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Euan Fulton

Submission for the degree of PhD

Portfolio of Compositions

Reflections for Clarinet Quintet

Department of Music

School of Culture and Creative Arts

University of Glasgow
All instruments shown at concert pitch.
Reflections
for clarinet and string quartet

Euan Fulton
Bars 4 - 9: as unaccented and unarticulated as possible. Strings change bows as required.
Bars 39 - 48: each bar should last c.4'. There should be a pause of c. 1' between each of these bars, including between bars 47 and 48. The first violin should cue the start and end of these bars. Trills - accidentals always refer to the note above, e.g. bar 39: Violin 1 - G flat to A flat, Cello C# to D natural. Clarinet cues the start of bar 48.
Bars 72-79: Crotchet rests with pauses should last c.1.5’. Quaver rests with pauses should last c. 1’. There should be a silence of c. 3’ after the last note of bar 78. Ist violin cues start of bar 79.
Bar 83: Clarinet cues start of 83 (i.e. end of pause). There should be no silence between the end of bar 82 and the start of 83.
Bar 96: Silence of c. 3 seconds between the clarinet note in b. 96 and the start of bar 97. First violin cues start of 97.
Bars: 97 - 119: as unaccented and unarticulated as possible. Strings change bows as required.
Euan Fulton

Submission for the degree of PhD

Portfolio of Compositions

Music for Cello and Glockenspiel

Department of Music

School of Culture and Creative Arts

University of Glasgow
Music for Cello and Glockenspiel

\[ \frac{1}{4} \text{音符} = 70 \]

Glockenspiel

Cello

Glk.

Vlc.
Glk.

Vlc.

Glk.

Vlc.

pp leggero
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Portfolio of Compositions
Movement for Viola, Cello and Double Bass
Department of Music
School of Culture and Creative Arts
University of Glasgow
Movement for Viola, Cello and Double Bass

Euan Fulton
Euan Fulton

Submission for the degree of PhD

Portfolio of compositions

Broken Images for double string orchestra and two pianos

Department of Music

School of Culture and Creative Arts

University of Glasgow
Euan Fulton

Septet

for flute, oboe, bass clarinet, trumpet, trombone, tuba and harp
All instruments shown at concert pitch.
Septet

Euan Fulton
septet
septet
septet
septet
Fl.\[p < f > pp\]
Ob.\[p < f > pp\]
B. Cl.\[f \rightarrow ff\]
Tpt.\[p \rightarrow ff\]
Tbn.
Tuba
Hp.
septet
septet
septet
septet
septet
septet
septet
septet
septet
Euan Fulton

Submission for the degree of PhD

Portfolio of compositions

Commentary

Department of Music

School of Culture and Creative Arts

University of Glasgow

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Introduction

Discontinuous large-scale form had been an emerging feature in my music for the last few years. I sought to develop this in the present PhD portfolio. Each individual section of a given piece has its own distinct gestures, pitch and rhythmic characteristics, instrumentation and so on. The music maintains these until the start of a new section, which usually occurs with no transition between them. The large-scale form is a result of the interaction between individual sections – their characteristics relative to one another, their lengths, when they begin and end and so on.

The origins of the discontinuous aesthetic can be seen in the animating disjuncture of modulation to the dominant in sonata form:

‘First-movement sonata form falls into two sections […]. The first section, or *exposition*, has two *events*, a movement or modulation to the dominant, and a final cadence on the dominant. […] Because of the harmonic tension, the music in the dominant (or the second group) generally moves harmonically faster than that in the tonic. […] The second section also has two events, a return to the tonic, and a final cadence. Some form of symmetrical resolution (called *recapitulation*) of the harmonic tension is necessary: an important musical idea played anywhere except at the tonic remains unresolved until is it so played’¹.

The overt, conscious use of discontinuous musical form emerged in the early twentieth century in such works as Stravinsky’s ‘Symphonies of Wind Instruments’ (1920).

‘From *Le Sacre du Printemps* onwards, Stravinsky’s textures have been subject to sudden breaks affecting almost every musical dimension: instrumental and registral, rhythmic and dynamic, harmonic and modal, linear and motivic. (Almost every one of these can be found in the first dozen measures of the *Symphonies of Wind Instruments*.) Such shifts would be noticeable in any context, but they are especially so because of other peculiarities of Stravinsky’s style. A change of chord after a long-continued static harmony comes as a shock; so does a melodic leap interjected into a predominantly conjunct line; so too a new temporal context after a metrically persistent rhythm’².

This approach to temporality was developed and conceptualized by Stockhausen as ‘moment form’: “Every present moment counts, as well as no moment at all; a given moment is not merely regarded as the consequence of the previous one and the prelude to the coming one, but as something individual, independent and centred in itself, capable of existing on its own”\textsuperscript{3}.

However, there is a paradox:

“Collage has been termed ‘moment form’ with the implication that time is now perceived only as a series of unrelated events. Although such thinking is a cliché of avant-garde thought, collage in fact enriches continuity. The absence of transition in much twentieth-century art allows many relationships to be established quickly and without explanation […]. The time-sense of a collage-form work is therefore more directional than that of earlier music’\textsuperscript{4}.

Therefore the composer is still concerned with large-scale form. Indeed, decisions regarding the order of ostensibly discrete sections can have a dramatic effect on the piece. As Elliott Carter put it:

‘Scholars’ ‘reshuffling’ of the chapters of Kafka’s The Trial and The Castle (in connection with a dispute over Max Brod’s editing of these works) has not only rather radically altered their meaning and effect but by the same token has vividly demonstrated just how important time-continuity is, precisely in works that seem to depend on ‘discontinuity’ for their character’\textsuperscript{5}.


Influences - individual composers

I first came across the music of Claude Vivier (1948 – 1983) in late 2008. He once described his music thus:

‘My music is a paradox. Usually in music, you have some development, some direction, or some aim. . .which in my music happens less and less. I just have statements, musical statements, which somehow lead nowhere. Also on the other hand, they lead somewhere but it's on a much more subtle basis’.  

In *Siddartha* (1976) ‘[T]he non-teleological and non-dialectical nature of Vivier's music is at once evident. Rather than a goal-oriented development of melody, Vivier merely presents the melody in different guises. [...] His music therefore avoids the melodic contrast and conflict that characterizes so much of Western art music’.

In *Zipangu* (1980), timbre, articulation, glissandi and other methods of articulation ‘colour’ the melodic line and serve to sharply differentiate the sections of the piece from one another.

My music tends to have a slightly stronger sense of goal-orientation than this. The conclusions of the pieces are not ‘goals’ to which the music is directed, but tend to be more stable than the succession of brief sections that precede them (e.g. slower harmonic rhythm), bringing the piece to a more definite close.

Ruth Crawford Seeger’s (1901 – 1953) music has a number of technical characteristics that are also present in mine. One example is the use of ostinato-based textures, as in the first movement of the Suite for Wind Quintet.

There is an instance of this in *Reflections*: the ostinato in bars 48 – 59 in the cello.

Another example is the filling in of chromatic space that characterises her melodic lines:

‘The tendency of Crawford’s melodies to fill whatever musical space is made available to them acts as a dynamic force – they move towards a state of ‘chromatic plenitude’. When gaps appear, they tend to be filled promptly. Indeed, gaps seem to be opened precisely to be filled. By the end of a typical melody or

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7 Tilley, p. 7

melodic phrase, every tone will be connected to the rest by semitone, with no gaps left unfilled and no notes left dangling and unattached. Each note seeks, and usually finds, its chromatic neighbours’. \(^9\)

The smallest-scale version of this is what Strauss terms ‘motive M1’ (see example 1).

Example 1: ‘motive M1’ starting on D.

\[ \text{Example 1: 'motive M1' starting on D.} \]

‘This motive […] is extraordinarily prevalent in Crawford’s melodic lines […]. The first three notes [of the *Diaphonic Suite No. 1*], D-E-Eb, present the motive in its prime ordering. It opens a space a whole tone above the D, then immediately fills it with Eb, creating a small chromatic zone’. \(^10\) The systematic filling of chromatic space directly influenced my melodic lines.

Another important influence is Galina Ustvolskaya (1919-2006), in whose music unchanging sections are abruptly juxtaposed, each defined by a predominant timbre and texture. The importance of pitch - and, to a lesser extent, rhythm - in creating form and meaning is greatly suppressed. One example is *Composition No.2* for eight double basses, piano and wooden cube.

‘[T]he aggressively homophonic and rhythmically synchronized blocks of sound are so massive that the entrances [of the double basses] seem static, like enormous walls, although they in fact contain individual pitch processes within. However, almost none of this activity is apparent to the listener. […] Near the end, the activity […] breaks off suddenly in several places, in order to open unexpected visions of an entirely different world, with silences, […] tremolos and quiet chords’. \(^11\)

The clearest example of Ustvolskaya’s influence is in bars 383-414 of *Broken Images*. In this section, pitch activity is severely restricted – apart from bar 399 in string group 2, the double bass chords in bars 383 - 401 all consist of the same pitches – or obscured, as in the piano clusters in bars 395 - 408. There is also the abrupt emergence of the piano texture at bar 414, which differs markedly from its immediate

\(^9\) Ibid. p. 8  
\(^10\) Ibid. p. 28  
context. There are comparable passages at bars 317-321 and 349-356 in the same piece.

While writing *Music for cello and glockenspiel*, I first came across music by Rebecca Saunders (1967 - ). Pieces such as *Choler* for two pianos (2004) and *QUARTET* for accordion, clarinet, double-bass and piano (1998) make extensive use of extended instrumental techniques that produce noise with little or no definite pitch. The music presents distinct blocks of pure timbre separated from one another by silence. In this, and in its pronounced lack of narrative progress, it resembles what my own music would be like if taken to extremes. Some of this is apparent in her description of the compositional process:

‘When composing I imagine holding the sounds and noises in my hands, feeling their potential between my palms, weighing them. Skeletal textures and musical gestures develop out of this. Then, like pictures placed in a large white room, I set them in silence, next to, above, beneath and against each other’.\(^\text{12}\)

Elliott Carter was another influence. In addition to his interest in issues of continuity and simultaneous development in discontinuous music,\(^\text{13}\) certain aspects of his harmonic language offer solutions to the problem of structural coherence. The use of specific, recurring chords from which the harmonies derive is apparent in the *Symphony* (1942), and is more pronounced in the *piano sonata* and the *cello sonata*. An all-interval tetrachord (0,1,4,6) performs the same function in the first string quartet.\(^\text{14}\)

Some traces of this can be found in *Reflections* for clarinet quintet and *Music for cello and glockenspiel*. Later, however, it seemed to me that pitch class sets did not contain sufficiently concrete musical information to work with because they are less stable and fixed than intervals or pitch classes. A pitch class set can be transposed and/or voiced in a number of ways, and therefore can take forms that seem to have very little in common.

I started to use intervals and non-transposing pitch class collections. Carter’s harmonic language is much more complex than mine. For example, in the Piano Concerto the harmony is derived from the twelve trichords that are derived from a

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\(^\text{13}\) See Bernard p. 655 and *passim*.

\(^\text{14}\) See Schiff p. 64.
twelve-note chord\textsuperscript{15}. Nevertheless, much of the harmonic language can be described in terms of the constituent intervals present on the musical surface: ‘[I]t seems quite possible that individual modes of presentation are inseparable from pitch-class set equivalence. In other words, it becomes necessary to define analysis primarily in spatial terms, in which the identity of a pitch collection is a function of its intervallic configuration’.\textsuperscript{16}


\textsuperscript{16} Ibid, p.7.
Darmstadt Summer Course for New Music (2010)

The Darmstadt Summer course for New Music has been an important forum for the performance and discussion of contemporary classical music. It has a quasi-polemical function beyond the dissemination that is its raison d’être; since the early 1950s, the music performed and discussed seems to embody what some European avant-garde composers see as the ‘future’ of art music. In recent years the range of music has broadened considerably, to the extent that, as Michael Spencer has noted: ‘[T]he lack of a specific aesthetic directive leaves the programming open to a challenge of being an "anything-goes" mentality’. Such a concentration of eminent performers and composers in one place is uncommon, and provides a rare opportunity to immerse oneself in new music. The structure was as follows: individual lessons for composers and instrumentalists, and workshops with resident ensembles for composers. There was at least one concert every evening.

One of my fellow students claimed that there was a diverse range of composers present compared to the rigid serialist orthodoxy that used to dominate the course. In terms of the range of aesthetics and intellectual concerns, this was true. The contrasting examples of Liza Lim, who lectured on her current music, and Johannes Kriedler, who gave a lecture and whose music was performed, provide a good illustration.

Lim’s recent work is influenced by certain Australian Aboriginal tribes:

‘Over the last five to six years, my compositional work has been informed by an investigation into Australian Aboriginal aesthetics and ritual. In the Aboriginal worldview, there is a great permeability between temporal structures and this fluctuating nature underpins the structures and expressions of language, ritual and art. In looking at Aboriginal culture, I have focussed particularly on this quality of fluctuation or shimmer.’

The interacting layers of structure and timbre in her music function as a musical analogue of this worldview.

18 Lim, Liza – Patterns of Ecstacy. Darmstädter Beiträge zur neuen Musik, 21, p.28
19 Ibid. p. 29
friction as action of repetition as a way of both uncovering and covering up patterns. I have written a series of compositions including solo, chamber and orchestral works centred on an exploration of the aesthetics of shimmer and the shimmer effect that arises from the interactivity of materials and forces^{20}.

Kriedler’s preoccupations and music are very different. One of the pieces performed during the course, *in hyper intervals* (2006 - 08), consists of disjointed musical gestures from a small ensemble alongside electronically distorted fragments of generic pop music. In his lecture, he described at least some of his work as a response to the current profusion of easily available music.

Despite the variety of aesthetic and intellectual viewpoints, much of the resulting music had a homogenous character. Many of the pieces consisted of sparse, barely audible sounds (bowed tailpieces and extreme sul pont. in the strings, breath sounds and key noises in the wind and brass) interrupted by loud noise from electronics or electric guitar. Most of the music seemed to me to lack substance beyond the immediate novelty of its sound, an impression that was confirmed when I listened to some of it again after the course. So widespread was this style that it may explain why, out of the four composers I received lessons from, two commented not so much on the specific notes I had written, but on the fact that there were notes at all.

Furthermore, even the music that departed from this idiom, such as Hans Thomalla’s use of out-of-context ‘expressive’ modernist signifiers, or Bernhard Lang’s short, repeating loops, was subservient to the concept it embodied.

Such was the omnipresence of a post-Lachenmann sound-world allied to a conceptual intellectual framework – elements that have very little to do with my music - that at least part of me thought at the time that I was obliged to incorporate it somehow into my own work. However, taking such a stance requires an absolute belief in both the intellectual climate and the resulting music that I did not and do not possess. However, Darmstadt presented a definite point of view against which to react at a time when I was unsure of the direction of my own music.

^{20} Ibid. p. 32
Reflections for clarinet and string quartet (2009)

The start of the compositional process was informed by my working methods on a previous piece for two pianos, for which I made recordings of myself improvising at the piano, transcribed sections of those and used them in the piece. Direct engagement with starting material that had a musical identity differed from the serial processes that I had used up until then. The resulting work had a heightened immediacy and focus compared to my previous music: instead of applying rhythm, phrasing, dynamics and other features to separately conceived pitch material, I could use music that already had its own characteristics to construct the piece.

This experience left its mark on the working method employed in the Quintet. I quickly wrote four fragments of solo clarinet music. Each had a distinct motif, which I worked with until each fragment was around a minute long. However, the relationship between the clarinet and the quartet had yet to be defined. While the clarinet sections had a certain character by virtue of the intense focus on each individual fragment, the limitations of starting without a larger scheme became apparent.

As a solution to this, the quartet often acts as a single static entity [see for example bars 1-3, 39-47, 97 – 120], bearing little relation to the clarinet. However, other types of texture are also present: the polyphony of bars 25 – 34 and 48 - 59, for instance, although even in these sections each instrument is restricted to one type of material; the first violin to quaver triplets, the second violin to a high sustained line and so on (see Example 2).
Example 2: *Reflections* for clarinet and string quartet, bars 53-56.
Large-scale form

The most obvious aspect of the form is the number of short, seemingly unrelated sections. However, unlike a pure ‘moment form’ piece, some elements return. One return in particular undermines an attempt to conceive of the piece as a pure ‘moment form’. This is when the opening texture in the quartet (see Example 3a)

Example 3a: *Reflections* bars 1 and 2.

returns at bar 93 (see example 3b).

Example 3b *Reflections* bars 93 – 95.
This is followed by the final section [b. 97 – 126]. If the last section is heard as a coda, bars 93-96 could be regarded as a recapitulation after the contrasting sections of b. 4-92.

In addition, the quartet texture at b. 4-9 (see example 4a)

Example 4a: Reflections bars 8-9.

is the dominant feature of the last section (see example 4b):

Example 4b: Reflections bars 101-102.
There is a less overt recall of earlier music towards the end. The tessitura, predominant pitches and intervals of bar 120 Violin 1 (see example 5a) are reminiscent of bars 16-18 (see example 5b).

Example 5a: Reflections bar 120.

Example 5b: Reflections bar 16, violin 1.

Small-scale form

When writing the initial four clarinet sections, instead of converting the motifs into abstract ‘pre-compositional’ material such as a row or set, I worked directly with specific pitch classes and intervals. There is evidence of this in the finished piece. For example, in the clarinet bars 1-3, bars two and three are different versions of the figure in bar 1. E and Ab are added in b.2, and bar 3 is a condensed version of the second part of the b.1 figure incorporating these two additional notes (see example 6).

Example 6: Reflections bars 1-3, clarinet.

In the clarinet part bars 98 – 100, 99 – 100 is an altered transposition up a tone of bars 98 – 99. For example, the major 6\textsuperscript{th} in 98 becomes a minor 6\textsuperscript{th} in the next bar, and the minor 9\textsuperscript{th} in 98 is a major 9\textsuperscript{th} in bar 100 (see example 7).
Example 7: **Reflections** bars 98 – 100, clarinet.

In b. 48-49, the first five pitches of 49 are created by octave displacements and reversing the order of the first two notes of 48 (see example 8):

Example 8: **Reflections** bars 48-49, clarinet.

The other main source of pitch coherence is through the use of pitch-class sets. The opening bar bars contain an appearance of the all-interval tetrachord (0,1,4,6) as well as (0,1,5) and (0,1,2) which both feature prominently in the rest of the piece (see example 9):
Example 9: Reflections bars 1 and 2.

Often appearance of these sets overlap. For example, in bar 13, there are two such appearances of 012 (see example 10):

Example 10: Reflections bar 13.

Sometimes different sets can overlap in more complex ways, as in the first violin part in bar 18 (see example 11):

Example 11: Reflections bar 18, violin 1.
In bars 39 – 47, the cluster harmony precludes tonal implications. This is a pronounced element of the harmony of the later music (see example 12).

Music for cello and glockenspiel (2009)

The rather unusual instrumentation was required by the call for works by the Red Note Ensemble for one of their Noisy Nights events at the Traverse Theatre, Edinburgh. It was performed in December 2009.

The piece encapsulates my compositional approach at the time. The form consists of two solo cello sections (bars 1-12, 18-29), two solo glockenspiel interludes (bars 13-17, 30-38) and a coda (bars 32-52).

The contrasts between sections are maintained more rigidly than in the quintet.

The harmony, however, is similar. There are unambiguous presentations of the (0,1,4,6) all-interval tetrachord at bar 33 (see example 13a)

Example 13a: Music for cello and glockenspiel bar 33.

![Example 13a](image)

and in the last two bars (see example 13b).

Example 13b: Music for cello and glockenspiel bars 51-52.

![Example 13b](image)

However, the pitches in b. 1-5 are more significant (see example 14a):

Example 14a: Music for cello and glockenspiel bars 1-5.

![Example 14a](image)
Bars 8-23 are shown below. The figure in the first beat of bar 5 appears frequently, at the places indicated (see example 14b):

Example 14b: *Music for cello and glockenspiel* bars 8-23.

Note that, apart from the octave displacement of the C in b. 18, 19 and 21, every appearance of the figure has the same pitches, not merely the same intervals or pitch classes.

The pitches in the glockenspiel sections are almost as restricted. The cello figure in bar 5 appears in b. 37-38 (see example 15).

However, most of the harmony consisting of the (0,1,2) trichord using pitches between Ab4 and A5. Here are bars 30 – 36 (see example 16):

Example 16: *Music for cello and glockenspiel bars 30-36.*
**Movement for viola, cello and double bass (2010)**

This piece was written as a response to the call for works for the Darmstadt Summer Course for New Music 2010.

The original version was written in March-April 2010. The revised version from December 2010 is included in the portfolio. The differences are fairly minor, but the revision of the opening had a pronounced effect on the piece for double string orchestra and two pianos. Here is the opening from the original version (see example 17a):

Example 17a: *Movement for viola, cello and double bass* – original version bars 1-3.

![Example 17a](image)

My supervisor, Bill Sweeney, pointed out that the interest was in the cello and double bass parts rather than the viola. The section was revised accordingly. The opening of the revised version is shown below (see example 17b):

Example 17b: *Movement for viola, cello and double bass* – revised version bars 1-3.

![Example 17b](image)

This involved thinking about the music in a different way. In the previous version, I had regarded the viola as the main feature of the section, because the melodic line had a quasi-thematic function. In contrast, while the tone-cluster harmony of the revised
opening is an important part of the piece, its thematic function is less important than the sheer sound of it, and the rhetorical force of its violent contrast with the ensuing viola phrase (see example 18):

Example 18: *Movement for viola, cello and double bass* bars 3-4.

This particular phrase seemed to have a quality of requiring some sort of resolution, which became even more obvious when the piece was performed. This was a new element in my music – previously, the sections in the pieces seemed self-contained, and whatever narrative or meaning they possessed was due entirely to how I had arranged them and to correspondences between them.
Large-scale form

One significant difference between this piece and the earlier ones is that types of material that at first appear separately later occur simultaneously. This usually creates a ‘foreground and background’ texture. For example, the chord in the cello and bass in bar 9 comes back as an accompaniment the viola solo in bar 17-20. Here is bar 9 (see example 19a):

Example 19a: *Movement for viola, cello and double bass* bar 9.

And here are bars 17-21 (see example 19b):

Example 19b: *Movement for viola, cello and double bass* bars 17-21.

Another new element is the alternation of the viola line and the opening figure in bars 22-24 (see example 20):
Example 20: Movement for viola, cello and double bass bars 22-24

as is the brief interjection of out of context material in b. 8 (see example 21):

Example 21: Movement for viola, cello and double bass bars 7-9.

Beyond the momentary impact of its unexpectedness and brevity, it undermines the rate of change that has prevailed in the piece, thereby preventing the listener from projecting what they have come to expect onto the subsequent music.
Small-scale harmony

The development of motifs is much more restricted than in the earlier pieces. When a given motif returns, it is altered only slightly. To illustrate, first here are bars 1-7 (see example 22a):

Example 22a: *Movement for viola, cello and double bass* bars 1-7.

Compare bars 1-2 and 5-7 above with the last appearance of the opening figure, bars 52-54 (see example 22b):
Example 22b: Movement for viola, cello and double bass bars 52-54.

Bars 52-54 are the same as 5-6 except for the addition of the double bass notes from bar 10 (see example 23), and bar 53 is virtually identical to bar 7 (see example 22a, above).

Example 23: Movement for viola, cello and double bass bar 10.

Much of the music consists of variants of b.1-2 (the opening figure) or 3-4 (the viola figure). The sections that are not so clearly derived from these two figures come from the intervals present in them, and from the tendency of the harmony to establish a small area of chromatic ‘pitch space’ which is then ‘filled’. A large-scale version of the latter is b. 12, where the F in the viola is the last of the notes of the complete chromatic aggregate to appear, and thus marks the end of the section – the variant of
the opening gesture in bar 13 could be regarded as a coda to this whole section (see example 24).

Example 24: *Movement for viola, cello and double bass* bars 12 and 13.

Often, passages that are not based on one of the main motifs referred to above are permeated by the (0,1,2) trichord, as in bars 11-12 (see example 25):

Example 25: *Movement for viola, cello and double bass* bars 11-12.

Augmented fourth adjacent to a semitone is a common cell, particularly the following forms, which appear for example in the viola at bar 22 (see example 26a):

Example 26a: *Movement for viola, cello and double bass* bar 22, viola.
These occur, for instance, in the coda, i.e. bars 55-74 (see example 26b).

Example 26b: Movement for viola, cello and double bass bars 59-64

The revised version was performed on 3/2/11 at The Arches, Glasgow by members of the Viridian quartet with Iain Crawford on double bass, as part of the Sound Thought festival, organised by post-graduate students from the University of Glasgow music department.

Certain aspects of the piece became clearer when it was performed. The opening was even more visceral than I had anticipated, and the expressive character of the viola solo section emphasised. The manner in which the players interpreted the abrupt juxtapositions was also interesting – occasionally they would pause slightly before beginning a new section, giving the music time to ‘breathe’. The music seemed to lend itself to this rather more than I would have thought.
Soon after the Quintet was finished, Bill Sweeney advised me to write a larger scale piece, in terms of both time and instrumental forces. I had been considering this already. The longest piece I had written up until then had been twelve minutes long. Some of the sections would have to be longer and the pacing different if the piece was longer. Also, the stark, visceral nature of the recent music could be realised more fully by larger forces.

The compositional process was rather protracted. I started in what had by now become my established fashion, recording piano improvisations and editing them to extract fragments of promising material. This time, there was also a period of examining these further to find common features to provide a large-scale structure.

Early work on manuscript paper had proved frustrating and tentative. Deciding that a different working method was required, I did some more recording, consciously basing what I played on a few of the recorded fragments I already had, and edited the result on Pro Tools. Direct engagement with sound gave me a new perspective on the material. Looping and effects created timbres and textures that I could not have conceived by other means.

However, as the process went on its limitations became apparent. There were occasions when I wanted to change some notes, but was limited to what I had played at the time. When this began to interfere with my progress, I returned to conventional notation.

The Pro Tools work resulted in a mere few minutes of music, but it established the gestural language and general expressive character of the piece. It also influenced the pacing at certain points [cf. track 2 on the accompanying CD and bars 1-44].

Broken Images for double string orchestra and two pianos (2010 – 2012)
Large-scale form

An obvious consequence of expanding the time scale is that a given section can last for minutes rather than the short sections in the earlier music - see for example bars 45-136. Sometimes, longer sections are built up from repetitions of short ones. For example, the section starting at bar 275 (see example 27a) is repeated almost verbatim starting at bar 300 (see example 27b). Such direct repetitions had been absent from previous pieces.

Example 27a: *Broken Images* bars 275 – 286.

Example 27b: *Broken Images* bars 300 - 310.
Aspects that had been merely hinted at formerly are more fully developed in this work. There are entire sections in which the timbre and texture is the most important element, as in the pianos and double bass starting at bar 383 (see example 28):

Example 28: *Broken Images* bars 383-387
Small-scale form

The first chord (see bar 1) contains important pitch material. The E to D# interval in the double bases and the cello 3 C-C# are from the trio bar 9 (see example 29a). The trio opening material is developed later - see bars 174-222.

Example 29a: Broken Images bar 1, cellos and double basses group 1

The B-D interval between the violas and violins is from the trio opening. In violins 1-5, the rest of the notes of the 12-tone aggregate (and the repetition of A, which has already appeared in double bass 2 in group 1, and double basses 2 and 3 in group 2) are voiced in a chord consisting mainly of semitones and minor 9ths (see example 29b).
Example 29b: *Broken Images* bar 1, violins and violas group 1

Another source of harmonic material is the following series:

Eb, A, C,G, Db/D, E, G#, B, F, Bb, Gb

It is rarely subject to transposition, retrograde and inversion. Instead, it is a direct source of pitches. The first five notes of the series are used most often and frequently appear in the following form (see example 30):

Example 30: *Broken Images* first five notes of series as chord.
This particular chord arose spontaneously while I was working on an unrelated passage. I discovered that it stubbornly resisted alteration. I was drawn to the sound of that specific chord, not to its intervals or pitch classes or any other abstraction that could be derived from it. Consequently, it appears on the surface of the music more overtly than any basic pitch material I have used previously, most obviously in the last section (bars 531 – 585).

Nevertheless, sometimes it is used as a source of intervals. The augmented 4\textsuperscript{th} [Eb to A], and the minor 9\textsuperscript{th} [C to Db] are the most often used, the perfect 5\textsuperscript{th} [C to G] and perfect 4\textsuperscript{th} [G to Db] less so.

There is a clear statement of the chord in bars 535-536 (see example 31).

Example 31: Broken Images bars 535-536.

Most of the last section consists of little more than broken chords outlining the series. Sometimes pitches are omitted, as at the start of the section, where Db and G are absent. The Gb is a perfect 4\textsuperscript{th} up from the absent Db, and the B a perfect 4\textsuperscript{th} up from the Gb (see example 32).

Example 32: Broken Images bar 533.
The second part of the set has triadic implications that, if stated too boldly, would have seemed incongruous given the highly dissonant idiom. To counteract this, many of its appearances differ in some respect from its basic form. In bar 560, for instance, the Gb and B arise for the reasons outlined in the previous example. F is also present in the second section of the series (and is an augmented 4th up from B) but D, E, G# (together an E dominant 7th) and Bb are absent (see example 33).

Example 33: *Broken Images* bar 560.
Even on a small scale, the harmony deviates frequently from the series. Here, for instance, is bar 6 (see example 34):

Example 34: *Broken Images* bar 6

The first five notes of the series (i.e. Eb, A, C, G, Db) are divided between the pianos. The Gb and Ab in the (0,1,2,3) tetrachord in piano 1 results from filling in the chromatic space between the G and A, but are not related to the series.
Bars 7-8 are an example of the ambiguous function of the row in the piece. In bar 7, the last two notes of the row (see piano 1 right hand: Bb and Gb) lead into a presentation of the first five (see piano 1 right hand: A, C, G, piano 1 left hand Eb, piano 2 right hand Db). However, the pitches in the ensuing (0,1,2,3) set in piano 2 (Gb and G right hand, E and F left hand) do not come from the series. Similarly, in bar 8 piano 1 beat 3, not only is the Eb (i.e. the first note of the row) that should come after the Gb (the last note) absent, but the chord in the left hand of piano 2 cannot be accounted for using the row (see example 35).

Example 35: *Broken Images* bars 7-8.
There is an allusion to the opening chord of the piece (see example 36a) in bar 472 (see example 36b). The double bass pitches in bar 472 are the same as those in the group 1 double basses in bar 1. The pitch classes in the cellos in bar 472 are those of group 1 cello 3 in bar 1.

Example 36a: *Broken Images* cellos and double bases group 1.

Example 36b: *Broken Images* bar 472.
Another important element of the piece is the following gesture at bars 195-196, based on the opening of the trio (see example 37):

Example 37: *Broken Images* bars 195-196.

In its immediate context, bar 174-222, its thematic function is clear. However, unusually in my music, when it appears in the rest of the piece it does not interrupt another section, but instead retains its thematic function. The gesture of indicated section – a sudden, heavily accented interjection – is quite in keeping with its context. This is b. 17-19 (see example 38a):

Example 38a: *Broken Images* bars 17-19.
Here is how this section continues (see example 38b).

Example 38b: *Broken Images* bars 20-23.


*Septet* for flute, oboe, bass clarinet, trumpet, trombone, tuba and harp

During the Viva Voce, it was pointed out that the existing pieces were almost entirely for piano and/or strings. It was suggested that I write another piece to broaden the range of instruments used, hence the present instrumentation.

Each section of the piece uses a particular subset of the whole instrumental group. This has been used as a structural device used throughout the portfolio, but is perhaps most obvious in the polarised textures of ‘Music for cello and glockenspiel’.

The large-scale form is in some respects similar to that of the previous works: a declamatory type of material at the opening (bars 1-2), which occurs several times in varied form, a succession of disjunctive episodes (bars 3-98) and a climactic recapitulation of the opening (bars 99–103) followed by a coda (bars 104–163).

In its second (bars 30-31) and last (bars 99–103) variants, the texture of the opening functions as a few bars of accompaniment during trumpet solo material. The basic pitch material consists of two groups pitch classes (see Example 39).

Example 39: Two pitch class in *Septet*.

\[
\begin{array}{cc}
\text{Set 1} & \text{Set 2} \\
\end{array}
\]

In the music, the identity of each set is frequently rendered ambiguous by the elision of certain notes, or by its appearance with the other set. The harmony is not determined solely by the two sets. Instead, they interact with other elements, which sometimes negate the importance of the sets entirely. A few of these are described below.

Small-scale pitch is still marked by moving between pitch classes a semitone apart and by the augmented 4th – perfect 4th melodic shape. A succinct example of both can be observed in bar 55. The G, F natural and F# make a 012 trichord, and the intervals from C to the F and F# are an ascending 4th and a descending augmented 4th respectively (see example 40).
Example 40: *Septet* bar 55, flute

This also shapes some of the chords, for example the chromatic cluster of pitch classes between F and Ab in bars 116 – 117. The Bass clarinet has F, the flute F#, the trombone G and the Tuba Ab. The first two belong to set 2, the last two to set 1 (see example 41).

Example 41: *Septet* bars 116 - 117
The same principle operates on a slightly larger scale in bars 87 – 91 (bass clarinet) - the pitches form a chromatic cluster spanning from G2 to B2 (see example 42).

Example 42 – Septet bars 87 – 91.

The two sections dominated by the harp (bars 5 – 29 and bars 104 – 163) are unusual in the context of the portfolio. Prolonged static textures have appeared before – see, for example, bars 97 – 126 of Reflections - but there is a new importance given to harmony that is in many respects almost tonal. The clearest example is the Vb – I cadence in Bb minor at bars 120 – 122, and the ensuing section (bars 123 – 163), which is based almost entirely on that triad (see example 43).
Example 43: *Septet* bars 120 – 123

Also, bars 5 – 8 could be regarded as a II7b – I chord progression in A minor (see example 44), and indeed the majority of bars 5 – 29 consists of or is derived from these chords.

Example 44: *Septet* bars 5 - 8
Before the conclusion, I would like to address the question of rhythm. My compositional method regarding pitch is to consciously use basic starting material such as a row, chord or set. As a result, I can describe its various manifestations in the finished piece. By contrast, the rhythmic features emerge in a highly intuitive manner. The relative lack of initial material makes it more difficult to discuss. This applies to rhythm on both the small and large scale.

An example of the former is the altered diminution of the motif in bars 195-196 of *Broken Images* (see example 37) at bars 189 – 190 (see example 45). While bars 189-190 are clearly derived from the motif, its particular rhythm is not the result of a systematic method.

Example 45: *Broken Images* bars 189 - 190.

Intuitive large-scale rhythmic decisions include when to interrupt the figure established at bar 17 in *Broken Images* during bars 17 – 45, and which note lengths to use for the repeated figures that dominate bars 45 – 149.
Conclusion

Several changes took place within the framework of the discontinuous aesthetic in the process of writing the music. Some of these were matters of technique, such as the progression from pitch class sets in the quintet to fixed intervals and pitch classes in the rest of the music. This was at least partly a result of simplifying the gestures of each section, making them more concise and less liable to return in an altered form. The beginnings of this are obvious in the piece for cello and glockenspiel, and became more pronounced in the rest of the music. Timbre as a distinct focus became more important. This was an element that was there at the outset; the opening of Reflections depends on the pizz. strings at least as much as the clarinet line for its impact. By the time of Broken Images, entire sections were almost entirely dependent on timbre and articulation for their effect.

Also, the variety of approaches to musical time increased. The clearest evidence of this is in Movement for viola, cello and double bass, which had different types of music layered simultaneously, brief destabilising fragments of out-of-context music, very short alternation of different sections and so on.

However, perhaps of more interest are those aspects that contradict the discontinuous aesthetic. For example, all the pieces have a similar formal outline – assertive opening, unrelated, disjunctive sequence of sections, sometimes with brief returns of the opening as in the Quintet and the Trio, climactic, short recapitulation of the opening and a quiet coda, usually longer than any of the preceding sections. In some respects, the pieces have fairly traditional structures. For example, there is the piano section towards the end of Broken Images, with its static confirmation of the basic series that has been hitherto merely glimpsed, to say nothing of the return of the opening chord at the end, which may be interpreted as a unifying gesture.

The evolution of the aesthetic occurred directly through the act of composing. It was not mediated by an intellectual stance, nor could it have been.

Much of the preceding may indicate that the manifestation of the discontinuous aesthetic was always shot through with ambivalence. Because of the nature of the compositional process, this was inevitable, and perhaps as it should be.
CD Contents

Track 1: Music for Cello and Glockenspiel
   Robert Irvine – Cello
   Tom Hunter - Percussion
   Recording Venue: Traverse Theatre, Edinburgh
   Recording Date: Live Recording – 7th December 2009

Track 2: Edited improvised material.
   Euan Fulton – Piano.
   Recording Venue: University of Glasgow Music Department
   Editing: September – October 2010.

Track 3: Movement for Viola, Cello and Double Bass
   Emma Peebles – Viola
   Peter Nicholson – Cello
   Iain Crawford – Double Bass
   Recording Venue: The Arches, Glasgow
   Recording Date: Live Recording – 3rd February 2011
Bibliography


Discography


Rebecca Saunders, *Choler/Crimson/Miniata*, Hodges/Hind/Anzellotti, SWR Vokalensemble Stuttgart, SWR Sinfonieorchester Baden-Baden und Freiburg cond. by Hans Zender (Kairos, 0012762KAI, 2008)

*QUARTET/ Into the Blue/Molly’s song 3 – shades of cimson/dichroic seventeen*, musicFabrik cond. by Stefan Asbury (Kairos, 0012182KAI, 2003).

**Filmography**

*Claude Vivier - Reves d’Un Marco Polo*, Dir. by Hans Hulscher (Opus Arte, 2006).

*Elliott Carter - A Labyrinth of Time*, Dir. by Frank Scheffer (Allegri Films, 2004).