her?

The previous movement can be thought of as the seed of destruction (announcing the beginning of the end) for the whole set as the narrative of bringing the material (and therefore memory) closer to the foreground was brought almost to completion at the end. The final two movements naturally have to reflect this: *...to show how much I love her?* does this in a number of ways. The piece requires minimal discussion here as the formal, harmonic, melodic, and textural devices mirror that of its sister piece (*What shall I do...*).

For the purpose of demonstration and completion, Figure 16 gives the form of the [B] and [B1] sections of Purcell's *What shall I do to show how much I love her?*

Figure 16 shows a handwritten formal plan for two sections of Purcell's music. Section B (measures 0-44) is divided into eight measures with the following instrumentation and counts: 1. All Counterpoint (Intro) - 4; 2. Tbn + Bsn - 2; 3. Tpt. Melody + Fl. Bsn 1+2 - 3; 4. Tpt. Solo - 1; 5. Tpt + Fl - 2; 6. Bsn Melody All - 4; 7. Fl. Melody + Bsn + Tbn - 3; 8. Fl + Bsn - 2. Section B1 (measures 48-80) is divided into eight measures: 1. Fl + Tbn - 2; 2. Tbn + 3 - 3; 3. Tbn + Bsn Melody All - 4; 4. Fl + Bsn - 2; 5. Fl. Solo - 1; 6. Tbn. Bsn. Tpt. - 3; 7. Fl + Tbn - 2; 8. All Counterpoint Theme - 4. Chord progressions are written in red below the staves: B: G0-9 | A0-7 | E0-7 | m3 m3 | E0-9 | P4 M2 | B0-7 | P4 m. B1: F#0-7 | m3 P4 | E0-9 | M3 m6. An 'INTERVAL MAPPING' is indicated at the bottom of section B1.

Figure 16: Formal plan for *...to show how much I love her?*

The differences between movements two and four lie in the more frenetic feel to the material and harsher timbres employed. In addition the seed of destruction sown in movement three allowed me to change the construction of the introduction in movement four. The initial draft of the introduction used the same process as *What shall I do...* in layering the two eight-bar melodies from the section (in this case [B] and [B1]). Purcell's original melody and variation is written in pencil at the top.

Figure 17 shows a handwritten musical score for the introduction. It consists of two staves. The top staff shows the original melody in pencil. The bottom staff shows a variation in red ink, which is more rhythmically complex, featuring triplets and sixteenth notes. The variation is layered over the original melody.

Figure 17: Introduction to *...to show how much I love her?*

The two lines were re-written to produce a hocketing effect (blue note with pencil lines = [B], green notes with green lines = [B1]). This process was used to disguise the original lines and the result was orchestrated into the introduction. The difference between the outcomes of movements two and four was added in the second draft in which an interrupting motif was written into the process. The hesitant semi-quaver motif (bb.7,11-13, 28-33) was pasted into the introduction, suggesting a change of character. This motif also becomes increasingly significant as the piece progresses, again playing on memory.

I see she flies me ev'rywhere

As noted in Chapter 1, the final piece of the set completes the narrative with the borrowed material working its way to the surface: the hope is that by the final bars it will feel as if it has been there all along. *I see she flies me ev'rywhere* is a summative piece, not only completing the narrative but bringing together the set. It employs the same altered series for tonality and harmony, expands and contracts the form, uses spiral and unfolding melodic technique extensively, and utilises compound variation form. Finally, it has a cantus firmus at its core.

First, the 28 pitches of Purcell's second section of the piece of the same name were extracted, removing consecutive pitches that repeated.



Figure 18: Notes extract from bb.22-29 of Purcell's *I see she flies me ev'rywhere*

These formed the basis of a cantus that features throughout the piece and controls the harmonic series being used. The difference between this cantus and *An evening hymn* is that the harmonic pace expands and contracts very freely. For example, the cantus is first heard in the introduction (bb.1-27) running through all 18 notes (cantus note 1=b.1, 2=b.6, 3=b.7, 4=b.8, 5-6=b.9...27=b.26, 28=b.27) whilst bb.143-155 uses only note 15.

The piece employs compound variation form (as in movements two and four) and the initial plan was to have 21 sections representing the 21 bars of Purcell's first section. In practice this would make the sections too short for the length of the piece I had planned. I therefore freely (subjectively) allowed the sections to be as long as necessary and cut the form in the 9th bar of the variation section. I also utilized the layered structural effect employed in early movements so that the first 21 sections of the piece contained four

theme changes, and three tempo changes, all spaced equally. Thematic development across the three theme sections was achieved by unfolding the themes selected from Purcell: section 1 of three uses theme 1; section 2, themes 1+2; section three, themes 1+2+3. In addition, I decided to deviate from my previous applications of compound variation form by inserting a number of direct quotes from previous movements in the variation section of the piece. This was achieved in a similar manner to the cutting and splicing found in the introduction to *...to show how much I love her?* For example, the opening of *An evening hymn* is quoted almost verbatim in the third section of the variations, the variations taking place at the top of the texture played by clarinet and bassoon (bb.223-255). *What shall I do...* appears in bb.269-286, and its melodic material seems to influence what follows. Hints of other movements are more concealed. This endeavour was to play further with the memory of the listener.

One final and new mimetic technique was employed in this movement: timbral borrowing. I enjoyed the metallic and aggressive timbres presented in the recording of *What shall I do to show how much I love her?* by Paul Agrew and as such chose to try and recreate them in the opening. The use of trash metal and harsh timbres attempt to elicit this effect. *Through Glass Mountains* and this movement end with the macro narrative reaching its conclusion. The statement of Purcell's *What shall I do to show how much I love her?* in near original form brings the borrowed material right to the surface.

Given the central nature of *Through Glass Mountains* to the portfolio, it has been necessary to conduct a thorough investigation of its construction and the thinking behind each movement. The following chapters investigating other pieces in the portfolio will only briefly describe techniques that are similar and instead focus on different methods employed.

CHAPTER 3 – PLAINCHANT & HYMNS

This chapter addresses my approaches to plainchant and hymn source materials and will examine *Hope of the Hopeless*, *Three Haiku*, and *Thy Heavenly Grace Inspyre*. *A Peace all too Fair* will be discussed alongside *Hope of the Hopeless* as the two pieces are linked both in text and music and demonstrate how the techniques used developed.

Hope of the Hopeless & A Peace all too Fair

I was commissioned to write an anthem to celebrate the sesquicentenary of St. Jude's Church in Englefield Green, Surrey. For the source material I studied *O Worship the Lord in the Beauty of Holiness* which was written by John Monsell who, as vicar of St. John's in the nearby town of Egham, was instrumental in the founding of St. Jude's in 1859. The now famous hymn became the backbone to the first attempt at writing an anthem: *A Peace all too Fair*. With words commissioned from writer Phoebe Wynne, the piece was scored for triple choir and organ.

In order to create the atmosphere of floating and space I decided to engage cluster harmony and gradual unfolding or spiral form. Unfolding and spiral form have already been noted in the previous chapter but this was my first comprehensive venture into applying the form. The form can be thought of as exploring the material gradually with each sweep of the material adding more or less detail. In relation to harmony, it was used to create the effect of exposing the listener to harmony that feels as though it is ever present but slowly revealed. A visual analogy might be viewing a diamond, with different facets catching the light at any one time.

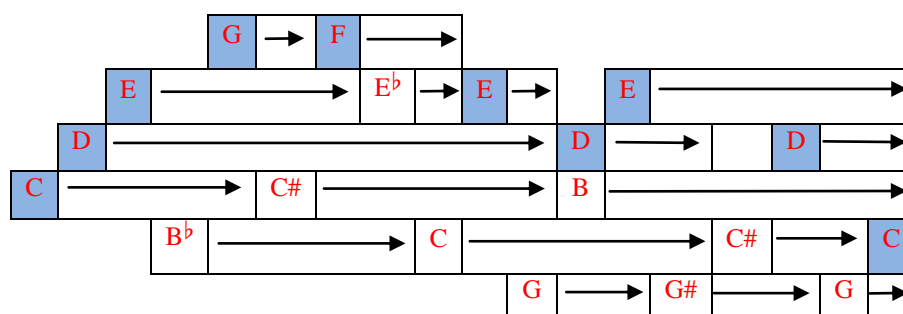


Table 5: Cluster unfolding in *A Peace all too Fair*

At first a cluster was created by taking the first phrase of the hymn and sustaining each note. Additional notes were then added to the cluster and revealed and removed at different times in the process. This is represented in Table 5 in which part of the opening section is shown in graphic score. Red notes denote the introduction of new pitches

within the cluster whilst the blue-boxed pitches are the original phrase of the hymn. This table demonstrates how the pitches of the cluster fan out from the initial note, 'middle C'. Each section of the work uses a similar technique and at times the original melody is closer to the surface. This helps produce the dual effect of memory haze and false memory as the haze, fabricated by the clusters, disguises the melody whilst its surface appearance nearing the end of each cluster makes one think retrospectively about what has already been heard.

Unfolding techniques were honed and used at the beginning of *Hope of the Hopeless* in which the original melody was given to soprano one. The first ten bars show how the melody unfolds and builds a cluster through sustaining each note. The addition of the sharpened 4th G# in b.7 adds a modal feel to the melody to accentuate the sense of floating and not being grounded in one key; it was borrowed from the modulation to the dominant at the end of the second phrase of the hymn. This second phrase is further hinted at in the bars which follow (12-28) as the music continues to unfold. The music continues to spiral, with each sweep gaining new material and discarding previous material up until the climax at b.65. As the piece progresses a motif begins to take form. Set up at the beginning, it appears in full at bb.56-58 tenor 1 and dominates the rest of the piece. The five-note motif was taken from the modulatory phrase which accompanies the words "the Lord is his name" in the original hymn. Each phrase of the hymn is treated in turn as the new poem setting continues concluding with the main motif (bb.177-179) and a quote by the organ of the hymn's opening. The final organ quote employs the modal inflection (G#) stressing its significance to the piece.

Three Haiku

At Magn.
Ant. 1. g²

1 Odi-e * Chrí-stus ná-tus est : hódi-e Salvá-

2

3 tor appáru- it : hódi- e in térra cánunt Ange-li, laetán-

4

5 tur Archánge-li : hódi- e exsúl-tant jústi, di-céntes :

6

Gló-ri- a in excélsis Dé- o, alle-lú- ia.

Figure 19: *Hodie Christus natus est*

Of the Three Haiku written, two are included in this portfolio: *Paradise Sinks Hence*, and *Under a hushed moon*. The following text for the haiku was commissioned from Anoosheh Dastbaz:

The Lord brought the day.
Then came the fall, darkening all.
Paradise sinks hence.
Under a hushed moon.
Sound is stolen, sight is stopped.
Our world a wide tomb.
Away with the night.
Darkling sin, usher in light.
He will bring the day.

The six phrases of the Hodie chant were considered as labelled in Figure 19. What was most striking about the chant was its narrow tessitura: a major 3rd. A plan for all three haiku was fashioned employing major 3^{rds} significantly and exploring each line in a manner where the sentiments of the Hodie text and the haikus were matched as closely as possible. Consequently, the tripartite structure of the haiku was reflected in the music:

	Haiku 1	Haiku 2	Haiku 3
Line 1 (5)	Phrase 1	Phrase 4	Phrase 1
Line 2 (7)	Phrase 2 + Gloria	Phrase 5 + Alleluia	Phrase 6
Line 3 (5)	Phrase 3	Phrase 3	Phrase 1

Table 6: Haikus' structural plan

In line with the macro plan of Table 6, the opening of *Paradise Sinks Hence* explores the first phrase of the chant. Major 3rd intervals were used to control the pitch entries of each voice. The alto enters first, presenting the first phrase of the chant in E^b followed by the soprano a major 3rd higher (G major), tenor a major 3rd higher again (B major), and finally bass (D#/E^b major). The borrowed material is presented on the surface with initially only rhythmic variety disguising its origin. The layering of the three key centres crafts an unstable harmonic basis until the tonal release on 'day' in b.35. Bitonality continues into the second line with the bass (B major) and tenor (G major) presenting material founded on phrase two with the *Gloria* sounding at b.67. Unfolding of the 3rd phrase and line takes place from b.82 as the music becomes more diatonic.

Very similar techniques are employed in the second haiku. The borrowing of phrases is governed by the plan set out in Table 6 and the unfolding technique is ubiquitous. The borrowed material is treated in respect of pitch in nearly the same manner as in *Haiku 1* but the overall aural effect is constructed so that the material appears further below the surface. It is disguised by the very gradual unfolding and the slow movement and rhythm. Some aspects of the chant are buried deep toward the core of the music, giving the impression of different gears or rates of speed. For example, the chant is performed very slowly by the organ pedals from b.35 of the organ part. The sense of gears moving at different speeds is further created by the use of multiple tempi (see chapter 5).

The influence of major 3^{rds} can be witnessed in the construction of the harmony and melody. The three harmonic centres of Haiku 1 were engaged as chords (Eb major, G major, B major) and all possible triads were extrapolated from the resultant notes (Eb major, G major, B major, B^b augmented, B minor, D augmented, F# augmented). Finally, a mode was constructed from these chords: Figure 20. This mode and the resultant harmonic possibilities were explored in the organ introduction which prepares the way for the entrance of the choir.

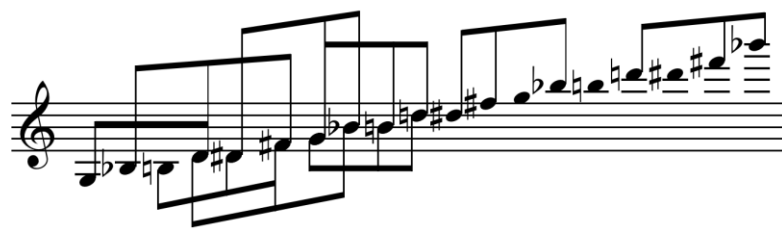


Figure 20: Possible triads and mode created for *Haiku 2*

The formal plan for the set of three haiku also included a memory based narrative, similar to that employed in *Through Glass Mountains*. As noted, the borrowed material is very close to the surface during the first haiku, reflecting the haiku words of hope expressed in the first line “The Lord brought the day” and the Hodie “today Christ is born”. The material then takes an inward journey for the second haiku, disguised by the multiple tempi and rate of change before being revealed again at the surface in the third haiku, again reflecting the journey stipulated in the three haiku texts.

Thy Heavenly Grace Inspyre

T*hy Heavenly Grace Inspyre* borrows melodic material from the plainchant *Veni Creator Spiritus* and, like the other pieces in this chapter, explores the relationship between surface and core placements, evoking different levels of memory.



Figure 21: *Veni Creator Spiritus*

A layering approach to form (as described in *Through Glass Mountains*) is employed with a slow cantus firmus moving at a different rate to the harmony and overall form. The cantus is constructed from the whole chant with a harmonic rhythm of roughly one note per seven seconds. It begins in the pedal part (bb.1-28) and weaves its way through the texture, appearing at times in the right hand (bb.30-45), left hand (bb.46-75) and pedal (bb.76-79) before the coda (b.81). This technique was influenced by *Meditation* by James MacMillan in which a cantus is employed. In the final section of *Thy Heavenly Grace Inspyre*, the cantus initially disappears before becoming melodic in bb.95-98, 99-104 (top

This chapter has documented how spiral form, harmonic clusters, and memory, as seen in *Through Glass Mountains* have been significant in the construction of three new pieces based on liturgical sources. The employment of layered form has shown how these devices are a common facet of the portfolio.

CHAPTER 4 – POPULAR STYLES

The influence of popular styles on twentieth and twenty-first century composers has been the subject of much scholarly debate. From the Jazz influences noted in Stravinsky's *Ebony Concerto* to Stockhausen's *Mikrophonie II*, in which he uses expressive terms such as 'à la jazz, cool.' The influence of popular music on contemporary composers can clearly be seen in the works of Gabriel Prokofiev, Tansy Davies, Thomas Adès, Mark-Anthony Turnage, and Donnacha Dennehy. This chapter shall examine two works within the portfolio that are both influenced by popular music and use popular music in their mimetic processes.

Entrainment

Entrainment for Oboe & Percussion borrows material extensively from popular music. Given the temporal relationships in the piece, it was decided that the main source material should be from a piece related to time and space. Pink Floyd's *Time* from their 1973 album *Dark Side of the Moon* was therefore chosen and closely analysed. The rhythmic lines throughout *Entrainment* are based on the rhythm of the bass line from *Time*. This can be clearly seen in the opening in which the oboe part employs this rhythm.

Harmonically, *Entrainment* consists of a series of key centres whose period is determined by points within the first four minutes where either of the two independent parts briefly synchronise at the semiquaver level (the unit of measurement being a second). At each of these points, which become more frequent as the piece progresses, the harmonic centre changes. The harmonic centres relate directly to the chord structure of Pink Floyd's *Time*: at each point where either part synchronises with the unit of a second, the harmonic centre in both parts moves one chord through *Time*'s harmonic sequence. The harmony from the song's verse was linked to the oboe and the refrain's harmony to the percussion. If an oboe semiquaver synchronises with the unit of a second, the harmony of the piece is advanced one chord from the verse, if the percussion synchronises the harmony is advanced one chord from the refrain. This process results in the following sequence (plus decoration): F#, D^Δ, A^Δ, A, E, F#minor, C#minor, Bminor, C#minor⁷, F#minor, A, E, F#minor⁷, E, C#minor⁷. At 2' 19'' the percussion and oboe part synchronise (albeit briefly) for the first time. This event was used to mark the start of more polytonal harmony as both instruments from this point forward begin their own cycles through the *Time*

chords. The harmonic centres were notated into the matrix created for the score (see Figure 24 and Figure 25 in Chapter 5) and control the pitches used in melodic and harmonic construction.

Both the rhythmic and harmonic processes at work in *Entrainment* place the source material right at the core of the work. This objective method relates very closely to my first experiment with borrowed material in *Wounding Dart* (2008). One could argue that such methods are more for generative reasons than aesthetic, and indeed this is true to a certain extent as the listener would be unaware of any reference to Pink Floyd. This was of little concern to me as subjective compositional practices were employed for the choices made in rhythmic relationships and melodic line. In addition, one could regard such methods as akin to the cipher-based generative processes used by composers as diverse as Bach and Shostakovich: the messages hidden in their scores were to disguise illicit references and therefore are often esoteric in nature. *Entrainment* is therefore less an exploration of memory in regard to borrowed material and more of a journey to marry subjective and objective processes using a borrowed material.

Two Pieces for Solo Harp

For source material for *Two Pieces for Solo Harp* I turned to the American gothic metal band *Evanesence*. I had desired to explore the compositional possibilities of *Evanesence's* music for a long period of time as their symphonic approach to songs, rhythmic complexity, and experiments with techniques such as scordatura had always appealed to me. I limited my borrowing to the group's 2003 album *Fallen* and chose either songs or phrases that were of particular musical interest.

In *Resonating Light* I borrowed not only a lyric from *My Immortal* for the title, but also the song's structure and melodic gestures. The introduction of *Resonating Light* sets the mood for an ambient (in the club/dance sense) piece gradually introducing the quaver motif that forms the basis of the introduction of *My Immortal*. The first section of the former (bb.23-31) takes the rhythm of *My Immortal's* verse and re-constructs the pitch material. Even though the melodic gestures are far removed from the original, a distant memory effect is created by maintaining but manipulating the original melodic shape and rhythm. This notion is further explored in the second section (bb.32-38) in which the accompaniment figure from the chorus is borrowed and re-scored.

The second piece in the set borrows fragments from other songs from *Fallen*: from *Whisper* and *Going Under* rhythmic gestures are extracted and married with new melodies, and phrases and textures are borrowed from *Everybody's Fool* and *Imaginary*. The choice of fragments to use and the resultant harmonic and melodic style that was brought to the work were totally free or subjective. Each fragment explored held a particular musical interest for me: some rhythmic, some melodic or atmospheric. The final memory effect of both pieces is one where the listener is left feeling they have heard something they recognise at a deep psychological level. However, unlike in *Through Glass Mountains* in which the memory tricks are internal as well as external, the distant memory evoked in *Two Pieces for Solo Harp* is purely external (surface) given the simple approach to form and motivic development.

CHAPTER 5 – MULTIPLE TEMPI

This chapter will examine three pieces from the portfolio that employ complex temporal relationships alongside borrowed materials. The problems arising when using divergent tempi are addressed as well as the solutions that were explored. In addition, aesthetic considerations, particularly in relation to *Entrainment*, are discussed.

Entrainment

As noted in Chapter 4 – Popular Styles, the borrowed materials for *Entrainment* are both musical and non-musical / conceptual. *Entrainment* is the process by which two oscillating systems, which have different periods when they function independently, assume the same period when interacting. The principle of entrainment is universal, appearing in chemistry, pharmacology, biology, medicine, psychology, sociology, astronomy, and architecture, to name but a few. A musical example of entrainment would occur if two metronomes that were set to different tempi were placed on a skateboard together: within seconds their cycles would synchronise despite being initially different.

I decided to use the non-musical concept of entrainment as the backbone to this first venture into multiple tempi and thus intended to use multiple tempi as a structural device. I planned to represent the process of entrainment by creating two instrumental lines that start at opposite ends of a tempo spectrum and gradually converge. The first sketches revealed that the use of simultaneous tempi posed four questions:

1. with such a strict concept (two separate tempo planes gradually converging/diverging), how would the performers be able to maintain their parts?
2. as the composer, how could I monitor the individual lines and ascertain how each bar of the two parts aligned? For example, which bar of the oboe part lines up with bar 12 of the percussion part? This would be important to enable musical relationships between the two parts
3. how could the presence of two tempi be made obvious to the listener (unlike in the Stockhausen? (see Chapter 1 – Introduction & Contextual Issues)
4. how would the finished composition be notated?

Revisiting Stockhausen may help with the first question. *Gruppen* uses three conductors who gauge the tempo and tempo changes. Two reasons prevented the use of such a method with *Entrainment*: first, the piece was for two soloists, not ensembles, so conductors would be inappropriate; second, this would lead to a lack of precision as it would prove nearly humanly impossible to gauge the gradual shifting in as precise a way as the entrainment concept required.

Technology provided the answer in the form of a device commonly used in the film industry to sync performers to video: a click track. A click track traditionally provides a controlled metronome click through headphones to each player enabling synchronisation with other media. I intended to use the device in a novel way to control precisely the gradual shift in tempo for each player: this would enable the players to perform their complex temporal shift whilst maintaining perfect synchronisation within the general scheme – for example it would be possible to create a complex relationship between the parts, such as musical hits, that would always coincide in performance. Without the aid of the click track, such strict ensemble would not have been possible within shifting tempi planes.

The ability to know exactly how the parts related at any one point in time was essential to the aesthetic intention as I did not wish to write two disparate parts that bore no relation to one another, as was my initial perception in *Gruppen*. This awareness would afford the building of relationships between the parts. Gestures would be able to synchronise (albeit in different tempi) and draw attention to the presence of the different tempi by crafting similar material presented at the same time in the two parts.

In order to relate the two parts and create the click track, a common denominator was required: 'real-time' measured in seconds fulfilled this function. The problem would be solved by being able to show which bar/beat each part would reach at second intervals. The first step was to create the click tracks in *Logic 7* using tempo controls. An oboe click track was created setting a tempo curve that matched the piece's concept (decreasing from 137-100bpm over four minutes). Using the ruler at the top of the *Logic* screen, it was then possible to work out how each semi-quaver (the chosen duration) of the oboe part related to time durations within the four minute structure (Figure 1). This process was then repeated for the percussion part.

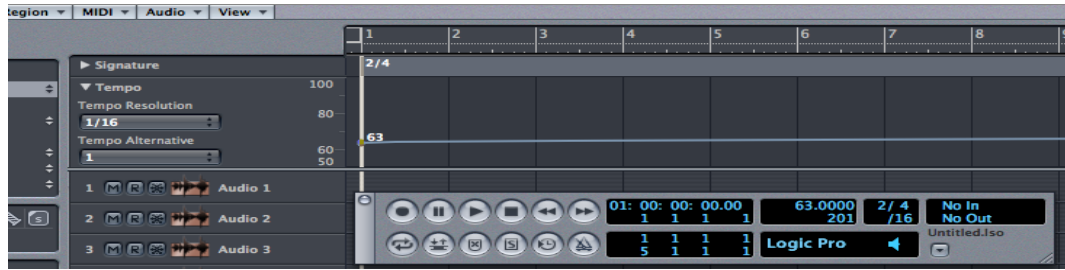


Figure 23: Oboe click track for *Entrainment* shown in Logic 7

The following two figures show the portion of the time grid that resulted from the analysis of both tempo curves. Note how there are many more oboe bars to each percussion bar owing to the tempo differences. The red note-heads denote the position of a semi-quaver that aligns with each second marking written above in red (semiquavers were grouped into longer note values to aid reading). Very few semiquavers synchronise exactly with the time markers. When such events occur the stems are also marked in red and the second readings (above the notation in red) were highlighted yellow.



Figure 24: *Entrainment matrix*

The instance of such occurrences increases as the four minutes of the first section progress. Interestingly, there were six points at which both parts synchronise at the semiquaver level against a second marker. These events were of interest and were marked musically in relation to the harmonic/tonal rhythm of the piece, as documented in Chapter 4 – Popular Styles.



Figure 25: A latter example of the *Entrainment matrix*

Question three (drawing attention to the presence of the two tempi) was addressed by returning to Stockhausen. The simplest solution would have been to use basic rather than complex rhythmic gestures in each part and musically mark the down beats. As noted previously, Stockhausen goes to the opposite extreme resulting in the pulses often being inaudible. The time matrix, as discussed, also afforded knowledge of exact synchronisation which could promote surface relationships such as hits and imitation – further enhancing the aural distinction between the two tempi.

In order to express the entrainment concept further, the second section of the piece, which arrives when the tempi changes for both players reach 100bpm, consists of a discourse in unison – rhythmically, melodically, and dynamically – the musical equivalent of total synchronisation. The final section reverses the entrainment process by requiring the percussionist to slow down whilst the oboist maintains their speed.

The final question to be addressed was how to represent a score of the piece. Notation software such as *Sibelius* does not permit multi-bar lines or function with divergent simultaneous tempi. After experimentation, the method chosen was to import the two individual parts into a graphics package and align them by hand. Whilst this was labour intensive, it would allow the musicians to be more aware of ensemble.

Haiku II: *Under a hushed moon*

The second of the two haikus submitted for this degree has multiple tempi at its core. As a result, the score required special preparation. The choice of temporal techniques for this particular piece was to emphasis contrast and balance in the haiku's text. Balance and contrast can be seen in the second line: 'Sound is stolen, sight is stopped.' There is a natural balance between the noun and its antithesis as suggested by the verb: sound-silence, sight-blindness. However, despite the polar relationship between the paired words, the author carefully bound each pairing together through the use of alliteration. I wished to represent this notion through tempo and in the pre-compositional stage created a detailed plan of how a fast organ part could relate to a slow-moving, almost static choir part. The plan built on the idea presented by *Thy Heavenly Grace Inspyre* of an object in a landscape. Whilst in the first haiku the organ and choir parts are united tonally, this second haiku places the chant-based choir parts in a landscape of the aforementioned controlled mode. This balances with the multiple tempi at the heart of the piece. The two facets of tempo and harmony are reunited in the third haiku and the preparation for this begins with the organ's material preceding the words 'sight is stopped' (b.128 organ part).

In addition to the multiple tempi, the organ part consists of more than one tempo gear. The slow-moving pedal part beginning in b.35 presents the plainchant for the movement in cantus style similar to that found in *Thy Heavenly Grace Inspyre*. This is in direct contrast to the semi-quaver led motif. Naturally, using rhythm to construct temporal gears is simpler than tempo relationships. However, I wanted an aleatoric element in regards to the performance to stress the uncertainty of the poem, and so resolved to avoid notating the relationships precisely using rhythm.

The plan for the haiku is similar in method to that used for *Entrainment* in that I was able to compose with a clear awareness of how the parts related. Further guidance to enable the desired synchronisation was placed in the performance notes at the beginning of the score.

Gyres

Gyres was commissioned by the band *Vultures* to perform at the 2010 York Festival. The title comes from the name given by poet WB Yeats to a geometric shape that represents his philosophical conception of history and time. Yeats alludes to this shape in his poem *The Second Coming*:

"Turning and turning in the widening gyre
The falcon cannot hear the falconer;
Things fall apart; the centre cannot hold;
Mere anarchy is loosed upon the world..."

In his imagery, Yeats also employs a pun on this word, which when spelt Geier, is the old German word for Vultures.

In *Gyres* each of the four instrumental parts (sampler, percussion, bass guitar, and electric guitar) consists of a loop of material which increases in density and definition with each repetition (spiral form). At the half way point the process is reversed as each part spirals back by losing definition and decreasing in density. The overall performance of the piece will vary each time because each instrument performs independently of the other with independent tempo and loop length. The sampler part acts as a free-moving core, providing stability and a sound world that unites the other parts.

Naturally, the issues of synchronisation and scoring required addressing again. I decided not to produce a score for this piece and employed a similar process to that of constructing *Entrainment* to ensure that the aesthetic and narrative for the piece remained intact for all performances. The units of seconds and minutes were utilized again to maintain synchronisation in performance and to keep track of the various parts during the composition process. The bass guitar provides nine cycles of material following the narrative of spiral form and in the tempo of ♩=60. The computer performs a free non-cyclic part (♩=90) against the seven cycles of the guitar (♩=115) and six cycles of the percussion (♩=75). This piece therefore brings together the concepts of layered form which is used throughout the portfolio (see *Through Glass Mountains*).

Given that each part starts together but performs throughout independently, a method of promoting ensemble was required in order for the compositional narrative and aesthetic to be conveyed. First, a timeline of minutes and seconds is given above each part to help maintain a degree of ensemble; second, the performance notes suggest that one of two methods should be employed to maintain ensemble: either a large digital clock should be

positioned so that each player can reference from it, or each player should have a digital metronome set to their tempo. If the latter option is used, metronomes should be employed that have a light function so that beats are shown to the players silently. The performance notes also state that whichever method is used, overall time should be thought of as very loose, and whilst players should strive to stay within the main time frame, minute deviations and serendipity are welcomed. The percussionist is tasked with completing the piece. When the other players arrive at the repeating sections at the end of their scores they should watch for the percussionist's cue to finish. As the cue is given they should complete their passages before freezing position. The percussionist then continues before miming the final strike of the piece.

Gyres plays loosely on memory and mimesis, most obviously its non-musical borrowing from Yeats. In addition, memory processing is evoked through spiral form as aurally tuning into one of the four parts for the duration of the performance will reveal the cyclic nature of the part. Furthermore, towards the middle of the piece improvisatory passages are included in three of the four parts with the instruction to 'mimic' (one reading of mimesis) what is being heard.

CHAPTER 6 – MUSIC FOR AMATEURS

Two pieces in the final portfolio were written especially for amateurs. It was very important to me that I maintained compositional integrity whilst writing pieces suitable for amateur players. This chapter discusses how this aim was achieved.

...a seal upon thine heart

A *seal upon thine heart* was commissioned by Alison Marsh and Ed Wallis for their wedding in April 2010. Alison requested that the piece be lyrical and gentle and that it might also allude to Delibes's *Flower Duet*, an arrangement of which I had made previously for a clarinet duet in which Alison had performed. Further material for possible inspiration included the wedding date (17/iv/10), the letters 'A' and 'E', the couple's full names and the number four. Finally, the piece had to be of moderate level for the clarinetist and suitable stylistically to be played during the service. I always enjoy the challenge of writing such a piece and of finding methods to maintain compositional validity. With this piece I turned to ciphers and generative processes. Similar processes of ciphers and serialistic approaches to tonal frameworks can be witnessed in the music of Oliver Knussen. Julian Anderson details Knussen's compositional processes in two articles written for the journal *Tempo* (2002, 2003) and demonstrates how ciphers provide the backbone to Knussen's *Flourish with Fireworks* (1988), *Songs without voices* (1991-92), *Whitman setting* (1990-91), *Two Organa* (1994), *Horn concerto* (1994), and *Violin concerto* (2002). Of greater significance to the current discourse, the first of the *Two Organa* handles tonal harmony according to contemporary practices through pseudo-serialistic methods such as row generation and verticalisation.

The two names were encrypted into music by a simple monoalphabetic substitution cipher.



Figure 26 shows the cipher method and the musical result for the two names. The method employed an altered B^b major scale to offer the most naturalistic tuning and sound for the instrument and to aid playability.



Figure 28: Motif from *Delibes*

Further borrowing from Delibes occurs between bb.40-72 during which the rhythm of the clarinet part is an exact replica of the middle section of the *Flower Duet*, albeit in augmentation. The piano part was also built thematically from this with the falling 2nd semiquaver motif of Delibes becoming the falling 2nd quaver motif in the augmented version.

In the clarinet arrangement of the Delibes, the second clarinet takes over the melody in the middle section, an event which prompts the piano to take over the melody in b.58 ... *a seal upon thine heart* with the original piano countermelody moving to the lower voice. The melody that the piano introduces at b.58 is based on Ed's name and is followed by fragmentation and the gradual merge with Alison's between bb.67-74. The piano cadenza of bb.84-88 is constructed from both names in their entirety. After the reprise of the opening material by the piano, the clarinet enters with its own cadenza which is constructed directly from the name rows.

The decision was made early on that the names would be used for the melodic material of the piece. It therefore followed that the harmony would be derived from the wedding date (17/iv/10) and the number four. A method was sought for deriving harmony from the date by reading the date as a series of three intervals (a 17th, 4th, and 10th). This created a problem as 17^{ths} and 10^{ths} are the same as 3^{rds} (albeit compound). It was therefore decided to alter the quality (maj/min/dim/aug) of the intervals. Various attempts revealed that 17^{ths} and 10^{ths} were best regarded as major or minor and not augmented and diminished as the latter sound the same as 2^{nds} and 4^{ths} respectively. Likewise, 4^{ths} behave in a similar manner working best as perfect or augmented intervals. It was thus decided that the 17^{ths} and 10^{ths} could be regarded as major or minor and the 4^{ths} regarded as augmented or perfect. All possibilities of interval variation were considered returning the matrix and chords as shown in Figure 29:

	17 th	4 th	10 th
Chord 1	Major	Perfect	Major
Chord 2	Minor	Perfect	Minor
Chord 3	Major	Perfect	Minor
Chord 4	Minor	Perfect	Major



	17 th	4 th	10 th
Chord 1	Major	Augmented	Major
Chord 2	Minor	Augmented	Minor
Chord 3	Major	Augmented	Minor
Chord 4	Minor	Augmented	Major



Figure 29: Harmonic matrix & chords (root B^b) for *...a seal upon thine heart*

Eight chords were now available for the harmonic pallet of the piece. These were transposed by the interval of a Perfect 4th (bringing the number '4' into the harmonic writing) resulting in a complete pallet of 24 chords (Figure 30).



Figure 30: Complete harmonic pallet for *...a seal upon thine heart*

The whole piece was constructed using these chords and their inversions along with the incidental harmony that results from using Alison's name row in the opening piano part. This technique can be related to the 'object in a landscape' previously discussed. To draw attention to the quartal aspect of the harmony (the fact that the three transpositions are a 4th apart), chord sequences would often be constructed from reading vertically down the chart, resulting in chords with bass notes a 4th a part. The initial B^b chord row was used in its entirety to end the piece (piano bb.128-end) placing it at the surface of the music.

...a seal upon thine heart has been performed by two different Grade V clarinetists demonstrating its suitability for amateurs. By using cipher technique, melodic unfolding,

and generative harmonic processes I have shaped a piece that has maintained my current compositional practices whilst being suitable for all musicians and the intended audience.

Prelude from Celebration Suite

The final piece in this chapter was written for a Grade VI pianist. Unlike the previous piece, the construction was more improvisatory. The *Celebration Suite* consists of five movements in the traditional suite style with each written for a different piano grade (Prelude: Grade VI, Allemande: Grade V, Sarabande: Grade IV, Gavotte: Grade VIII, Gigue: Grade VII-VIII). I determined to use some techniques already explored in the portfolio including unfolding and harmonic ambiguity or polytonality. Unfolding seemed very appropriate to the atmosphere and mood underpinning the piece as the harmony could gradually unfold over the duration, becoming progressively more unstable. I took the borrowed material from the opening of Satie's *Gnossienne No.1* and it features throughout, gradually unfolding, extending and contracting.

CHAPTER 7 – SUMMARY OF APPROACHES TO FORM, MELODY, HARMONY, AND RHYTHM

This final chapter will summarise the various approaches to form, melody, harmony, and rhythm as explored in the portfolio. It will bring these strands together to chart the development of my compositional thinking and aesthetic, closing with some concluding thoughts.

Approaches to Form & Structure

Methods of form and structural construction have varied across the portfolio. However, an overview reveals that the approaches can be categorised into four areas: borrowing forms, compound variation, layered form, and ground bass/cantus. Often, a single piece presents more than one category of form, as shall be illustrated.

Epithalamium, *An evening hymn*, and *Resonating Light* from *Two Pieces for Solo Harp* all take structural blueprints from the work upon which they are based. What is notable is that borrowed forms are never treated in a manner where the original is left intact. In all examples, the original form goes through processes of expansion or contraction. This is particularly evident in *An evening hymn*.

Layered form derived from concerns over avoiding block technique. A useful device for avoiding blocks of material is ‘papering over the join.’ Dovetailing over joins, either with material or other musical elements can often disguise the joins. Such techniques are utilised in *An evening hymn*. This method is developed further in layered form in which different musical strands (harmonic, thematic, temporal, and textural) overlap by virtue of the number of sections of which each strand consists. Layered form is evident in both *Thy Heavenly Grace Inspyre*, and *What shall I do...;* the latter consisting of 16 textural sections, five harmonic, and three formal, equally spaced through the course of the piece.

The final category (ground bass/cantus) can be found in *An evening hymn*, *I see she flies me eo’rywhere*, and *Thy Heavenly Grace Inspyre* (and to a certain degree in the second haiku). What is notable is the use of expansion and contraction again. In *An evening hymn* the expansion and contraction is controlled by numbers significant to the original Purcell. In the other pieces, the expansion and contraction is freely determined by aesthetic decisions.

Aside from these four categories, structural decisions are sometimes made freely (subjectively). In *A peace all too fair, ...a seal upon thine heart, Prelude from Celebration Suite*, and *Fade to black*, the form is determined either by the text or freely. With *Entrainment*, *Tamesis* and *Gyres* the form is the result of the borrowed non-musical narrative. *Tamesis* takes its form from the passage of the river Thames (Figure 31). A satellite image was obtained of the Thames from Dorney to the estuary and a time-line of 20 minutes stretched over the top using computer software. Key events in the river's journey (such as locks, tidal changes, twists) were noted against the timeline and controlled the form of the piece.



Figure 31: *Tamesis* form, borrowed from the River Thames

Exploration of Melody and Harmony

Whilst contracting and expanding seems to bridge the various categories identified under form, unfolding or spiral technique dominates the approach to melody and harmony in all pieces. The spiral approach to melody has been well documented in *An evening hymn* in which the five melodic motifs extracted from Purcell were explored in a cumulative manner, with each sweep of the spiral adding another motif. In addition, spiralling technique can be identified in *Hope of the Hopeless*, *A peace all too fair*, *Tamesis*, *Gyres*, *Prelude from Celebration Suite*, and *Three Haiku*. Two other methods are ubiquitous in the portfolio: intervallic relationships with the source material, and strict adherence to pitches and shape of source material. The latter method is usually reserved for instances when the borrowed material is placed at the surface of the work. All three plainchant pieces demonstrate this (*Three Haiku* and *Thy Heavenly Grace Inspyre*).

The first method can be summarised as employing common intervals sourced from the borrowed music to construct new melodies, often controlled by the harmonic structure or formal relationship to the source. A good example of this can be found in *Epithalamium*. This method is also used to construct or control harmonic progressions and tonality. In *What shall I do...* and *...to show how much I love her?* the harmonic pace is determined by a close relationship with motifs and intervals found throughout the Purcell piece they are linked to.

Tonal centres are often controlled by events determined by the macro structure which, as we have seen, is set by the source materials. The harmonic rhythm and tonality of *Entrainment* is controlled by a series of events determined by the tempo process; *Epithalamium* and *An evening hymn* use events determined by structural relationships with this source material to control harmonic processes.

In two cases, the harmonic pallet is directly related to an analysis of the borrowed object. In the case of *Three Haiku* the plainchant was analyzed to determine its tessitura (maj. 3rd) which influenced harmonic construction. For *...a seal upon thine heart* it was the number four which, upon request of the commissioners, was moulded into the piece resulting in quartal harmony.

In some cases free harmonic methods were used (*Prelude from Celebration Suite* and *Two Pieces for Solo Harp*). In both cases, other factors were carefully controlled and the harmony became the subjective aspect of the piece. In *Thy Heavenly Grace Inspyre* and *...a seal upon thine heart* (and to a certain extent *Through Glass Mountains*) the mixture of two systems created the sense of placing an object in a landscape.

By far the leading harmonic factor was my discovery of altered harmonic series. The pallet of series generated from 0.7 and 0.9 relationships was used exclusively throughout *Through Glass Mountains*. The only exception to this is when original Purcell melodies are placed near the surface, in which case they often maintain their original pitches.

Finally, *Tamesis* explored a novel method for harmonic construction. Chords were created by extrapolating the first six notes from each movement of Haydn's late string quartets. These chords then became the harmonic pallet for the piece and can be clearly heard in the interlude sections.

Rhythmic and Temporal Approaches

One notable rhythmic device used throughout the works present is a controlled, written-out accelerando. This rhythmic motif began life in *Tamesis* and appeared in nearly all subsequent pieces. Other rhythmic approaches created more divergent results. The complex L-system used in *Epithalamium* and the frequent borrowing of rhythmic motifs from the source material generated complex rhythmic relationships within pieces as well as a rhythmic identity to each piece.

Finally, the divergent tempo relationships explored in pieces such as *Entrainment*, *Gyres*, and *Under a hushed moon* not only served to address an interest of mine but also created rhythmic complexity. For example, the rhythms used in *Entrainment* are comparatively basic by contemporary trends. However, the composite effect of simple rhythms across complex temporal relationships disguises this and makes for an intricate aural effect. This effect was used very effectively in *...a seal upon thine heart* when the piano and clarinet are required to play temporally independent of each other (b.107). I had conceived the final rhythmic effect before settling on this method and was concerned that notating the exact rhythmic relationship required would be beyond the ability of amateurs. This limitation was serendipitous!

Concluding Thoughts

This thesis has set out my compositional concerns regarding borrowed material, mimesis, and memory and has explored how the pieces therein have sought to address these interests. As noted at the end of Chapter 1 – Introduction & Contextual Issues, the process of writing this thesis has enabled me to identify common techniques within my practice. The use of unfolding technique, rhythmic accelerations, and

expansion and contraction of harmonic and melodic features clearly pertain to my compositional style. Their appearances in nearly all pieces and their post-composition discovery lead me to believe that their use must be subconscious. Possibly the hunt for the elusive 'own voice' has uncovered some clues.

I plan to take some of my discoveries further. I should like to explore further how simple rhythms within complex temporal frames can be exploited, for example, by writing a piece for two conductors. I also intend to revisit the method employed for *Gyres* in an orchestral context using digital clocks for synchronisation.

Memory and mimesis have become increasingly important to me over this process and I should like to extend my work in this area and hopefully showcase *Through Glass Mountains* in a new context in which the borrowed Purcell song is integrated between each movement. Birtwistle explored this possibility in his set of pieces called *Sempre Dowland*. He arranged the original Dowland pieces to be performed between his own ventures into mimesis.

What is most striking about mimesis is its significance to the history of art. Whilst some might regard its relationship to music as opening Pandora's Box, what is certain is that it provides an almost unending source of inspiration.

APPENDICES

Appendix A: Complete altered harmonic series

C

1.0

0.7

0.9

Db

1.0

0.7

0.9

D

1.0

0.7

0.9

Detailed description: This section contains three systems of guitar tablature for the chord D. Each system (1.0, 0.7, 0.9) consists of a treble clef staff and a bass clef staff. The treble clef staff shows the fret numbers for the strings, with '+' signs indicating natural harmonics. The bass clef staff shows the fret numbers for the strings. The 1.0 system has a treble staff with notes on strings 1-4 and a bass staff with notes on strings 5-6. The 0.7 system has a treble staff with notes on strings 1-4 and a bass staff with notes on strings 5-6. The 0.9 system has a treble staff with notes on strings 1-4 and a bass staff with notes on strings 5-6.

E_b

1.0

0.7

0.9

Detailed description: This section contains three systems of guitar tablature for the chord Eb. Each system (1.0, 0.7, 0.9) consists of a treble clef staff and a bass clef staff. The treble clef staff shows the fret numbers for the strings, with '+' signs indicating natural harmonics. The bass clef staff shows the fret numbers for the strings. The 1.0 system has a treble staff with notes on strings 1-4 and a bass staff with notes on strings 5-6. The 0.7 system has a treble staff with notes on strings 1-4 and a bass staff with notes on strings 5-6. The 0.9 system has a treble staff with notes on strings 1-4 and a bass staff with notes on strings 5-6.

E

1.0

0.7

0.9

F

1.0

0.7

0.9

Fsharp

Musical score for the Fsharp chord progression, consisting of three systems of staves. Each system includes a treble clef staff and a bass clef staff. The systems are labeled 1.0, 0.7, and 0.9 on the left. The notation includes various notes, accidentals (sharps and naturals), and plus signs (+) above notes, indicating specific voicings or fingerings. The bass clef staves show a consistent pattern of notes across the systems, while the treble clef staves vary.

G

Musical score for the G chord progression, consisting of three systems of staves. Each system includes a treble clef staff and a bass clef staff. The systems are labeled 1.0, 0.7, and 0.9 on the left. The notation includes various notes, accidentals (sharps, naturals, and flats), and plus signs (+) above notes, indicating specific voicings or fingerings. The bass clef staves show a consistent pattern of notes across the systems, while the treble clef staves vary.

Ab

1.0

0.7

0.9

A

1.0

0.7

0.9

Bb

1.0

0.7

0.9

B

1.0

0.7

0.9

Appendix B: Purcell Songs⁴

Epithalamium (from The Fairy Queen)

ACT V.

PRELUDE.

Nº 41.

The musical score is written for piano and consists of four systems of music. Each system contains two staves: a treble clef staff and a bass clef staff. The key signature is G minor (two flats) and the time signature is 4/4. The first system contains five measures. The second system contains five measures. The third system contains five measures, with a section marked 'A' starting in the second measure. The fourth system contains five measures, ending with a first and second ending bracket over the final two measures.

14058

⁴ All scores presented are out of copyright and available freely at <http://imslp.org/>

EPITHALAMIUM (Soprano). THRICE HAPPY LOVERS.

Nº 42.

JUNO.

Thrice hap-py, thrice hap-py,

thrice hap-py, hap-py, hap-py lov - ers, may you be forev-er, ev - er,

ev-er, ev-er free, may you be for ev-er, ev-er, ev-er, ev-er

free From that tor - ment - - - - - ing de-vil,

14056

A

jea-lous-y; From all that anx-i-ous care _____ and

strife _____ That at-tends _____ a married

life. Thrice hap-py, thrice hap-py, thrice happy, happy, happy,

hap - - - - py, hap-py lov-ers, may you be for ev-er, ev-er,

14056

ev-er, ev - - er_ free.

Be to one an - o - ther true, be to one an - o - ther true,

Kind to her, kind, kind to her as she to you; And since the

er-rors, since the er - - rors of this night are past, May he ___ be

14056

ev-er, may he be ev-er, may he be

ev-er, ev-er con-stant, she be ev-er,

she be ev-er, ev-er, ev-er chaste,

may he be ev-er, ev-er con-stant,

she be ev-er, she be ev-er, ev-er, ev-er chaste.

14056

What shall I do to show how much I love her?

8

||: A :||: B :||

WHAT SHALL I DO TO SHOW HOW MUCH I LOVE HER

FROM
DIOCLESIAN

Original Key D mi.

Fast
(Wandering Duet format)

Andante (♩ = 84)

1. What shall I do to show how much I love her?
2. Since Gods them - selves could not ev - er be lov - ing,

legato e cantabile

How ma - ny mil - lions of sighs can suf - fice? That which wins
Men must have breath - ing re - cruits for new joys; I wish my

o - ther hearts nev - er can move her; Those com - mon
love could be al - ways im - prov - ing, Though ea - ger

mf *decrescit veri*

Bm C Em F# Bm F#7 Bm F#

Bm F#7 Bm F#7- Em7 F# Dm || Bm C Em

F# B F#7 Bm F# Bm F#7

ORIGINAL ACCOMPANIMENT: figured bass

16968

||: Relative Major
D
 Repeated as refrain

me - thods of love she'll des - pise. I will love more than man
 love more than sor - row de - stroys. In fair Au - re - lia's arms

14

Bm Em7 F# Bm AD G

e'er lov'd be - fore me, Gaze on her all the day and
 leave me ex - pir - ing, To be em - balm'd by the

19

Bm D G A D Bm E A C#7 dim.

melt all the night; Till for her own sake at last she'll im -
 sweets of her breath; To the last mo - ment I'll still be de -

25

F#m C# F#m B E C# F# Bm Em7 Bm

-plore me To love her less to pre - serve our de - light.
 - sir - ing: Nev - er had he - ro so glo - rious a death.

28

F#m Bm Em7 F# A

cresc. dim. rall. 2nd time

An Evening Hymn

An Evening Hymn

Dr. William Fuller

Henry Purcell

voice

Continuo realized by W. F. Long

organ

6

6 Now, now that the sun hath veil'd his light, and

12

12 bid the world good night, to the soft bed to the soft, the

18

18 soft bed my bo-dy I dis- pose, but where, where shall my

24

24 Soul re - pose? Dear, dear God, ev-en in thy arms, ev'n

6 4 3

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An Evening Hymn

2

30

in thy arms and can there be a - ny so sweet se -

36

cu - ri - ty! Can there be, a - ny so sweet so sweet se -

42

cu - ri ty! Then to thy rest O my

46

soul! Then to thy rest, O my

53

soul! and sing ing, praise the mer - cy that pro - longs thy

The image shows a musical score for a hymn. It consists of six systems of music. Each system includes a vocal line (treble clef) and a piano accompaniment (grand staff). The key signature is one sharp (F#), and the time signature is common time (C). The lyrics are written below the vocal line. The score includes measure numbers 30, 36, 42, 46, and 53. The piano accompaniment features various chords and melodic lines, with some measures containing fingering numbers like 2, 5, 6, 4, and 5.

An Evening Hymn

4

89 jah, Hal - le - lu - jah, Hal - le -

94 lu - jah, Hal - le -

99 lu - jah, Hal - le - lu - jah, Hal - le - lu - jah, Hal -

104 le - lu -

109 jah, Hal - le - lu - jah.

The musical score consists of five systems, each with a vocal line and piano accompaniment. The key signature is one sharp (F#) and the time signature is 4/4. The piano accompaniment features a steady bass line and chords in the right hand. The vocal line is written in a soprano or alto clef and includes lyrics for each system.

I See She Flies Me Ev'rywhere

I SEE SHE FLIES ME. (AURENG-ZEBE)

Words by
DRYDEN.

HENRY PURCELL.
1692 or 1694

Animato.

I see, I see she flies me, she
flies me, I see, I see she flies me, she
flies me, flies me, she flies me ev-ry

This PDF courtesy of Art Song Central - The singer's resource for free sheet music - <http://artsongcentral.com>

where, she flies me ev-ry-where: Her eyes, her eyes, — her scorn, her

scorn — discov-er, but what's — her scorn, but what's — her scorn, or

my — despair, *cresc.* Since 'tis my fate, 'tis, 'tis my fate, since 'tis, 'tis my

fate, *dim poco rit.* since 'tis my fate to love her, since 'tis my fate to love her.

Rather slow.

p

Were she but kind, — kind, — were she but kind, —

cresc.

kind, — whom I a - dore, I might live long — —

cresc.

er, but not love — —

p

her more; were she but kind —

p

kind, — were she but kind, — kind — whom

I — a - dore, I might live long - - -

cresc.

- - - er, live long - - - er, but

f *dim.*

not love — her more.

poco rit.

dim. *poco rit.*

Appendix C: Music cited

Thomas Adès

Darkness Visible (1992), Arcadiana (1994), Asyla (1997), Piano Quintet (2000)

J. S. Bach

Partita Number 2

Luciano Berio

Folk Songs (1964), Sinfonia (1967-1969)

Leonard Bernstein

West Side Story, (1949)

Harrison Birtwistle

Pulse Shadows (1981), Sempre Dowland (2010)

Benjamin Britten

St. Nicolas (1948)

Gavin Bryars

The Sinking of the Titanic (1969-2004)

Guy Bunce

Aphelion: Concerto for Piano, Computer & Orchestra (2007), Diverging Lines: Symphony for Chamber Orchestra & Electronics (2008), Wounding Dart (2008)

The Caretaker

Theoretically Pure Anterograde Amnesia (2009), An empty bliss beyond this world (2011)

Frédéric Chopin

Berceuse in D^b, (1843-1844)

Couperin

La Séduisante

Tansy Davies

Inside Out II (2003), Neon (2004)

Léo Delibes

Flower Duet (1881-1882)

Donnacha Dennehy

Junk Box Fraud (1997), Glamour Sleeper (2002), Street Walker (2003)

Thomas Dowland

Come Again! Sweet Love doth now Invite (c1597), In Darkness let me Dwell (c1610)

Dufay

Missa Se la face ay pale

Evanescence

My Immortal (2003), Whisper (2003), Going Under (2003), Everybody's Fool (2003), Imaginary (2003)

Bill Evans

Peace Piece, (1958)

Heiner Goebbels

Surrogate Cities (1994)

Jonathan Harvey

Mortuos, Plango, Vivos Voco (1980), Weltethos (2012)

Joseph Haydn

Late String Quartets

Simon Holt

Everything Turns Away (2010)

Charles Ives

Unanswered Question (1906)

Oliver Knussen

Flourish with Fireworks (1988), Whitman setting (1990-91), Songs without voices (1991-92), Two Organa (1994), Horn concerto (1994), Violin concerto (2002)

Brian Lock

Concerto for Clarinet, Percussion, Birds & Computer (2007), Sonata for Cello and Mixing Desk (2007), Concerto for Sound of a Harp & Other Sounds (2007)

James MacMillan

Meditation (2010)

Peter Maxwell Davies

Variation on a Theme of Chords (1959), Magnificat and Nunc Dimittis (1960), Cinderella (1980), The Great Bank Robbery (1989), The Spider's Revenge (1991), A Selkie Tale (1992), Fanfare: A salute to Dennis Brain (2007)

Henry Mancini

Moon River, (1961)

John Monsell

O Worship the Lord in the Beauty of Holiness

Palestrina

Missa L'Homme Armé

Henry Purcell

—— (c1688) *An Evening Hymn* (London: Novello & Co. Ltd.)

—— (1690) *What shall I do to show how much I Love her?* (London: Novello)

—— (1692) *Epithalamium*, from *The Fairy Queen* (London: Novello)

—— (?) *I see she flies me ev'rywhere* (London: Novello & Co. Ltd.)

Pink Floyd

Time (1973), Dark Side of the Moon (1973)

Maurice Ravel

Mother Goose (1910)

Eric Satie

Gnossienne Number 1 (1890)

Karlheinz Stockhausen

Gruppen (1955-57)

Christopher "Tricky" Stewart, Terius "The-Dream" Nash, Thaddis "Kuk" Harrell and Knowles

Single Ladies (2007)

Mark-Anthony Turnage

Hammered Out (2010)

John Woolrich

The Death of King Renaud (1991)

Michael Zev Gordon

On Memory (2003-2004), Bohortha – Seven Pieces for Orchestra (2012)

Plainchants

Veni Creator Spiritus, Hodie

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