

Introduction

The word orchestra comes from the ancient Greek word meaning ‘a dancing place’. In ancient times this referred to an open place where dances were performed to an instrumental accompaniment. ‘Orchestra’ is now used to mean a body of instruments and their players and it is the idea of the orchestra that I will be exploring in this submission.

My image of the orchestra is biased towards the size and forces of the early to mid romantic era, as this is where a vast amount of my orchestral knowledge was acquired. Therefore it is apt that orchestrally the portfolio begins at this point and only then branches out and explores other formats of this perhaps, most flexible of instrumental bodies. Several different orchestral ensembles are explored, drawing aspects from the classical era to the contemporary orchestra. There is one main constant within this portfolio, the core group of bowed strings, which I feel is a necessary and an important part of my works.

The orchestra is my ‘instrument’ of choice and is by far my preferred ensemble to compose for, perform in and listen to. It is also greatly appreciated by many other composers, conductors and musicologists. André Previn talks about orchestral repertoire “lying dormant in the greatest instrument ever intended” (Macdonald and Jane’s, 1979:7) and Stephen Cottrell wrote “The symphony orchestra is undoubtedly one of the great cultural achievements of European civilisation.” (Cambridge, 2003: 251)

It is by no chance that this portfolio is a show of orchestral works. I was lured by the orchestra’s vastness and large array of sounds, textures and timbres, something no other Western classical ensemble can offer. There are three main reasons why my ensemble of choice is the orchestra:

1. Its size, which enables the greatest combination of instruments
2. The sheer array of textures and timbres available
3. Its historical and cultural connections

The orchestra is the largest Western ensemble available, thus offering the greatest variety of instruments and their combinations. The sheer size of the orchestra offers the composer the greatest challenge in establishing knowledge of every instrument and competently writing for each one. As Walter Piston sighted “The sounds made by the orchestra are the ultimate external manifestation of musical ideas germinated in the mind of the composer.” (W.W. Norton and Company, 1955:7)

This submission therefore builds on the craft of orchestration and I see it, together with its instruments, in a similar way to how an artist sees colours on a palette. An orchestra is like a large piece of paper, traditional and well adapted over hundreds of years. Feldman said of his work “to me my score is my canvas, my space” (Machlis, 1961: 633)

The orchestra is the common denominator within the submission, although different models, the chamber and string orchestras have also been explored.

Technique and Orchestration

This chapter concentrates on my perception of technique and orchestration, exploring parallels existing between features of both my musical and visual compositions.

Orchestration is personal to each individual composer and it is possible to know its creator just by looking or listening to a work. This is also true of paintings. One can know the artist by the composition of texture, colour and technique used. I believe that my style of orchestration has been shaped by my orchestral experience as a string player and the position in which I sit within an orchestra. Had I been a woodwind, brass or percussion player, my experience within the orchestra would have been very different. As a string player, I am naturally biased towards the string section and therefore have to concentrate harder on successfully writing interesting woodwind and brass parts.

I first made a connection between art and music after watching a televised performance of Mussorsky's *Pictures at an Exhibition* at Symphony Hall. The CBSO were performing whilst an artist was painting his visual perceptions of the music live onto a projective screen.

Feldman's music also has distinct relationships with art and the linear, single dimensional space within his music can be compared with the space in some of Jackson Pollock's paintings. Feldman himself admitted the relationship to the painter and said "I have always been interested in *touch* rather than musical forms." (Article, Music and Painting, Dore Ashton). Like my music, Feldman's is non-symbolic with the sounds having no reference to anything but themselves. My music is also in line with the expansive space of contemporary painting.

Below I have explored the 'composition' of my works:

Space

As the portfolio has progressed, I have become more interested in space, which is evident through the use of sustained notes and rests. This is also true of my artwork and I have learned that a whole canvas does not necessarily need to be covered with paint or other materials. There are general pauses in my later works but the musical lines are also given more room to breathe, where rests are perhaps present in a phrase. I have come to realise that silence is as important as the notes surrounding it and can also enhance dramatic effect within a work.

Colours

My artwork always uses very specific colours and I began to wonder whether these same colours were evident within my compositions. The relationship between colour and sound cannot of course be scientifically proved, but the colours I imagine when listening to my music are the same as those I would choose to paint with. The coldest colour, blue, I generally do not feel comfortable using in visual terms, and it seems to be also generally eliminated from my music. This is especially true in my later works where greens, purples, yellows, oranges, reds, gold, silver and black are far more likely to be present. Perhaps it is the open interval of fourths and fifths which are characteristic of two of the three primary colours, red and yellow. The complementary colours of yellow and purple, green and red may, therefore, be seen in interval terms as sevenths or seconds, diminished fifths and augmented fourths, where they may be artistically complementary but in more traditional terms actually 'clash'.

A unique faculty of human psychics exists where there is an underlying ability in some individuals, called synaesthetes who see sounds of certain instruments and tonalities in various colours. Synaesthesia has been associated with some composers, including Scriabin, Messiaen and Rimsky-Korsakov.

The example below, taken from the solo violin part of Violin Concerto uses in visual terms, the primary colours red and yellow through the use of perfect fifths. Subsequently the complementary colour green is added against the red when the compound minor second occurs.

Example 1



This tone row, taken from the first two bars of *Variations?* is visually based around the complementary colours red and green.

Example 2



Patterns

Patterns are an extremely important part of ‘who I am’ and this has filtered through very strongly into my music. I like angular patterns and material to be well defined and well developed throughout a work. Later I include some examples of my paintings, which visually show the types of patterns I am interested in and expresses my interests visually in a way that is not possible through words.

The development of patterns is an important aspect in the progression of my works. Often the essence of the pattern will remain the same but it may be

reworked to grow with the music. Patterns are often a common link throughout my music and often the development of patterns will also shape a work, rather than using a prescribed form. This is also true of Maxwell Davies whose works cover many different genres but links between scores tend to be forged by means of similar use, i.e. or thematic techniques.

There may be several patterns in a work that will sometimes be layered on top of each other like a collage. This layering gives the patterns a new dimension to the music, often creating a new texture where the music becomes more three-dimensional.

Material

I enjoy reworking and reusing a limited amount of material in as many ways as possible. Often the amount of ideas used within a work is small, but due to the way in which the music is constructed the work itself does not bear any resemblance to the minimalist style. The only work in the portfolio which actively seeks to show its limited use of material is *Conundrum*, although the work itself cannot be considered as a 'traditional' minimalist work as it seeks a different view of harmony.

Texture

In both music and art I am free and willing to explore all kinds of textures. It is important to me that textures, colour and pattern are used in such a way that one will enhance and complement the other. The vastness of the orchestra allows for the most intricate and densest textures, something that cannot be achieved to the same level with a smaller ensemble. Picture example 1 is built up of multiple layers of abstract ideas, which is also true of much of my music. But there are problems and similarities in the construction of art and music. If lighter colours are used on the lower layers of a painting, they can easily be covered over by applying additional layers. Therefore it artistically makes sense

to use darker, denser colours on the base of the picture. This means that the construction of musical and artistic layers needs to work on another level and textures need to be considerate to other parts around them. In picture example 1 I have kept the lowest layer of paint, that of the red and green lines, visible by using only a glue-based solution to cover over the whole canvas, other layers placed on top are small fragments which only cover small areas of the work. In musical terms, this work shows the importance of rests, sustained but quiet notes, which perhaps remain in the background. These only become more evident when the ornamental parts stop, or perhaps are recurring ideas, which create familiarity, freeing the listener's mind to new, emerging sounds.

Abstract

My preference is for more abstract work where the music and artwork is based around musical or artistic ideas rather than a storyline. Sometimes single images and conceptions are used as a starting point for a piece as in *Spiders* and *Pluto*. *Aviation* is perhaps the only exception to this, where the music tells the story of a plane journey, an idea used to fit the theme of the concert for which the piece was commissioned.

An article, *I Think of Music in Terms of Sound* written by Malcolm Arnold, sums up my abstract approach to composition.

I write music because it is only possible to express the ideas and emotions I wish to express through music.

Music appeals to me chiefly because of its abstract quality. It is not necessarily tied to a story or subject. That is the reason why most of my works are orchestral or chamber music. (www.musicweb.uk.net/arnold)

Maxwell Davies also uses a similar approach for his third symphony "When I wrote this symphony [Symphony No.3] I thought of it in terms of purely abstract music." (www.maxopus.com)

The primary way in which I express myself is through music and this is due to its abstract quality. My preference for music over other forms of expression is also why I write for instrumentalists and not for singers as I feel that words get in the way of what I want to say musically. None of the works in my portfolio are tied directly to a story, although some have a single subject matter or an image as a starting point. Unlike Schnittke, I do not feel comfortable in re-using material from other composer's works, and will always strive to create my own musical starting point. My works are primarily about the music itself.

If one looks closely at my pictures, these are often based on repetition of abstract ideas, as with the following examples:

Example 3



Example 4



Example 5



Example 6



Example 7



Historical and Personal Connections to the Orchestra

The orchestra has personal and historical connections for me as I play on my great grandfather's violin. From his signed music in my possession, it is apparent my great grandfather played orchestral compositions by Brahms and Wagner around the turn of the twentieth century, music which was very modern for its time. I therefore have a great desire to preserve the orchestra's historical traditions and although I want to create new and original works, I feel I can achieve this without over-stretching the orchestra's boundaries. The orchestra has already shown it can change and adapt to the times and has been constantly evolving for more than four hundred years. I feel I can make further musical adaptations without destroying the essence of what it stands for or dissolving its historical tradition.

At the age of eleven, I became a member of the National Children's Orchestra which led to my first introductions of twentieth century music. Performing the works of other composers gave me the initial aspiration to create my own music. I soon become acquainted with the music of Malcolm Arnold, including both sets of his *English Dances*, several symphonies and the *Peterloo Overture*, all of which are a popular choice for many children's and youth orchestras.

After the initial period of adapting to these 'new' genres, one soon learns to follow the music and become acquainted with its more diverse sounds and rhythms compared to the safe havens of the 'Romantic' world. However the introduction to Arnold and later Maxwell Davies along with other twentieth century English music by Walton and Britten, did not dampen the shock of being presented with a much later English work, *Contrasts* by Edward Gregson.

The sounds and textures of Gregson's work were far from those previously experienced and certainly opened my mind to a very new musical world. This was certainly a demanding work for a children's orchestra but once the orchestra become acquainted with its sound world and demanding rhythms, which made one count more than ever before, the orchestra came alive with the music. I

began to notice this ‘liveliness’ with other works, especially those by Stravinsky and Shostakovich, and it seems that when presented with more complex time changes, the orchestra had to further concentrate to remain in the correct place. An orchestra is able to sit back more and get ‘lost’ in the vast majority of romantic music as one seems to learn where to come in intuitively. I began to take an interest in this liveliness, created through time change and rhythm, aspects which I have since carried through and are now a major part of my works.

Now looking back, I realise why Arnold and Maxwell Davies were such popular choices for the youth orchestra. Maxwell Davies is known for his versatility of working with many genres and it was often the case that his neo-mediaeval music was one of the most popular choices. This link to a past genre did make his music more accessible to the youth orchestra and in many cases the music is often written with a youth orchestra in mind, therefore fitting the requirements perfectly. Arnold on the other hand was often a more ambitious choice, although due to the forgiving nature of his work it is possible for a youth orchestra to ‘get away’ with a rather poor performance. My research shows that Arnold, Maxwell Davies and Walton, along with the earlier twentieth century composer Holst and to a lesser extent, due to its complexity, Elgar, are still very popular choices for the British youth orchestra. I am therefore sure this choice is due to the nationality link, also strengthened by the willingness of Arnold and Maxwell Davies to attend their performances and talk with the players.

For the British composers, Arnold and Maxwell Davies, the orchestra has always played a central role, when generally over the second half of the twentieth century orchestral output has fallen. Outside the UK, Ligeti and Xenakis have both written extensively for the orchestra although Xenakis is interested in procedures based on probability theory rather than the functioning of the traditional orchestra, which is where my interest lies. I have also, in latter compositions, looked more closely at the textures and weaving of individual lines although not to the same degree as Ligeti’s micro-polyphonic works. More recently when looking for a new way to express myself outside of my usual preferences, I have considered to a greater extent Lutoslawski’s last two

symphonies, together with the structures he has adopted through the use of free sections. I felt that using totally notated rhythms was becoming a little restrictive and have therefore chosen to use free or aleatoric passages to give the music freedom from a strict beat, thus also giving more textural possibilities. However I still prefer to be in control of pitch and, therefore, there are very few instances in the portfolio where a precise pitch is not defined.

Like Maxwell Davies, I want to be free to explore any style I desire and do not want to be classified as a composer of one particular genre. Maxwell Davies throughout his career has responded to a wide range of sources, i.e. chant and modality in medieval and renaissance music, motivic music from the classical and romantic symphony, atonal and serial music and neo-classical pastiche. Links are evident between pieces but this is due to more personal choices of use of materials, ideas and development rather than stylistic consistency.

The majority of compositions within this submission would be accessible to good youth orchestras and semi-professional adult orchestras. Youth orchestras, by nature of their financial status, are far more likely to play new pieces of music than a semi-professional one which is reliant on its performances to bring in funds. The youth orchestra is generally financially more secure, perhaps funded by a local authority and has an 'automatic' audience - the parents who will generally attend regardless of the music programmed. *Aviation* was written especially for the Hillingdon Youth Orchestra and the request was to reflect an idea based around Mussorsky's *Pictures at an Exhibition*. I chose for my picture the image of a flight, due to our closeness to Heathrow Airport. This idea went down well with the players. As the Hillingdon Youth Orchestra's players were only about grade 5 standard, the music had to reflect this. Hence it is the 'easiest' work in the portfolio.

With my vast experience of playing in youth and semi-professional orchestras, I am fully aware of the issues facing the orchestral player. Malcolm Arnold's experience as a trumpet player with the London Symphony Orchestra led him to write and talk of his observations and inside knowledge of issues facing the orchestral composer. My time as an orchestral player was invaluable as a source

of furthering my understanding, not only how the orchestra works, but also of the often complex social and political aspects which arise. Orchestral playing has certainly given me the confidence to write suitable parts for each instrument.

Perhaps coming from a performance perspective has given me the courage to let go of my works and accept that I am just the creator. It is the performers who will eventually bring the music alive. I therefore agree with Tippett who wrote “I have, in principle, nothing to do with the performance: my concern is simply with *invention*.” (Oxford, 1995: 259)

There are several rules of orchestration which I try to adhere to. My orchestration aims are to create equal, interesting and enjoyable parts for each player. However this is not always practical to achieve and could upset the balance of what one wants to achieve aesthetically within a piece. This is always a concern and I am constantly looking at ways to address and balance these issues.

All the music in the portfolio can be performed by traditionally trained musicians with little experience of contemporary music or extended techniques, which is certainly the case for the youth orchestra and probably true for the vast amount of semi-professional orchestras. New signs and instructions can cause problems for the player and it is to the composer’s advantage to make a score as accessible as possible to the player.

As I became further involved with the orchestra, it became a comfort zone offering much more than just the enjoyment of playing its music. It is also a place of refuge, where I could surround myself with familiarity and meet people sharing the same interests and often the same cultural background as myself. Orchestras demand a high degree of discipline and it takes a while for such a large number of players to become acquainted, both musically and socially. Players within a single orchestra usually share an enjoyment of similar music and therefore changes to musical genres and an introduction of non-classically trained players can upset the balance of an orchestra, the reason for which a player desires to be part of a particular group. Part of my yearning to compose

is to develop music to satisfy others who share a similar orchestral enjoyment to myself.

The enormity of the orchestra offers real excitement, whether from the players', composer's or audience's perspective. There is something special about seeing or being part of an orchestral concert in a large hall that I feel one cannot get from seeing a smaller ensemble in a chamber room. It is the 'buzz' from the orchestra's enormity that gives me the desire to recreate in my own works.

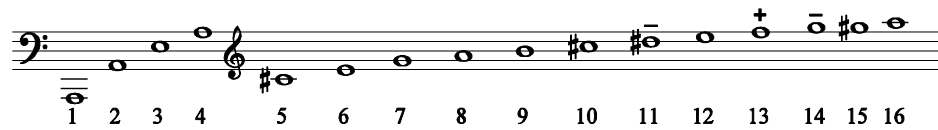
My passion for the orchestra has always been to create music I am able to perform and be part of. This also enables me to keep in communication with other players and stops me becoming too distant from the music. As a violinist, the orchestra offers the opportunity to both compose and perform alongside the wide range of other western classical instruments thus satisfying my desire for textural and timbral diversity.

The Pieces

Overtones

As the earliest work in the portfolio, *Overtones* bears a strong relation to my earlier, melodic, compositional style and is led more by harmonic interaction than the other works. The harmony in *Overtones* is based on sounds from the harmonic series which were inspired by my interest in the relationship between intervals of the harmonic series. The harmonic series, played in its natural progressive order has a very recognisable melodic sound, reminiscent of the horns warming up before an orchestral rehearsal that I wanted to be evident in my work.

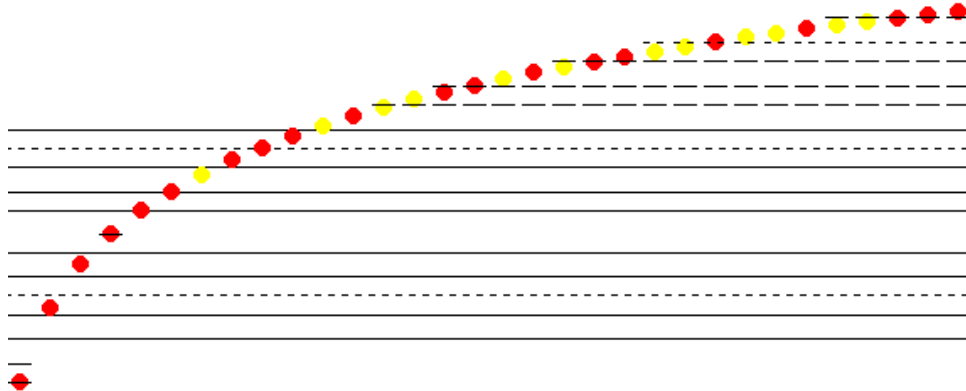
Example 8 - The harmonic series, fundamental note A



The harmonic series is a very natural sound source and presents the basic composition of any sound. Hindemith wrote “We find the intervals embedded in the tonal raw material which Nature has made ready for musical use...” (Schott, 1945: 15)

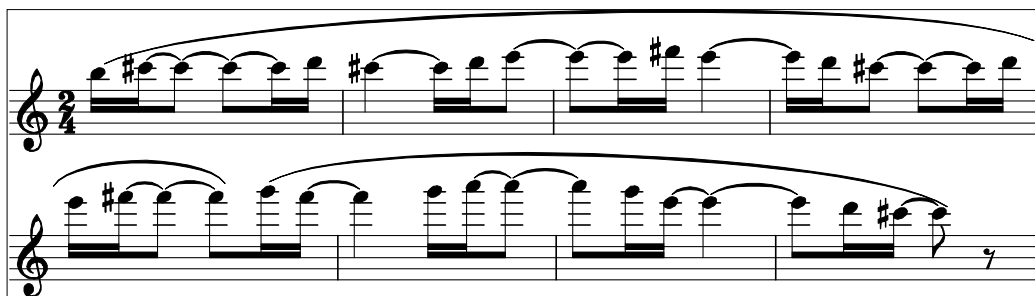
The series, played in order, also offers its own very individual melody and it was this ‘natural melody’ which I decided to explore further. Firstly however, I needed to decide how to use the harmonic series within the context of equal temperament and therefore realised that adapting the harmonic series to fit within the staff was the best route for my work. This decision was in line with my original criteria of keeping my orchestral works notated in a ‘traditional’ way, rather than working with quarter-tones which I feel would be unsuitable for my target orchestras to play.

Example 9 - The natural melodic curve of the harmonic series which can be heard at the beginning of *Overtones*.



Preservation of the harmonic series in *Overtones* works both vertically, as harmonic interaction between parts and horizontally as a melody.

Example 10



The melody above is introduced in the second bar of *Overtones* after a firm establishment is made in bar one to the harmonic series of A. As the melody is in the upper parts, its notes are based around the upper partials from the ninth to the sixteenth. This passage exposed my first dilemma on how to work with the partials which are ‘out of tune’ with equal temperament. After considering what to do about this, which affects the eleventh, thirteenth and fourteenth partial, I came to the conclusion that using my discretion would be the best way forward and therefore allowed myself the freedom to choose either the sharpened or flattened version of the note.

Ligeti’s violin concerto draws upon on the harmonic series which is especially evident in the first movement. This use of the harmonic series has similarities to

the beginning of *Overtones* where the notes of the harmonic series are used in an ascending motion.

Due to its more traditional harmonic structure, *Overtones* is the piece in the portfolio which can be most easily analysed and I have therefore created a harmonic analysis of the work to show its link with tonal structure.

Example 11 - Analysis of *Overtones*

The image displays a musical score analysis for the piece *Overtones*, organized into six distinct sections across three systems of staves. Each system consists of two staves, likely representing different instruments or voices. The notes are color-coded: white notes indicate harmonic arrival points, while black notes indicate less significant harmonic implications. The sections are labeled as follows: 'section 1' (bars 189-200), 'free bar' (bar 201), 'section 2' (bars 202-210), 'development' (bars 333-385), 'repeat' (bar 478), 'recapitulation' (bar 505), and 'coda' (bars 505-510). The progression shows a clear tonal structure, starting with a resolution from note A to note D, which is underlined in the original image to emphasize its relationship to the D major scale.

The above example shows the overall harmonic direction of *Overtones*. The white notes are the harmonic arrival points whilst the black notes present less important harmonic implications. The diagram shows a progression from the note A to a resolution on the note D. In tonal terms the notes derive from the scale of D major, underlining that the harmonic series has a close relationship to tonal harmony.

Probably the most significant bar in the piece, in relation to the progression and conclusion of the portfolio, is the free bar as this has stretched my mind from a more 'formal' notation. The idea of the free bar came from seeing something

similar years earlier in a work by Edward Gregson. I wanted to explore this idea myself but instead using a more harmonic configuration within individual lines.

Example 12 - Free bar

16 175 Free Bar - with vigour

Picc.
1st Fl.
2nd Fl.
1st Ob.
2nd Ob.
C. A.
Bb Cl.
1st Cl.
2nd Cl.
1st Bas.
2nd Bas.
Cban.
1st Hr. (harm. gliss.)
2nd Hr. (harm. gliss.)
3rd Hr. (harm. gliss.)
4th Hr. (harm. gliss.)
1st Tpt.
2nd Tpt.
3rd Tpt.
Tbn. (harm. gliss.)
B. Tbn. (harm. gliss.)
Tbn.
Timp.
Cym.
Tr.
Hp 1.
Hp 2.
Vln I. (Free Bar - with vigour, harm. gliss.)
Vln II. (harm. gliss.)
Vln. (harm. gliss.)
Vc. (harm. gliss.)
Db. (harm. gliss.)

The free bar comprises of the partials of the fundamental note of A being let free like the atoms of a gas moving and bumping into each other as they travel freely inside a container. This is the only bar in the piece where the harmonic series in the brass and strings will be ‘out of tune’ with western classical temperament as it will be played in its natural, harmonic state. The use of the ‘natural’ harmonic series thus further adds to the ‘freeness’ of this bar. The string parts in this free bar bear similarities with bar 14 of Stravinsky’s *Firebird*, a bar of harmonic glissando within the strings where the music feels as though it momentarily loses track of time.

Example 13 - Stravinsky’s *Firebird*

The image shows a musical score for a specific bar, marked with a circled '3' in the top left. The score is for a full orchestra and includes parts for Corno II, Violini I and II, Viola, Violini III, and Corno Bassi. The string parts (Violini I, II, III, and Corno Bassi) feature a complex harmonic glissando, with handwritten annotations in French: 'glissées sur la I. corde accordée en Ré (4)', 'glissées sur la III. corde (4)', 'glissées sur la II. corde (4)', and 'glissées sur la II. corde (4)'. The Corno Bassi part is marked 'Tutti C.B. div. a 3' and 'pp'. The score is written in a standard musical notation with various dynamics and articulation marks.

(Chester, 1920: 3)

Overtures makes use of a large symphony orchestra with the traditional triple-woodwind forces like that of the late-romantic and early twentieth century works. It is a lengthy piece containing development of themes on a symphonic scale and its narrative musical journey bears likeness to a symphonic poem.

Experiments

Experiments, as suggested by the title, is an experimental piece which extends the portfolio's sound world into a more complex territory. The desire to use a more atonal sound world alongside a more 'aggressive' style of textural writing came after hearing Magnus Lindberg's piece, *Engine*. I wanted to explore a similar use of musical language in my own free way and where *Engine* gave Lindberg a solution to avoiding mannerisms in his own style, I wanted to use this new sound and textural world to avoid my past stylistic preferences.

Thematic development in *Experiments* is an important factor and often occurs as abstract fragments and motifs. A number of musical ideas are introduced and then re-worked to give maximum usage throughout the three movements. These ideas are re-used in a variety of traditional ways and reappear transposed and retrograde as well as fused with other musical ideas, re-worked to give them a new direction.

The most important ideas in the piece are the sustained chords, beginning with an attack, which is how the piece begins:

Example 14

The image displays a musical score for Example 14, featuring sustained chords. The score is arranged in a system with the following parts from top to bottom: 1st Horn in F, 2nd Horn in F, 3rd Horn in F, 4th Horn in F, Marimba, Violin I, Violin II, Viola, and Violoncello. The Horns play sustained chords with a dynamic marking of *sfz* (sforzando). The Marimba, Violin I, Violin II, Viola, and Violoncello parts are marked with *Pizz.* (pizzicato) and *f* (forte). The score is divided into four measures, with the first measure showing the initial attack of the sustained chords.

Example 15 - The use of augmented and diminished fifths:

Musical score for Example 15, showing four staves: Mar., Vln I, Vln II, and Vla. Each staff contains a melodic line with a slur over it, illustrating augmented and diminished fifths.

Example 16 - Triplet semiquavers, which are also re-worked into sextets:

Musical score for Example 16, showing a single staff with a triplet of semiquavers followed by a rest, then another triplet of semiquavers followed by a rest.

Example 17 - And, major sevenths, also inverted and used as a minor second.

Musical score for Example 17, showing a single staff with a major seventh interval followed by a rest.

These examples also help shape the harmony within *Experiments* and were chosen to help me achieve a more atonal work. They are all fairly simplistic when considered on their own but when juxtaposed with each other, create interesting and often quite complex textural layers.

Example 18 - Juxtaposed ideas:

6

The musical score for Example 18 is a complex orchestral arrangement. It features a variety of instruments, including woodwinds, brass, strings, and percussion. The score is divided into two main sections, with the first section ending at measure 37. The second section begins with a dynamic marking of *ff* (fortissimo) and includes the instruction "Senza sord" (without mutes) for the brass instruments. The score is characterized by its dense texture and the juxtaposition of different musical ideas, creating a rich and layered sound. The instruments listed on the left side of the score are: Picc., 1st Fl., 2nd Fl., 1st Ob., 2nd Ob., E♭ Cl., 1st Cl., 2nd Cl., 1st Bsn., 2nd Bsn., Cbn., 1st Fln., 2nd Fln., 3rd Fln., 4th Fln., 1st Tpt., 2nd Tpt., 3rd Tpt., 1st Tbn., 2nd Tbn., B. Tbn., Tba., Tmp., B. D., Mar., Vln. I, Vln. II, Vla., Vcl., and Db.

I see the texture of *Experiments* rather like that of a piece of my artwork, as shown in example 17, where there are many layers of ideas used in abstract

ways, although there is a pattern between ideas and the way in which they have been placed on the canvas.

Example 19



I see this mixed-media picture as a visual interpretation of *Experiments* as it is made up of many abstract textural layers built on different thematic ideas. The bright colours of mainly greens, yellows and reds also match my image of tone colours within *Experiments*.

There are three thematically linked movements to *Experiments* and its overall structure follows a traditional pattern of ‘fast-slow-fast’ like Debussy’s *La Mer* and therefore could almost be considered symphonic in structure. Like Maxwell Davies’ first symphony, *Experiments* began life as a single movement but felt incomplete. A second movement was therefore added to contrast the first but did not conclude the work. In order to balance the whole piece a third, fast movement was later composed.

Five Experimental Studies

These five ‘experimental’ works demonstrate the progression of thought and idea within the portfolio. They were written as ‘experiments’, exploring ideas which I might not have used in a serious, longer-length work. Harmonies, rhythms, textures and thematic ideas explored are later re-used and developed in other compositions.

Pluto

Pluto is the first study and an experiment with alternative instrumentation, composed after I was involved in a performance of Holst’s *Planets*. It is composed around the image of Pluto, which is perceived only in an abstract way and not as a basis for a story. Only after I had written the piece I became aware that this had already been done by Colin Matthews; interestingly his *Pluto* also starts with long held notes, over which there is a single sustained piccolo note. The higher notes of the four piccolos are used to capture an icy, cold atmosphere especially when all four are playing, creating a desired ‘eerie’ effect.

Spiders

Spiders, study number two, was influenced by the idea of spiders. Again an image to be utilised in an abstract way, the piece is designed to imitate the quick movements of spiders. This piece is a pre-run of ideas that later leads to *Vivacity* and was my first use of the ‘running semi-quaver’ idea, although here they are used in a more textural way than in *Vivacity*. One of the key ideas of the piece is the repeated semi-quaver, as shown in the following example:

Example 20

16

The musical score for Example 20, page 16, is a full orchestral score. It begins with a tempo marking of 106. The score is written in 6/8 time and consists of 16 measures. The instruments and their parts are as follows:

- Picc.**: Piccolo, playing a short, sharp note at the beginning and end of the piece, marked *f*.
- 1st Fl.**: First Flute, playing a continuous line of semi-quavers, marked *mf*.
- 2nd Fl.**: Second Flute, playing a continuous line of semi-quavers, marked *mf*.
- 1st Ob.**: First Oboe, playing a short, sharp note at the beginning and end, marked *f*.
- 2nd Ob.**: Second Oboe, playing a short, sharp note at the end, marked *f*.
- 1st Cl.**: First Clarinet, playing a short, sharp note at the end, marked *f*.
- 2nd Cl.**: Second Clarinet, playing a continuous line of semi-quavers, marked *mf*.
- 1st Hn.**: First Horn, playing a short, sharp note at the beginning and end, marked *f*.
- 2nd Hn.**: Second Horn, playing a short, sharp note at the end, marked *f*.
- 3rd Hn.**: Third Horn, playing a short, sharp note at the beginning and end, marked *f*.
- 4th Hn.**: Fourth Horn, playing a short, sharp note at the end, marked *f*.
- 1st Tpt.**: First Trumpet, playing a short, sharp note at the end, marked *f*.
- 2nd Tpt.**: Second Trumpet, playing a continuous line of semi-quavers, marked *mf*.
- Tbn.**: Trombone, playing a short, sharp note at the end, marked *f*.
- Cym.**: Cymbals, playing a short, sharp note at the end, marked *mp-f*.
- Vln I.**: Violin I, playing a continuous line of semi-quavers, marked *mf*.
- Vln II.**: Violin II, playing a continuous line of semi-quavers, marked *mf*.
- Vla.**: Viola, playing a continuous line of semi-quavers, marked *mf*.
- Vc.**: Violoncello, playing a continuous line of semi-quavers, marked *mf*.

Here I used moving semi-quavers mainly in 6/8 to achieve a constant, fast moving rhythm to imitate the sound of spiders and the constant movements of their legs. These semiquavers are constantly pushing the music forward, as if in a rush to go somewhere. Due to its quick tempo, *Spiders* is perceived as a

textural piece although its composition of fast moving semiquavers parts are actually homophonic.

This piece creates familiarity by using recurring intervallic relationships of chromatic rising and falling sequences with augmented/diminished fourths and fifths.

7:5

7:5 is a study of harmonic ideas using serialism as a starting point. This piece initially uses material from the tone row, splitting it into two parts, one comprising seven semi-tones, the other five. The two sections of the row later compete with each other, the larger seven semi-tone passage finally being triumphant. A chamber orchestral instrumentation is employed with an extended pitch range of a piccolo and E flat clarinet instead of using two flutes and two B flat clarinets.

Example 21 - The tone row used in 7:5



Using a tone row as a starting point, especially in 7:5 where the tone row is split into two sections, is very similar to an artist choosing a limited amount of colours prior to starting a work. I often work like this when painting and therefore the aesthetic quality of the art is based around the chosen colours.

Analogy

Study number four, *Analogy*, also takes a tone row as a starting point and uses all twelve tones within the first two bars. The piece is not strictly serial, again using the tone row just as a starting point and harmonic reference.

Analogy begins to place a greater emphasis on space within the music and uses sustained notes, where sometimes little else is happening. Rests have also become an important element within the work as in Feldman's work, where he sees the "white" silence as important as the "black" notes.

Mistique

The last study, *Mistique*, begins to move further away from the use of serialism, and by the end is working with free atonality. The piece opens using all twelve note pitches which are employed within the first eight bars. However at bar 31, there is a tempo change and the music takes on a new, more textural path. The music 'lets go' more than in the previous pieces and a 'time out' section reiterates ideas and motifs from the first part of the work. This piece uses for the first time an undefined pitch notation, a harmonic glissando on the G string.

Example 22 - Undefined pitches in *Mistique*

14

The image shows a page of a musical score for Example 22, titled "Undefined pitches in *Mistique*". The page number "14" is in the top left. The score is for a full orchestra and includes parts for Flute (Fl.), 1st Oboe (1st Ob.), Clarinet (Cl.), Glockenspiel (Glock.), Violin I (Vln I), Violin II (Vln II), Viola (Vc.), and Double Bass (Db.). The Flute part starts at measure 79 with a dynamic of *f p*. The 1st Oboe and Clarinet parts also have *f p* markings. The Glockenspiel part has a *pp* marking. The Violin I and II parts have a *nienté* marking. The Viola and Double Bass parts also have a *nienté* marking. The score shows various musical notations, including rests, notes, and dynamics.

Mistique employs a mysterious aesthetic quality where the final section is underpinned by the misty, undefined pitch-glissandos of the first and second violins. This misty atmosphere is also enhanced by the use of string harmonics.

Example 23



The picture above provides a visual example of the last section of *Mistique* where there is an overall mysterious image that represents only abstract recurring ideas. The picture also represents the shimmering aesthetic of the music.

Aviation

Aviation was composed for the Hillingdon Youth Orchestra and therefore written to their requested specifications. The piece was to be part of a concert entitled *Pictures at an Exhibition* where Mussorsky's piece would be played alongside other works that portrayed a pictorial image. *Aviation* is, therefore, the only piece in the folder which 'tells a story'. As we are based so near to Heathrow Airport, I decided that the flight of an aeroplane would be an appropriate theme and within the music one can hear the plane take off, journey through the sky, enter a 'gliding' section and then land at its destination. As it happened, the idea itself provided a very good structure for the work which resembles an overriding arc.

In order to write a piece suitable for the players, I attended a few rehearsals. The players were mostly around grade 5 standard and had little or no knowledge of twentieth century music, something I had to consider when composing. For this reason, *Aviation* is the easiest piece in the portfolio and is written in a more melodic rather than abstract style.

Vivacity

Vivacity was inspired by my move to London and portrays the motion of the tube, a metropolitan atmosphere and the hustle-bustle of everyday life. At this point in the portfolio, I am very interested in rhythmic patterns and pulse cycles and creating music that is closely thematically developed for directional coherence.

I aimed to achieve close thematic development in this piece by reiterating the use of a four note idea which stems from the running semiquavers which begin the piece. As the piece moves on, this idea becomes more defined and its relevance to the music is shown as it is played in the final bar in rhythmic unison throughout most of the orchestra.

Example 24 - Four note semiquaver motif:



This piece explores the smaller chamber orchestra and uses the higher sounds of the piccolo and E flat clarinet instead of just utilising two flutes and two B flat clarinets. These two instruments add clarity to the music and offer a slightly different take on what is otherwise a classical orchestral line-up. Conceived as a short, fast and exciting piece, *Vivacity* is similar in conception to Adams' *Short Ride in a Fast Machine* and would make a good opening piece to a concert.

Example 25 - Below is *Vivacity*, the music illustrated in a picture:



The literal meaning of *Vivacity* is lively, which lends itself well to both the music and the artwork. This picture shows sections of colours and patterns which reminds me of a map of the London boroughs. There is also a mixed media three-dimensional version that has cube-like boxes placed over it representing buildings within the city. The music of *Vivacity* is journeying around these abstract images, reflecting the journey of a train around London.

The majority of *Vivacity* is composed in compound time, often changing between time signatures to alter the rate of directional flow. Adding an odd numbered meter is an effective tool in changing the flow of music and keeping the audience's attention. The first section of *Vivacity* has many time changes, thus having the effect of liquid music due to the constant subdivided foreground

rhythm of flowing semi-quavers. These frequent time changes have a subtle similarity to those of Stravinsky in his *Rite of Spring*, a work which I have always greatly admired.

Vivacity relies heavily on time changes to enhance musical direction. By adding or subtracting a beat or beats from a bar or phrase, the music can either be propelled forward or remain more static in direction. Joseph Machlis wrote that:

The twentieth century composer is apt to avoid four-bar rhythm. He regards it as too predictable, hence unadventurous. He prefers to challenge the ear with non-symmetrical rhythms that keep the listener on his toes. This rejection of standard rhythms has led the composers to explore meters based on odd numbers: five beats to the measure (2+3): seven (2+2+3, 3+4 or 2+3+2)... In addition, the groupings of the bars into phrases is far more flexible than in earlier music. The result is that today rhythm is freer, more subtle than ever before. (Machlis, 1961: 44)

The example below shows a dotted crotchet section where the music becomes a simplified version of that which came before. This has the effect of pushing the music onwards, where the majority of the orchestra takes a simplified version of the previous section, presenting the music as a simple, but effective crotchet, chordal melody.

Example 26 - Vivacity

34

238

Picc.

1st Fl.

1st Ob.

2nd Ob.

1st Cl.

2nd Cl.

1st Bsn.

2nd Bsn.

1st Hrn.

2nd Hrn.

1st Trp.

2nd Trp.

Trmp.

Vib.

Vin I.

Vin II.

Via.

Vcl.

Db.

This example also bears similarities to the final section of Stravinsky's *Firebird*, where the rhythm and use of material becomes much more simplified. In both the example above and the last section of the *Firebird*, this simpler texture has been derived from the material that came directly before, only now the ornamental material has been stripped away, leaving the essence of the underlying beat.

Example 27 - Stravinsky's *Firebird*

19 . Doppio valore J. 104 Maestoso.

Fl. 1. *ff* *sim.*

Fl. 2. *ff* *sim.*

Oboe *ff* *sim.*

Bsn. *ff* *sim.*

Trp. *ff*

Tbn. *ff*

Per. *ff*

C. B. *ff*

Viol. I *ff*

Viol. II *ff*

Viola *ff*

C. B. *ff*

tires toujours

W. C. 17

(Chester, 1920: 77)

During the rehearsal of *Vivacity* it was interesting to observe that by using regular changes in time, it seemed to keep the orchestra ‘on their toes’ and because of the vigorous counting during the rests, the rests remained part of the music rather than becoming just time-out for the players.

The tonality of *Vivacity* is very 'open' bearing similarities to the sounds of the American Minimalists as well as Copland's music and *O Rio* by the English composer Martin Butler.

Chamber Symphony

This piece re-works rhythmic ideas from *Vivacity*, especially in the first movement *Andante con moto*. Both this and the third movement, *Presto vigoroso* have a strong rhythmic motion, similar to *Vivacity's* driving music. However, *Chamber Symphony* branches out into triplets, quintuplets and sextuplets, which are also sometimes played simultaneously with duplets creating more complex rhythms and textures within the music.

Chamber Symphony has a link to the classical era and like *Vivacity* uses a smaller orchestra than other previous works. It is perhaps slightly unusual in instrumental line-up compared to other well-known examples of twentieth century chamber symphonies such as those by Schoenberg, Webern, Adams and Adès who use an ensemble without a full string section. *Chamber Symphony* was written to be more compact, something I liked about *Vivacity*, but for this work I had chosen to explore the traditional four movements of a symphony. The first *Andante con moto* sets the scene and, although not in the traditional first movement sonata form, explores theme and content in a way one would traditionally expect. The second movement *Allegretto* is slower and more refined than the first movement and makes use of ideas generated from the *Andante con moto*. Again the third movement *Presto vigoroso* uses material generated from the first movement. It is modelled on the scherzo and is in a strict ABA structure. Its fast and rather furious A sections (which are directly repeated) and more harmonically static B section, are also modelled on the scherzos found in late-romantic works by the composers Mahler and Bruckner. Schoenberg wrote about the scherzo as being “distinctly an instrumental piece, characterised by rhythmical accentuations, and rapid tempo. The tempo prevents change of the harmonies and remote variation of motive-forms”. (Faber, 1967: 150)

This statement also sums up the third movement of my *Chamber Symphony*.

The final movement acts as a conclusion and re-works ideas from the second movement. This movement, *Moderato*, has a middle section that refers back to the rhythmical and faster first and third movements, but concludes in perhaps an unexpected and rather unconventional way.

The final movement opens with bell-like sounds played by the strings and marimba. This section reminds me of works by Malcolm Arnold, who often uses bell-like sounds in his works and, therefore, I see this section as being inherently 'English'.

Example 28 - Final movement of Chamber Symphony

The image displays a musical score for five instruments: Marimba, Violin I, Violin II, Viola, and Violoncello. The score is written in 4/4 time and features a prominent ostinato pattern in the strings and marimba. The dynamics are marked 'p' (piano). The Marimba part consists of a rhythmic sequence of eighth notes. The string parts (Violin I, Violin II, Viola, and Violoncello) play a sustained, bell-like sound with a long note value, likely a half note or longer, creating a static background for the other instruments.

The final movement of *Chamber Symphony* also employs a very traditional element, an ostinato pattern, which enables the music to remain static for a period of time. Over this ostinato, other important ideas from within the movement are stated.

Example 29 - Ostinato pattern in final movement of *Chamber Symphony*

61

26

1st Fl. *ff*

2nd Fl. *ff*

1st Ob. *ff*

2nd Ob. *ff*

1st Cl. *ff*

2nd Cl. *ff*

1st Bsn. *ff*

2nd Bsn. *ff*

1st Hn. *ff*

2nd Hn. *ff*

1st Tpt. *ff*

2nd Tpt. *ff*

Timp. *ff*

Mar. *ff*
on 'white' notes

Vln I *ff*

Vln II *ff*

Vla. *ff*

Vc. *ff*

Db. *ff*

Picc.

61

The aim of the piece is to re-work symphonic tradition into a twenty-first century context. Like Maxwell Davies' symphonies, *Chamber Symphony* does not use well-defined exposition, developments and recapitulations of the Romantic symphonic tradition, but instead uses the transformation of basic material.

Conundrum

Conundrum moves away from the rhythmic pulse of *Vivacity* and *Chamber Symphony* and instead uses simple rhythms to build patterns and textures. These simple rhythmic cells, almost entirely made up of repetitive semi-quavers, are of a minimal nature and the piece is free of unnecessary clutter.

Long held notes are sparingly used up to the climax and help bind the music together. However, in the last section these long notes, now built into chords, come to the forefront of the piece.

The harmonic part writing assigned to each instrument is also very minimal. The piece contains no flourishes, trills or embellishments and each instrument is generally given just one note at a time (occasionally two) to play during a fragment, phrase or section. These instrumental lines are not particularly meaningful when played on their own as they are made up of little other than rhythmic patterns. However when played in the context of the orchestra, the single lines are greatly enhanced as they work with or against each other, sometimes bouncing off other instrumental lines and sometimes sounding together, creating displaced and suggested chords, intervallic relationships between parts and interesting textural possibilities.

Example 30 - Texture in *Conundrum*

17

The musical score for Example 30 in *Conundrum* is a complex orchestral arrangement. It features a variety of instruments, each playing a rhythmic pattern that repeats every two measures. The score is divided into two systems. The first system includes the Flutes (1st and 2nd), Oboes (1st and 2nd), Clarinets (1st and 2nd), Bassoons (1st and 2nd), Horns (1st, 2nd, 3rd, and 4th), Trumpets (1st and 2nd), Trombones (B. and T.), and Violins (I and II). The second system includes the Viola, Violoncello (Vc.), and Double Bass (Db.). The dynamics are marked as *ff* (fortissimo) and *p* (piano). The key signature is one sharp (F#), and the time signature is 4/4. The score is numbered 110 at the beginning of the first system.

Conundrum's texture is similar to that of the minimalist composers Adams, Glass and Reich where rhythm is often very simple and harmony is built up as interaction between parts. Often each single instrumental line makes little musical sense on its own, just a repetition of a rhythmic cell. However, the single parts of *Conundrum* are perhaps more simplistic with less harmonic

variation and mostly no hint of melody, which is not so in a true minimalist piece. What takes this piece away from being another ‘traditional’ minimal piece is its harmony. In *Conundrum* the harmony is free from a prescribed scale or mode, as found in ‘traditional’ minimalist works, and instead employs a much more wide-ranging harmonic palette.

Example 31 - Ligeti’s *Ramifications*:

A

⑤

Clavicembalo
nur 8' in beiden Manualen
only 8' in both manuals

pizz sempre
f p

pizz sempre
f p

pizz sempre
f p

pizz sempre
f p

(Schott, 1970: 4)

The texture and orchestration in the third movement of Ligeti's *Ramifications* is very similar to that of *Conundrum*, where individual parts are harmonically very simple and textural interest is created through the interaction of parts. This texture of repeated notes, occurring where each individual line uses a single pitch, is also present in Ligeti's *Doppelkonzert*.

Prior to *Conundrum*, I had always focused on more rhythmically directional music. However during this piece I have used an often quite intricate texture to drive the music. Long held notes are sparingly used up to the climax and help bind the music together.

The main ideas of *Conundrum* are simplification of line allowing the interaction between parts to show through. I had realised that complexity is not always the best option for a piece.

Variations?

The use of a theme and variations has been commonly used by many well-known composers over the centuries. More recent orchestral examples include Elgar's *Enigma Variations*, Schoenberg's *Variations for Orchestra* and Britten's *The Young Person's Guide to the Orchestra*. However I did not want to write a piece based around a theme that someone had written and therefore looked for ways to explore the idea of 'variation' on different levels.

Firstly the structure of the piece is related to a traditional set of themes and variations, although it does not rigidly stick to this traditional form in terms of material. Also the piece is symmetrical, so the second half of the piece is an exact retrograde of the first half. The last way in which variations are used within the work is through the tone row and the piece starts off using a tone row, which is fully stated within the first two bars. The content for the rest of the work is taken from these starting bars by re-working its intervallic relations and motifs.

Example 32 - Line of Symmetry (indicated by dotted line)

The image displays a musical score for a symphony orchestra, illustrating a line of symmetry. The score is divided into two halves by a vertical dotted line. The instruments listed on the left are: Piccolo (Picc.), 1st Flute (1st Fl.), 2nd Flute (2nd Fl.), 1st Oboe (1st Ob.), 2nd Oboe (2nd Ob.), 1st Clarinet (1st CL), 1st Bassoon (1st Ban), 1st Trumpet (1st Tpt), 3rd Trumpet (3rd Tpt), Violin I (Vln I), Violin II (Vln II), Viola (Via), and Voice (Vo). The notation includes various musical symbols such as notes, rests, and dynamic markings. The dotted line is positioned in the center of the score, indicating the axis of symmetry.

In view of the atonal nature of this piece, it was possible to retrograde the music from the line of symmetry. In a sense the retrograded music defies the logical progression of musical climax. Therefore the retrograded second half of the

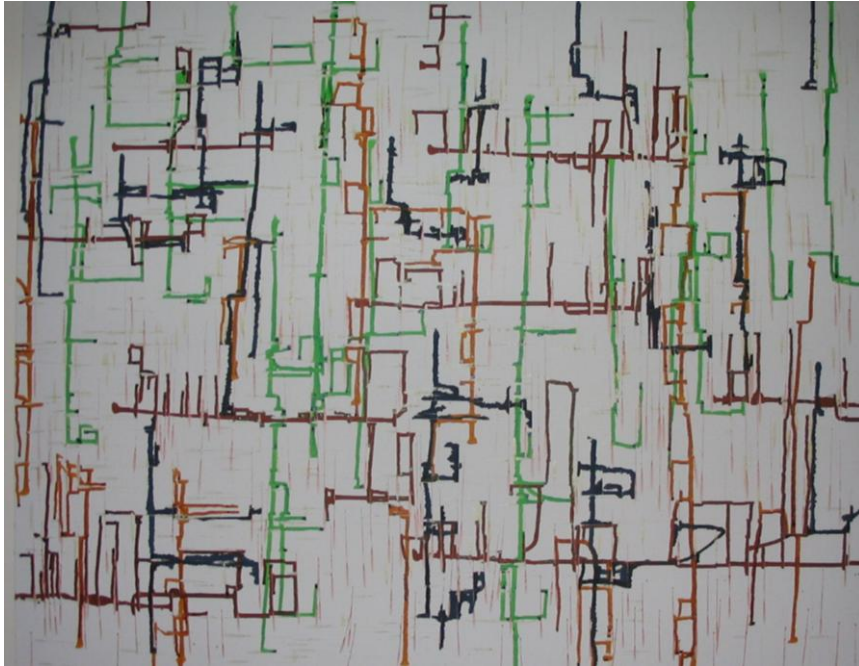
piece goes against natural musical progression although the idea of symmetry itself is very natural as with a butterfly or a reflection. A piece of artwork can be created in the same way as *Variations?* and emphasises the fact that the essence of a symmetrical piece is very simple and, therefore, there is no reason why musically such a natural phenomenon should not work.

Symmetry in music has previously been used by other composers. Examples include pitch symmetry by Webern in his *Variations*, Op. 2 and Messiaen's 'non-retrogradeable' rhythms and pitch symmetries.

Flexibility was achieved on several levels and this was the first time I had worked with serialism freely, using it to my own specifications much as Berg did in his Violin Concerto. *Variations?* has an atonal sound world, where perhaps other pieces in the portfolio only refer to atonality and are not exclusively atonal. Fragmentation is also a large factor within the piece and *Variations?* is consistently more abstract than other works in the portfolio.

This piece uses octave displacement to avoid traditional melodic shapes, as used by the Second Viennese School, which enhances the abstract nature of the piece and also contributes to the weakening of tonal associations. The music is therefore quite angular in style, artistically shown in the picture in example 33:

Example 33



This piece uses a large symphony orchestra with triple woodwind and, at times, numerous instruments playing in unison, thus enhancing the power of the piece and creating a 'big' sound. The music is generally quite sparse in texture and harmonisation occurs through juxtaposed line, created horizontally rather than through consideration of vertical chord structure.

Violin Concerto

The Violin Concerto regenerates ideas from *Variations*? It uses free atonality rather than a tone row, but uses a similar style of displaced octave placements to generate motifs and themes. The Violin Concerto also begins with the same angular style as *Variations*? But as the music progresses, I allow my previous harmonic tendencies to return, and the music moves towards a more consonant world.

The solo violin writing is quite traditional and uses no extended techniques. The interaction between the orchestra and the solo violin is also traditional, with the violin being supported throughout the piece by the other orchestral instruments. There are two cadenzas, a minor one bridging the first and second movements, and a major cadenza prior to the coda, near the end of the third movement. Both are traditionally notated. *Violin Concerto* offers a technically possible and accessible contribution to contemporary violin concerto repertoire.

Example 34 - Natural harmonics

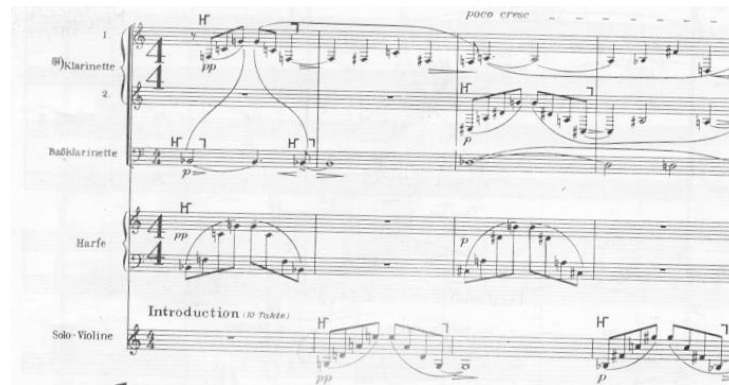
4

The musical score consists of ten staves. The top four staves are for woodwinds: 1st Flute (1st Fl.), 2nd Flute (2nd Fl.), 1st Clarinet (1st Cl.), and 2nd Clarinet (2nd Cl.). The next two staves are for strings: Violin (Vln.) and Viola (Vla.). The bottom four staves are for Violin I (Vln I), Violin II (Vln II), Violoncello (Vc.), and Double Bass (Cb.). The score begins at measure 23. The woodwinds play a melodic line starting with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4, and finally a quarter note A4. The dynamics are marked *mp*. The strings play a harmonic accompaniment. The Violin I and II parts are marked *con sord.* and *pp*. The Viola part is marked *pp*. The Violoncello and Double Bass parts are marked *p*. A rehearsal mark "(change to picc.)" is placed above the 2nd Flute staff at the beginning of measure 25.

The first notes we hear from the solo violin are natural harmonics. This is significant, firstly as it emphasises the purity of these notes against the atonal opening section, and secondly because it introduces the solo instrument in its purest form. Notably they are also the open strings of the solo violin, which we hear in Berg's Violin Concerto, when the violin enters in bar two, although I

have immediately contrasted the sounds of the artificial harmonics against the natural ones in the previous phrase. In Berg's Violin Concerto the phrase is repeated again, only this time in a transposed version, thus also stopped rather than natural.

Example 35 - The beginning of Berg's Violin Concerto:



The image shows a page of musical notation for the beginning of Berg's Violin Concerto. It features four staves: 1. Klarinette (Clarinet), 2. Bassklarinette (Bass Clarinet), Harfe (Harp), and Solo-Violine (Solo Violin). The music is in 4/4 time and begins with a dynamic marking of *pp* (pianissimo). The Solo Violin part is marked "Introduction (10 Takte)" and includes a section labeled "poco cresc". The notation includes various musical symbols such as clefs, time signatures, dynamics, and articulation marks.

(Universal, 1936: 1)

The open violin strings create a theme of fifths in the music, which occurs many times in different ways. Below is an example of the solo violin part containing double-stopped perfect fifths:

Example 36



The image shows a single staff of musical notation for a solo violin part. The music is in 4/4 time and features a series of double-stopped perfect fifths. The notes are: G4 (open G string) and D5 (open D string), followed by A4 (open A string) and E5 (open E string), then C5 (open C string) and G5 (open G string), and finally F5 (open F string) and C6 (open C string). The notation includes a treble clef, a 4/4 time signature, and various musical symbols such as stems, beams, and accidentals.

Like much of Robert Saxton's music, Violin Concerto is neither tonal or strictly serial, often lying somewhere between the two and sometimes even giving the feeling of a battle between the two.

The music concludes on an octave unison A, which is preceded by a chord incorporating the notes of the two upper strings of the violin, A and E, thus concluding consonantly. There is perhaps a subconscious bias towards

consonance and it is this which finally triumphs over dissonance in Violin Concerto.

Example 37 - Consonant ending of Violin Concerto (last bar, penultimate and final notes):

The image displays a page of a musical score for a Violin Concerto, specifically focusing on the final bars (measures 41, 42, and 43). The score is arranged in a standard orchestral format, with parts for various instruments listed on the left side of the page. The instruments included are:

- 1st Fl.
- 2nd Fl.
- 1st Ob.
- 2nd Ob.
- 1st Cl.
- 2nd Cl.
- 1st Bsn.
- 2nd Bsn.
- 1st Hn.
- 2nd Hn.
- 3rd Hn.
- 4th Hn.
- 1st Tpt.
- 2nd Tpt.
- 1st Tbn.
- 2nd Tbn.
- 3rd Tbn.
- Tba.
- Temp.
- Hrp.
- Vln I.
- Vln II.
- Vla.
- Vcl.
- Db.

The score is written in 3/4 time and features a key signature of one flat. The music is marked with 'J-130' and '43'. The final bars (measures 41, 42, and 43) show a transition from a dissonant state to a consonant ending. The Violin I part is the primary focus, with the other instruments providing harmonic support. The final notes of the piece are marked with a fermata, indicating a moment of stillness and resolution.

The three movements of Violin Concerto are linked, as with Mendelssohn's Violin Concerto in E minor. The aim of the piece is to demonstrate effectiveness in writing for orchestra and solo instrument, a combination raising significantly different issues to writing for the orchestra alone.

Phasing Winds

Phasing Winds explores a smaller orchestral line-up with just the string section, harp, vibraphone, together with some untuned percussion instruments. The idea of using the string orchestra with a harp, percussion and vibraphone came after performing Poulenc's *Organ Concerto* who uses the string section, organ and timpani. Bartok used a similar line-up to *Phasing Winds* in *Music for Strings, Percussion and Celeste*. I had also been listening to Nørgård's string works which immediately struck me as being 'fresh' with a variety of timbral qualities, which I often felt was lacking in an all-string work. I had only written for string orchestra on two previous occasions and felt that it was an ensemble which I would like to explore further.

In *Orchestral Performance*, Christopher Adey wrote:

With such range and intensity at their disposal the predominance of the string section becomes understandable. The overall sound of any symphony orchestra rests very largely on the tone, flexibility, precision and focus of the complete string section.

(Faber, 1998: 3)

In a sense I am stripping the orchestra back to work with what is traditionally known as the basis of the orchestra, its string section.

A string instrument is far more versatile in its range of timbres than any woodwind or brass instrument. I therefore felt the need to make good use of traditional string techniques including harmonics, both natural and false, pizzicato, Bartok pizzicato, tremolo, glissando and mutes which would allow for the greatest amount of timbral differences. I would not, however, venture into extended techniques used by composers such as Penderecki who has string instruments bowing the 'wrong' side of the bridge. Neither would I use the body of the instrument as percussion as I feel this is disrespectful to the instrument. I would also worry that this could cause damage.

By using stringed instruments, an opportunity exists to explore long sustained notes and chords as no concern is needed in the length of note given to a string section. The aim of the piece, therefore, is to explore coherence of musical ideas through sustained notes/chords without becoming static and uninteresting. The textural passages generally add a more aggressive mood to the piece than the sustained long notes.

I quickly realised that movement and direction in a piece which relied solely upon sustained notes was difficult to achieve and after some thought decided to use re-articulation as a theme. Attack and articulation, therefore, became one of the main factors of the piece with the harp, vibraphone and percussion adding clarity.

Example 38 - Attack emphasised by the harp at the beginning of a sustained note:

The image displays a musical score for Example 38, featuring five staves: Harp, Violin I, Violin II, Viola, and Violoncello. The music is in 2/4 time and begins with a key signature of one sharp (F#). The Harp part starts with a series of chords, marked with a forte (f) dynamic, which then transitions into a sustained note. The string parts (Violin I, Violin II, Viola, and Violoncello) also begin with a series of chords, marked with a forte (f) dynamic, and then transition into a sustained note. The score illustrates the attack of the harp at the beginning of a sustained note.

Phasing Winds also uses a more frenzied texture, as shown in example 39. Its dense textures show similarities to sections within Ligeti's *Ramifications* which is also written for string orchestra.

Example 39

14

111

B. D. *ff*

Tom-t.

T. Bl.

Cym.

Tri.

Hp.

Vib. *mf*

Vln I *con sord.* *p* *mf*

Vln II *pp* *mf*

Vla *pp* *mf*

Vc. *arco* *pp* *mf*

Db.

The demisemiquavers in the string parts create a very dense and ‘earthy texture’ which is depicted visually in the picture below. This painting also has a fiery feeling which is echoed by the intense warmth of the movement of these demisemiquavers.

Example 40



Phasing Winds depicts the different states and directions of a breeze and the point of articulation for a sustained note announces a new direction and strength of a wind, where different breezes are constantly phasing in and out form each other. It is through this sustained interaction that harmony is created and becomes an important element of the piece.

Phasing Winds is a piece with two reflective movements and in a ‘cubist’ like-way, as in Satie’s *Gymnopedies*, are like the opposite sides of a cube, where similar material is presented from two different perspectives.

All in a Day

All in a Day depicts the idea of sunrise to sunset and is shaped in a naturally occurring arc form. The idea of sustained notes and re-articulation as a theme are carried through from *Phasing Winds*, only this time within the context of the chamber orchestra, thus allowing the opportunity to explore sustained notes within the woodwind and brass sections.

All in a Day achieves a similar aesthetic quality to *Phasing Winds* and uses a similar slow moving harmony, especially in the outer sections. There are more textural passages in this piece, forming most of the middle section. The textured passages are often sustained with a similar, although less complex texture, to Ligeti's *Atmosphères*. Where Ligeti has created a work which completely evolves around the idea of texture like an emerging textural mist through the use of very intricate parts, *All in a Day* holds onto the more traditional aspects of composition where individual parts are often less caught up in an overall texture.

Example 41 - Below is an example of the opening passage of *All in a Day*:

The image displays a musical score for the opening passage of *All in a Day*. The score is arranged in a standard orchestral format with ten staves. From top to bottom, the instruments are: Flute, Clarinet in E♭, Clarinet in B♭, 1st Horn in F, Bell Tree, Piano, Violin I, Violin II, Viola, and Violoncello. The music is written in 4/4 time and features a slow, sustained harmonic texture. The flute and clarinets play melodic lines with frequent re-articulation, while the strings provide a dense, sustained accompaniment. The piano part features a complex, rhythmic pattern. The overall mood is serene and atmospheric, reflecting the piece's theme of sunrise to sunset.

One immediate problem occurred in how to work with the woodwind and brass in a sustained environment. I decided that re-articulation was again the answer, rather than trying to hide the 'joins' where instruments needed to breathe. Articulation has become a recurring idea throughout the piece. These slow sections occur at the beginning and end of *All in a Day* and bear a resemblance to Montague's *Varshavian Autumn*, although his piece uses the idea of sustained chords throughout. There are also similarities to the opening and conclusion of the first movement of Ligeti's *Doppelkonzert*, where the material is entirely based around the idea of sustained notes, entering at different time intervals, thus creating a sustained, chordal texture.

The passage below shows a frenzied texture with both triplet semiquavers and demisemiquavers contributing to the texture embedded into the sustained chords:

Example 42

10

Picc. *mp* *mf* *f*

1st Fl. *mp* *mf* *f* *crec.*

1st Ob. *mp* *mf* *f* *crec.*

2nd Ob. *mp* *mf* *f* *crec.*

E♭ Cl. *mp* *mf* *f* *crec.*

B♭ Cl. *mp* *mf* *f*

1st Bsn. *mp* *mf* *f* *crec.*

2nd Bsn. *mp* *mf* *f*

1st Hn. *mp* *mf* *f*

2nd Hn. *mp* *mf* *f*

1st Tpt. *mp* *mf* *f*

2nd Tpt. *mp* *mf* *f* *crec.*

T. 4. *mp* *mf* *f*

Pno. *mp* *mf* *f*

Vib. *mp* *mf* *f*

Vln I. *mp* *mf* *f* *crec.*

Vln II. *mp* *mf* *f*

Vla. *mp* *mf* *f*

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

Db. *mp* *mf* *f*

I have chosen to re-use the ‘higher pitch’ instrumentation seen in several of the studies and *Vivacity*, again employing a piccolo and an E flat clarinet. These ‘higher’ instruments are inherent to the conception of the piece and blend well with their lower siblings, the flute and B flat clarinet, the violins, piano and

vibraphone. They also offer two very different timbres, considerably extending the control I had over the upper range of the orchestra.

Example of the last page of *All in a Day* which finishes in a way very close to how it began, thus creating an arc structure:

Example 43

44

290

Bb Cl.

1st Bsn

1st Flt

Bell Tree

Pno

Vib.

Vln I

Vln II

Vla

Vc.

p

Persistent Lines

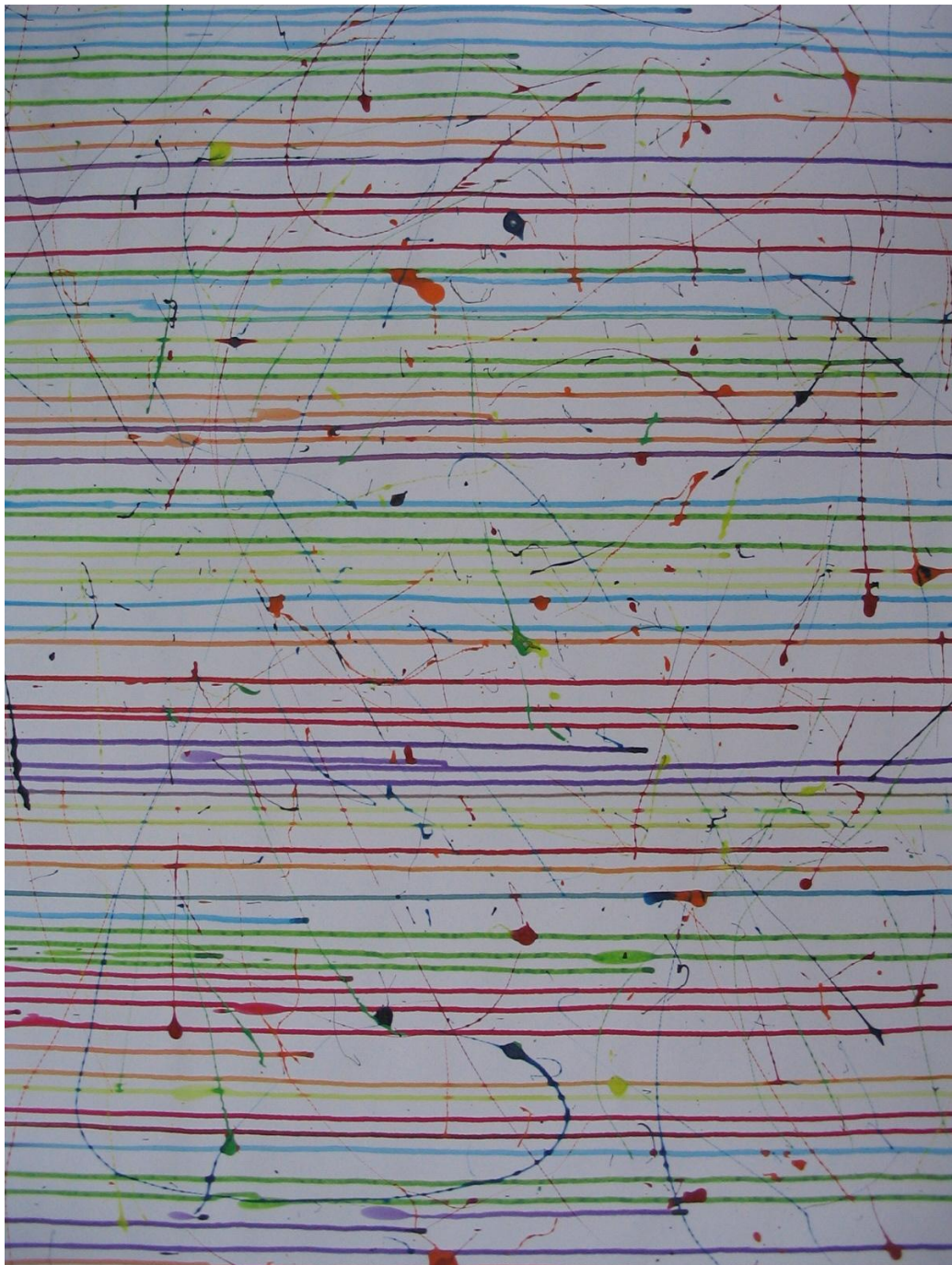
As the final work of the portfolio, written over a year after *All in a Day*, *Persistent Lines* has begun to branch out into a new-found composition style looking to a freer notation. This allows for a more diverse range of textures, which were not possible to achieve in my more strict compositional style.

After such a long break from writing, it proved impossible to start from the musical place I had previously reached and I soon realised the need to change my direction and look towards other composers for inspiration. I began to look at works by Lutoslawski, mainly his last two symphonies, and it was these free or aleatoric sections which began to increasingly interest me.

Lutoslawski was prompted to adopt aleatory techniques after hearing a radio broadcast of John Cage's *Concert for Piano and Orchestra*. Lutoslawski's use of these aleatoric passages is essentially very different to that of Cage who often uses undefined pitches. Generally in Lutoslawski's work it is only the rhythmic coordination of parts within the ensemble which are subject to chance, a technique known as aleatory counterpoint, and it is this technique which I have adapted in *Persistent Lines*.

There was one major practical problem with writing free sections; that of getting them into a music programme such as Sibelius. After realising that this was very difficult, perhaps even impossible to achieve, I decided to revert to writing music by hand, hence eliminating any software restrictions. This proved an interesting experience and subconsciously I believe that I write differently when using manuscript paper to using a computer. The result is that *Persistent Lines* is the 'freest' work in the portfolio, venturing out into new musical language. This is texturally and harmonically more diverse than any other work in the portfolio.

Example 44 - Artwork *Persistent Lines*:



The music is structurally linked to the picture with the dripping of the lines, originally down the page but later turned, so they occur horizontally. These lines represent the music's forward driving motion and the traditional notated music and bar lines. However the 'flicked splodges' over these strict dripped lines represent a freer structure, like the free sections within the music.

As well as the structural relationship between the music and artwork, the music's thematic ideas are also based around the abstract images of the picture. There are recurring instances of sustained notes representing the dripping lines in the painting and sections where a single pitch is re-articulated, also represented by a single dripping line. The splashes and flicks on the painting are also represented in the music by more random splashes of sound, such as the timpani's two semi-quavers on the first page.

I perceive the tone colours of the musical *Persistent Lines* to be similar to those of the bright primary and secondary colours and their complimentary partnerships in the painting. These colours also represent the brightness and boldness of musical ideas, with a general ambience of optimism.

There are similarities in material between the opening of *Persistent Lines* and that of Lutoslawski's Symphony No. 3 as shown in the following two examples:

Example 45 - Opening of *Persistent Lines*

Persistent Lines

Helen Rowley

- ① Downbeat into free section.
- ② Downbeat for timp only, then signal a quarter later to bring in woodwind (excl. DBsn). Woodwind phrases to be taken at player's chosen tempo between $\text{♩} = 88$ and $\text{♩} = 124$

①

Example 46 - Opening of Lutoslawski's Symphony No. 3:

for Sir Georg Solti and the Chicago Symphony Orchestra

SYMPHONY No.3

Witold Lutoslawski
(1983)

The image displays a page of a musical score for the opening of Witold Lutoslawski's Symphony No. 3. At the top, there are handwritten annotations: "ST S1" and "Vivo (d = ca. 108 ca. 4") (stesso movimento)". The score is divided into two main sections. The upper section features woodwind parts: Flute Piccolo (fl. picc.), Flute (fl.), Oboe (ob.), and Cor Anglais (COR. in fa). The lower section features brass and string parts: Clarinet in A (cl. 1, 2, 3), Trombone (trombe in do), Trumpet (trbni), Tuba, Timpani (tmp.), Xylophone (xil.), Violin I (vni I div.), Violin II (vni II), Viola (vle), Violoncello (vc.), and Contrabass (cb.). The woodwinds and strings are marked with dynamic levels such as *pp*, *p*, *mf*, and *ppp*. The string parts are mostly silent, indicated by a large block of white space with a dashed line.

(Chester, 1995: 1)

Persistent Lines explores a 'new-found' freedom where my music is freed from the 'traditional' time signatures in which the other pieces exist.

Conclusion

This submission is united by my enthusiasm for the orchestra, its range and versatility and the historical connections it holds. My music is influenced by a large variety of composers and musical genres and so continuity between pieces is created through my own technique and use of material.

It is important to me that the tradition of the orchestra is preserved and therefore my aim has been to work with orchestral tradition rather than alter its traditional formats. The majority of my works are accessible to a classically trained orchestra and many would also be suitable for good amateur and youth orchestras, hopefully therefore widening the participation to new music.

Although this portfolio is structured around the orchestra I have widely explored the parameters within this confinement. I have written a chamber symphony and concerto, both holding strong historical connections and requiring very different orchestration techniques, explored a structure similar to that of a tone poem and used a variety of orchestral sizes ranging from the string orchestra to a large orchestra with triple wind. I have also written for the chamber orchestra, which would seem unusual among my contemporaries as most existing chamber pieces use smaller forces. It therefore seems that I have taken a rare opportunity in writing a symphonic form for the chamber orchestra.

During my research it became increasingly evident that there is a strong link between my visual artworks and compositions and I have drawn upon these parallels within this commentary. There are certain colours which I am more drawn to and it is these colours which also present themselves within my music. I enjoy working with patterns and although my artwork often appears abstract one can see that on closer examination the recurrence of ideas is an important part of the construction of the work. Similar use of texture can also be identified in both the music and artwork.

The final work, *Persistent Lines* begins to take on a new dimension and moves towards a freer style of composition. Very early on in my research I had made use of a single free bar in *Overtures*. Later, in *Phasing Winds* and *All in a Day* consideration of time became more significant in my works through the use of sustained notes and I felt ready to take the idea of free sections to a new level. Drawing on techniques found in the aleatoric sections of Lutoslawski's orchestral music, a significant amount of *Persistent Lines* is based around free bars, where rhythm and time are left to chance but pitch remains notated. It is this freer style of notated composition with an element of time-chance which I intend to build on in the future. 'Time-chance' will give a new direction to my compositional style enabling me to explore textural elements to a greater level of densities and complexities, something I have become increasingly interested in during the later part of the portfolio. These aleatoric sections will create a new structural element in my works, thus allowing me to widen my compositional exploration of shape and direction.

In the future I would like to explore the smaller, chamber orchestral format of *Vivacity* and *Chamber Symphony* as I feel this ensemble suits my composition style, offering a wide range of textural and timbral possibilities alongside an orchestral body which is perhaps easier (thus cheaper) to maintain for rehearsal and performance purposes. I also intend to make further use of the string orchestra, both exclusively and with a small array of complementary non-string instruments.

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