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*Commentary on the Portfolio of Compositions
submitted for the degree of Doctor of Philosophy by
Composition*

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Commentary on the Portfolio of Compositions

Submitted for the degree of Doctor of Philosophy by Composition

John Goodenough

Durham University

2014

Abstract

John Goodenough

Doctor of Philosophy by Composition

Durham University
Department of Music
2014

Portfolio Contents

1. Ubi Caritas	2009 – for violin & piano	4.36
2. String Quartet	2010 – for string quartet	5.15
3. Echoes of Poems & Prose	2010 – for small ensemble	32.45
4. Fountains (Quartet)	2011 – for string quartet	4.45
5. Stato di Cambiamento	2012 – for large ensemble	5.10
6. Triptych	2012 – for small ensemble	5.20
7. Divergenza	2013 – for large orchestra	33.12
Total time		91.03

Other musical examples (not part of the portfolio)

Sette archi spezzati	2013 – for small ensemble	5.28
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This portfolio has three principal themes. The first, explored with the discussion of *Ubi Caritas* and the (2010) *String Quartet*, concerns the interpretation of harmony; that is harmony, plainly being the vertical component in music but having an inbuilt propensity for horizontal movement, including line and counterpoint. In *Echoes of Poems & Prose*, there is a disregard for any horizontal reasoning, harmony is constrained to the point of isolation and focus fundamentally shifts to the chord as ‘object’. I consider this ‘objective’ sense in detail, in subsequent music in the portfolio.

A second theme hinges on a discussion of ‘musical material’ (the term devised by Theodor Adorno); this considered alongside Samuel Beckett’s description of a relationship, between ‘mess and confusion’ (Beckett’s terms for material) and the ‘form’ that contains it. In *Echoes of Poems & Prose*, I consider material explicitly, in particular the singular sound. With *Fountains* and *Stato di Cambiamento* control of the sounds and their overall architecture become increasingly obscure, with issues around form, substantively re-defining the compositional process.

A third theme is the consideration of aspects of structure, which become of particular significance in the final pieces *Triptych* and *Divergenza* (the term ‘structure’ being as defined by John Cage).¹ In *Triptych*, exploration is made of a confining form into which structural material grows; material that yields intensely colourful musical moments. In the final piece *Divergenza*, the Fibonacci sequence applies a vice-like grip on the material, but as I remove the conceptual dependence on this sequence, the music’s intrinsic characteristics of rhythm and character grow to become of central importance.

¹ See fn. 35 below.

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Contents of accompanying CDs

CD 1		Recording Date
Track 1	Ubi Caritas - Darragh Morgan & Mary Dullea*	27 th March 2014
Track 2	String Quartet - Allegri Quartet	23 rd February 2010
Track 3	Echoes of Poems & Prose - Ives Ensemble	16 th November 2010
Track 4	Fountains - Ensemble 7Bridges	15 th May 2012
Track 5	Stato di Cambiamento - Ives Ensemble	16 th February 2012
Track 6	Triptych - Ives Ensemble	2 nd December 2013

* A supervised sight-reading

CD 2		Recording Date
Track 1	Divergenza - A Sibelius 6.2 recording	
Track 2	Sette Archi Spezzati - Ensemble 7Bridges	23 rd April 2013

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Introduction

Several distinct procedures, are elaborated in this thesis; I draw specific attention to two:

Firstly, I find myself continually and reflexively working to unearth what music's fundamental nature is, both in terms of its momentary intensity, its meaning at a point and its logic moving forward, that is the nature of its ongoing process or 'methodology'. The examination is not reductive but about negotiation, in order that the work might generate the new, the individual; that I might encounter and confront (particularly after the last piece) representations, or accounts of 'music' that are relevant to me. The outline for this evaluation is defined not only by the music directly under discussion, but also by music written during the early years of this PhD, music that does not appear here.

Secondly, this music is receptive to evaluation by way of repetitive scrutiny as each piece progresses, becomes defined and completed; does the music satisfy the evaluations and reflections I propose? In the context of a PhD, the music ought to be investigative: it ought to challenge and perhaps test to destruction as it does in *Stato di Cambiamento*, both the materials and processes used.

Each piece of music is described, analyzed and considered, the procedures outlined above are then absorbed, leading to a general conclusion following a discussion of *Divergenza*, the final orchestral piece. The conclusions point not only toward future concerns, but also to a clearer and hopefully sharper, more vibrant sense of my work as a composer.

1. Ubi Caritas

Composition title	<i>Ubi Caritas</i>
Scoring	violin & piano
Duration	04:36
Date of Completion	November 2009
Première	22 nd November 2009

Ubi caritas et amor, Deus ibi est. Congregavit nos in unum Christi amor. Exultemus, et in ipso iucundemur. Timeamus, et amemus Deum vivum. Et ex corde diligamus nos sincero.	Where charity and love are, God is there. Christ's love has gathered us into one. Let us rejoice and be pleased in Him. Let us fear, and let us love the living God. And may we love each other with a sincere heart.
---	---

Ubi caritas et amor, Deus ibi est. Simul ergo cum in unum congregamur: Ne nos mente dividamur, caveamus. Cessent iurgia maligna, cessent lites. Et in medio nostri sit Christus Deus.	Where charity and love are, God is there. As we are gathered into one body, Beware, lest we be divided in mind. Let evil impulses stop, let controversy cease, And may Christ our God be in our midst.
---	--

Ubi caritas et amor, Deus ibi est. Simul quoque cum beatis videamus, Glorianter vultum tuum, Christe Deus: Gaudium quod est immensum, atque probum, Saecula per infinita saeculorum. Amen.	Where charity and love are, God is there. And may we with the saints also, See Thy face in glory, O Christ our God: The joy that is immense and good, Unto the ages through infinite ages. Amen.
--	--

Latin from the Liber Usualis & the Gregorian Missal (1990) Translated by Michael Martin

Three significant elements are primary in the conception and production of *Ubi Caritas*. First, the music of Arvo Pärt, specifically his compositional method termed Tintinnabuli. Second, an exploration of rhythm in the music of Olivier Messiaen, and third, work on a choral piece that I was not to complete, which used plainsong.

THE SIGNIFICANT ELEMENTS

I

The music of Arvo Pärt had interested me for several years before commencing this PhD. It was not the particular change in Pärt's methodology (to the Tintinnabuli method) that occurred during the 1970s, but more a refraction of the harmonic I found there, which became of importance. This refraction was a move away from Pärt's earlier concern

to emulate twentieth century Western European practice; a practice loosely related to the music of Schoenberg, Berg and Webern, to an earlier tradition based on plainchant, Palestrina, the Netherlands school and polyphony. Pärt's later music retains a concern for clear simple expression of liturgical texts but there is a further, more important factor to take into account. For Paul Hillier: 'The characteristic sound of tintinnabuli music stems from a blend of diatonic scales and triadic arpeggios in which harmonic stasis is underpinned by the constant presence – actual or implied – of the tonic triad'.² In his first acknowledged tintinnabuli work *Für Alina* (see Example 1), Pärt plainly uses musical suspension, but its manner is more literally defined by the melodic line or M-voice³ and not as part of any conventional harmonic logic, which in most western pre-twentieth century composition, seeds to the music an intrinsically expressive intensity.⁴

Example 1

6

für alina
für klavier

arvo pärt
(* 1935)

Rubig, erhaben, in sich hineinhorchend

7

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² Paul Hillier, *Arvo Pärt* (Oxford: Oxford University Press 1997), p.90.

³ *Ibid*, p.96.

⁴ This thought may however be inverted; we may describe *Für Alina* as sounding 'like' other traditionally made music.

It is the small but potentially significant schism Pärt makes in Western European functional harmony that interests me, between the sound of the discrete chord and the notes that produce it. Because the notes of the triad (for Pärt) are formed sequentially, the process Pärt applies, embodies an obscure denial of harmonic consonance, which gives consent to dissonance whilst tolerating a ubiquitous (omnipresent) ‘harmony’ for its control.

For Arvo Pärt a carefully considered process is at work: the relationship of the melodic and tintinnabuli voices. However, this process at its conception affects and actually restricts the composer’s ability to control the moment, that immediate, visceral almost tactile auditory element. Further to the concept of a considered process, Morton Feldman in *Some Elementary Questions* states:

All activity in music reflects its process. This has always been true, and it is more and more true as time goes on. Whether it is too late to change this remains yet to be seen. But the question here is not pre-determinate or indeterminate. If I have a resistance to process, it is because I don’t want to give up control. Control of the material is not really control. It is merely a device that brings us the psychological benefits of process – just as relinquishing control brings us nothing more than the psychological benefits of a non-systematic approach.⁵

Arvo Pärt’s process enables ‘concrete’ control over the material, but in reality control is lost - it is actually illusory.

II

Messiaen (in terms of Arvo Pärt’s music) promotes a complimentary process, in which ‘modes of limited transposition’ give a forthright harmony to the music, at one moment dissonant and the next consonant.⁶ With Messiaen, particularly in his later music, the choice of chords and the movement between seems gently accentuated; perhaps being a function of Messiaen’s musicality and background, and only then, of the mode he is using. Further to this, Roberto Fabbi states:

⁵ Morton Feldman, *Give My Regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.65.

⁶ Olivier Messiaen, *The technique of my musical language* (Paris: Alphonse Leduc, 1944), p.58

Despite such mathematics, music composed using modes of limited transposition sounds anything but severe. The use of the modes is mainly harmonic, but the intrinsic recurrence of the same intervals produces an anti-functional tonal ubiquity, which subtracts dynamic-motor tension from the harmony. Thus the chords form textures of colours and timbres that follow one another without pursuing any particular direction, and with a sort of spell-binding force that resides in the latent and obligatory cyclicity of the scale structures.⁷

There is a given severity (i.e. control) in Messiaen's use of mode, but the result, particularly in the late music, sounds anything but severe.

Whilst *Ubi Caritas* was being written, a detailed study of *Messiaen's* approach to rhythm was made, since with *Ubi Caritas* the requirement is not for repetition but more for rhythmic augmentation and in particular the augmentation of (rhythmic) values around a central node.⁸ This becomes an exploration of rhythm as eccentric and irregular, indeed in *Ubi Caritas* rhythmic patterns occur over quite extended time values, with comparatively long phrase lengths.

III

In *Ubi Caritas* many facets of plainsong – melodic, rhythmic and harmonic – help define the music, much of this derived directly from work on a concurrent choral piece *Veni Creator*, which is not included in this portfolio. In *Ubi Caritas*, plainsong is considered and embedded as a sequence of pitches alongside rhythmic elements taken from the plainsong with its Latin text, but these latter elements offer only residual traces of character in the music.

THE MUSIC'S CONSTRUCTION

A group of two-note chords is given; this group defined loosely by consecutive pitches of the plainsong. Pitches 1+2 (of Example 2) become bar A, (of Example 3), 2+3 become B, 3+4 C, 7+8 D, 9+10 E, and 11+12 F.

⁷ Roberto Fabbi, *Theological implications of Restrictions in Messiaen's Compositional Processes, in Messiaen's Language of Mystical Love*, edited by Siglind Bruhn (Abingdon, Oxon & New York: Routledge, 1998), Volume 2050, p.59.

⁸ Robert Sherlaw Johnson, *Messiaen* (London: J.M.Dent & Sons Ltd, 1975), Chap. 4.

Example 2

Ant.
6.
U -bi cá-ri-tas et ámor,

Example 3

Growing awareness of a limited pitch range in the first section of plainsong (see Example 2) prompted me to consider consecutive pitches as intervals; the ‘Plainsong’ material in Example 3, giving what is an incomplete (inconsistent) set of these consecutively grouped intervals. In seeking other ways to create a more comprehensive pitch range, I developed four further distinct methods. Firstly, finding groups of two notes above the plainsong pitch – notes that simply ‘worked’ in terms of sound – secondly by adding a further group, using the same relative interval, but connecting the interval to the second plainsong pitch. Thirdly, there is the merging of two-bar groups (see Example 4, A-B, B-C, and C-D) much as the plainsong’s original note-by-note relationships are consecutively merged in the primary concept (‘Plainsong’ in Example 3). Finally, there is the movement of pitch freely over several octaves, but with the plainsong retained chiefly in the lowest voices, with rhythmic qualities colouring the notes above.

Example 4

John Goodenough

1. $\text{♩} = 72$

Violin *pizz.* *f* *f* *p* *arco* *pizz.*

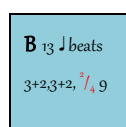
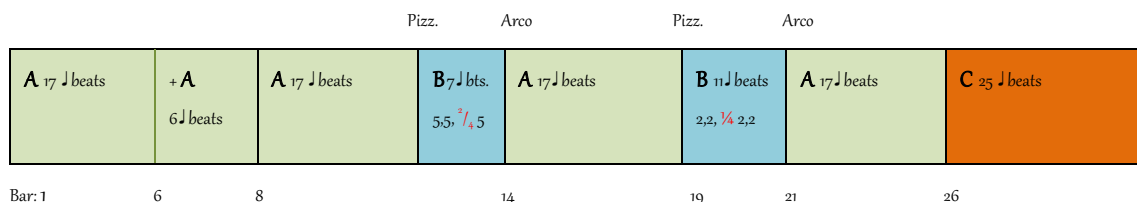
Piano *mp* *ppp* *3:2*

Found sounds initiated development of the musical material in the first seven bars (Example 4 shows the first five bars), and this exploration of a relationship between sound and gesture is noteworthy. There is however no explicit consistency in the work; it takes place before the application of any pre-defined material and there are consequential risks in that it can become difficult to achieve containment of this material once composition ‘proper’ is underway.

At the workshop performance of this piece, Michael Finnissy suggested there were perhaps ‘too many ideas’. The music over time might be seen as continually pushing for new rhetoric, for incessant change, and driven by a sense of tedium perceived by the composer on behalf of an envisaged listener. Upon consideration of the music’s form, however, my initial concerns do not seem altogether to be correct, since in physical (i.e. visual) terms the music is convincing, even simple, as may be seen in the formal blocks of the first movement, (see Example 5).

Example 5

First Movement



33

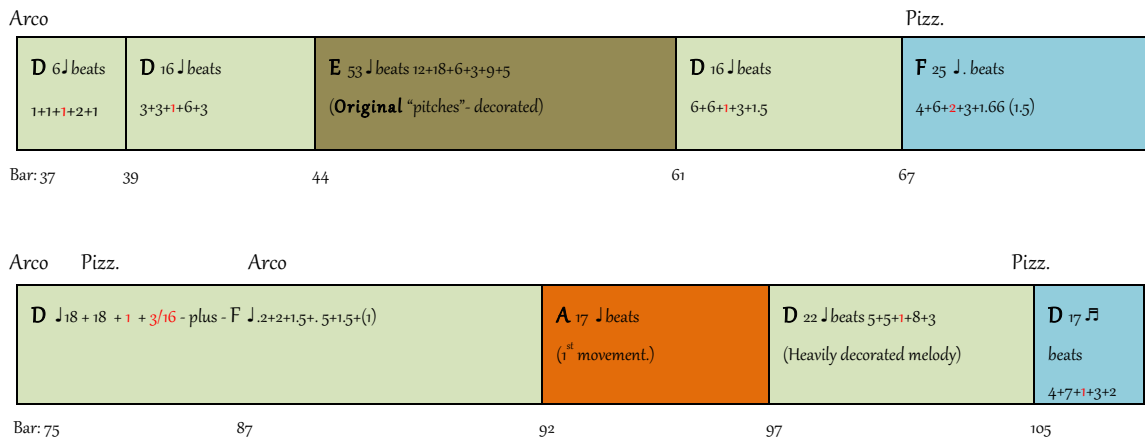
The form of the first movement, shown in Example 5 cannot clarify the small-scale structure of the music, this is not its function: it simply sequences blocks of material, and in doing so concurs with Cage’s use of the term.⁹ Form here does have an independent function, but also attempts a primary association with the creative process. In formal terms the music may be considered in large (repetitive and interactive) blocks *Mikrophonie 1* (1964), *Mixtur* (1964), and *Momente* (1961 – 1972). Concerns about the

⁹ See fn. 35 below.

relationship between the formal and structural elements extend into the second movement, (see Example 6).

Example 6

Second Movement



Repeating melodic fragments in the first movement (B in Example 5, together with section A in both the first and second movements) are not later additions to the music, but considered and positioned early in the process of composition. 'A' is developed and functions as a 'link' between the movements (the red section A in Example 6).

The rhythmic variation given in the Music at 'B' in Example 5 might not immediately be audible, but by the change in the Violin's playing technique to *pizzicato* this varied repetition becomes clearly marked.

CONCLUSION

In future work including my next score, the *String Quartet - Responses to a Chord* (979), I would be concerned to employ less material and at the same time, to work with considerably greater precision. This was to be achieved by more careful planning, primarily in the use of what may be termed 'pre-compositional' material, but then also by a further exploration of the relationship between large and small-

scale structures.¹⁰ In *Ubi Caritas* blocks of material are initially outlined in terms of length, but aspects in this definition expose a failure of clarity in the definition of small-scale metrical material, through a larger (more expansive) form. If form is a starting point here, its relationship to the smaller structural elements requires reflection. Does not beauty in the moment e.g. a simple 'sounding together' conspire against a pre-ordained or conceptualized idea of form? Should working from the moment compel one to work with a more consistent method, by using less material to support the relationship between the small and large scale? Alternatively, is the opposite more logical, working down (from a form) to small-scale momentary elements? In fact, what defines a 'work' (from which end is it defined), a question explored later in this portfolio? How might short-term musical gestures aid the arrangement of music into form, and in consequence, what precisely is characterful music?

Ubi Caritas benefits from strong, characterful, gestures, but these offer limited energy and clarity to the score. Rhythmic shapes are somewhat clouded, even if defined – and drawn quite freely – beforehand, under the impact of their reiteration. The repetitive logic of the material on paper may be (visually) clear, but in the music, as sound it is not. Ergo: the rhythmic basis of the construction does not effectively sound through the score it defines or inhabits, and so any intellectual precision of thought is not truly reflected in the result, which is the music as sound.

Can the subjective 'moment' give rise to a genuinely objective work, music that is active and functioning in formal terms? In the next composition *String Quartet - Responses to a Chord*, (979), these issues will be further explored.

¹⁰ Pre-compositional material is material considered and therefore privileged specifically before the music begins to be constructed.

2. String Quartet

Composition title	<i>String Quartet – Responses to a Chord, (979)</i>
Scoring	violin 1, violin 2, viola & violoncello
Duration	05:15
Date of Completion	January 2010
Première	23 rd February 2010

The harmony used in *Ubi Caritas* does not give rise to any specific exploration of interval or pitch, an exploration that might include the imposition of numbers on these musical elements. In *String Quartet* I chose amongst other things, specifically to explore this use of numbers.

String Quartet has the subtitle *Responses to a Chord, (979)*, and the chord of the subtitle – suggested by a moment in the first movement of Beethoven’s *Opus 127 Quartet* – is in terms of intervals essentially just two minor thirds. Its interval basis gives the numerical data (979) and becomes a starting point for all pre-compositional work.¹¹

A conceptual framework partially built around the making of musical objects from numerical data, as has already been said, may use data as a tool to control and manipulate pitch and interval. Within this framework there ought to be no assumed correspondence between numbers, and the sounds that one might ideally wish to hear; numbers – as Morton Feldman suggests – being primarily a means to explore and exercise an a priori ‘control’ over the musical process.¹² The dichotomy here is not simple since although numeric sequences may create patterns, selections of individual chords or groups of chords have first to be assembled as pre-existent material, in order that they may realise a restricted but not confining sound world. I find this complexity stimulating and to be considered in other places, particularly in the analysis of (linguistic) texts. Seán Burke states:

There is a very definite sense in which deconstruction is in complicity with the texts it deconstructs. As a general principle, preparatory labours of construction

¹¹ See fn. 10 above.

¹² Morton Feldman, *Give My Regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.30.

must accompany any deconstructive act, for the reading must propose a model of order even if only in the interests of finally unsettling that order...¹³

Burke's comments will be returned to again but they highlight difficulties inherent in an analysis of music, certainly when compared to the specific intentions of a composer. For the composer these intentions elicit in part a personal, direct and often intense process; a process profoundly reliant in large part on the materials used, and the relationships he/she engenders. On this point Arnold Whittall states that: 'tonal compositions tend to rely more on the **functional** harmonic relations of tonality, to provide structural principles than on the sequence of pitches and intervals present in any particular theme'.¹⁴

A 'non-functional' sequence of pitches or intervals, therefore require a further external order or process (a system), whilst a tonality-based harmonic concept assumes compliance with pre-defined internal mechanisms – these alongside time-based propositions – in order that it may function effectively. The matter requires further consideration but Whittall's description, of Varèse's use of 'serialism as a stimulus – as system provoking its rejection or refinement' is notable, in that the adoption of a system always requires a degree of modification or change, not simply compliance.¹⁵

Whittall however, also says:

It is always difficult in practice to draw a clear distinction between system and consistency, and I have been arguing throughout that - once the constraints of tonality have been loosened or abandoned altogether - degrees of ordering and regularity requiring definition by means other than those of traditional tonal theory make it possible and legitimate to invoke serialism as a guiding principle if not as a governing, all-determining law.¹⁶

A generic exploration was made of quartet repertoire and in order to find resonance I surveyed the string quartets of Beethoven, Bartók, and in particular the distinctive character of Janáček's quartets; music that is often considered to resonate strongly with

¹³ Seán Burke, *The Death and Return of the Author* (Edinburgh: Edinburgh University Press, 1992), p.132.

¹⁴ Arnold Whittall, *Serialism* (Cambridge & New York: Cambridge University Press, 2008), p.3.

¹⁵ Arnold Whittall, (2008), p.118.

¹⁶ Arnold Whittall, (2008), p.118.

the influence typical of a folk idiom. Because Janáček's (harmonic) language is so very personal however, his theoretical writing was scrutinised.¹⁷

During his time as a student and particularly in his teaching between 1874 and 1920 Janáček produced a great deal of pedagogic material. A probing of the relationships and tensions between sounding chords evidently became a focus for the composer's attention. Helmholtz, Bakala and Herbart inspired in Janáček an attempt to bring classical theory into line with contemporary musical practice, and as he worked at this Janáček arrived at an idea that I consider central to an understanding of his musical language and practice. That is 'Spletna' or twine, which holds together the preceding and following tones, suggesting importance be attached to what in 'classical' harmonic terms seems almost an illusory element. As Michael Beckerman explains:

Janáček based his theory of chord connection on a premise which he derived from his study of Helmholtz, and understood as a natural phenomenon.

He states that:

“...a tone sounds from an instrument, but also floats in our mind when it has really faded out...”

The actual sounding tone is called *pocit* or *sensation* tone, while its sonic “ghost,” which goes on sounding for a fragment of a second after the stimulus has ceased, is called a *pacit* or false sensation tone, which I call the *illusion* tone.

Janáček says that:

“...the most certain rhythmic and melodic forms are sensation tones, they build the surest sense of beauty.”

But, Janáček continues, musical phenomena cannot be understood in terms of sensation tones alone:

“I base the teaching of chords and their connection not only on the *sensation* but also on the *illusion* form of the tone... Tones are most firmly connected when the new tone falls into the illusion of the preceding tone...”

¹⁷ Michael Beckerman, *Janáček as Theorist, Studies in Czech music No. 3* (Stuyvesant, NY: Pendragon Press, 1994), Chap. 5.

If we designate the *illusion* fading-out of the previous tone by the note, there will be perceivable *spletna* (twine) of the preceding with the following tone.”¹⁸

I had found a composer, struggling with his own pre-conceived conceptions of ‘**functional** harmonic relationships’ (to use Arnold Whittall’s words again), with a profound concern to discover what a ‘tonality based’ harmony relies upon. When placing this material alongside an understanding of Arvo Pärt’s tintinnabuli technique one finds crucial discrepancies between the two concepts.¹⁹ Particularly, in terms of the function of time as it informs the strictly harmonic, or better the vertical element of music.

The consideration of chords – whilst certainly thought-provoking – is not the complete picture; equally important is how the vertical element takes on horizontal movement or line. Stravinsky suggested that he composed vertically, working with harmony before expanding into horizontal elements such as motivic material, rhythmic units etc. ‘I hear harmonically, of course, and I compose in the same way I always have’.²⁰ In focussing on the harmonic aspect Stravinsky emphasises how intense the relationship is for him, between the vertical and horizontal elements in a musical structure. The consistent application of numbers to chords – initially made perhaps to define supplementary intervals and pitch relationships – might also provoke the production of horizontal elements. I considered historical models, continuo-realisation and the late, serial music of Stravinsky, where numbers codify pitch. A closed, pre-compositional procedure might enable a more flexible yet consistent musical technique; but the four pitches of the initial chord (979) proved – after the event – to be profoundly limiting, and it didn’t work.²¹ It became clear that the vertical pitch structures would need to be as much musical initiators as single sound entities, and that in working with a greater number of pitches, less discretion should be taken. The singular ‘sound’ of the chord would however remain primary, it could not be simply a ‘clump’ of pitches; the chord would not be considered functional in classical terms, yet must in some way define the music within which it served.²²

¹⁸ Michael Beckerman, *Janáček as Theorist Studies in Czech music No. 3* (Stuyvesant, NY: Pendragon Press, 1994), p.61.

¹⁹ Arnold Whittall, (2008), p.3.

²⁰ Igor Stravinsky & Robert Craft, *Conversations with Igor Stravinsky* (London: Faber Music, 1959), p.25.

²¹ See fn. 10 above.

²² Robert Saxton (a talk in Durham 2013).

At specific points in *String Quartet*, the chords offered freedom to find a discrete yet characteristically rhythmic character, a character that could shape a complete section or block of music. This happens three times in the score, with harmonic material always derived strictly from pre-compositional work.²³ Consideration was not given at this stage to the effect of the imposed music on the material before and after (see Example 13). I also became interested in the notion of material being adapted at one structural level, because what happens at another, and this helped take me forward toward work on *Divergenza*.

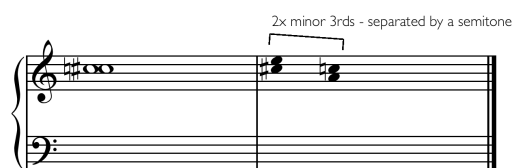
This was a singular music – music made by one composer – and it highlights something that I will return to later; the perhaps tendentious relationship between the composer and his/her music, as explored exhaustively in literary terms by Seán Burke.²⁴

Numerical data derived from other musical attributes – open strings, double, triple or quadruple stops – are used in an attempt to provoke an explicitly instrumental experience, and this may be applied to elements found in other disparate areas. A characteristic diminished seventh in Beethoven's *Op 127 Quartet* (loosely related to Example 7), together with several scores by Stravinsky, also a single chord at the opening of the second movement of Shostakovich *Quartet No 8*. I engaged with these as 'remembered' sounds from recordings and concert performances. There is also the ambience, or sense offered simply by music's notation, (factors derived from the music by the manner of processing and even the layout of a composer's printed score).

THE MUSIC

I will begin with a consideration of the initial chord, together with its musical development, (see Example 7).

Example 7



²³ See p. 23, & Example 14.

²⁴ See fn. 13 above.

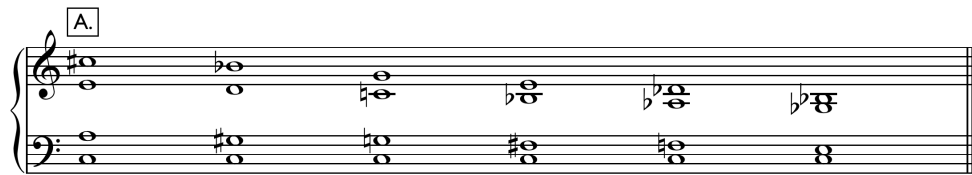
Two minor thirds are deployed, a semitone apart. The pitches are then transposed to create a more extended range, which I considered might offer greater effect in the context of a string quartet. The chord is thus:

Example 8



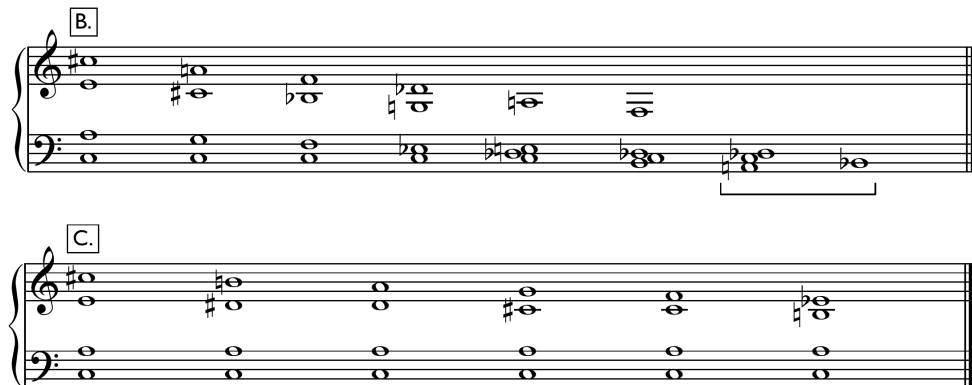
I developed sequences of chords labelled A, B and C, to offer determinedly focused sources of material for the music. The chords of group A, are defined as follows:

Example 9



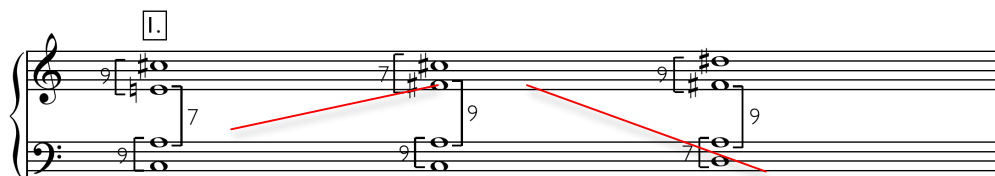
The first chord of group A (in Example 9) is Example 8, transposed up by an octave. Each voice apart from the bass continuously moves down by the same interval creating successive chords, the chords being linked harmonically by the lowest pedal C. Two further versions are made of this first six-chord group using the same number of voices, (see Example 10).

Example 10



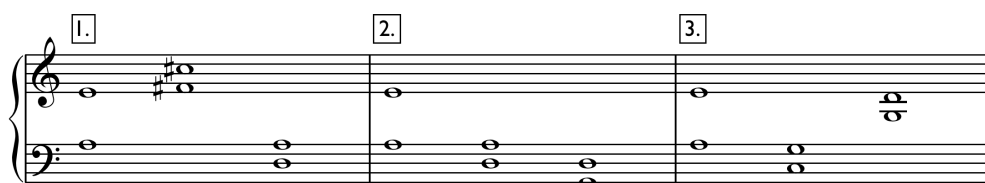
From this material a group of alternative ‘chords’ are defined by the re-ordering of the numbers (intervals) 979:

Example 11



Three groups of fifths, associated with those in the sequence above – joined by red lines – produced two further related series of chords, (see Example 12).

Example 12



In *Ubi Caritas* the pre-compositional construction of chord sequences did not engage the exploration of a chord’s individual alliances or groupings, there being too few appropriate intervallic relationships in the consecutive chords of A, (see Example 9). I therefore found chords derived from other unrelated groups, and from these defined sub-groups. Having considered Janáček’s analysis of what binds chords together (‘spletna’), the chords here ought to work as pre-compositional material from more than one single ‘pre-ordained’ perspective; I hoped specific sequences would have coherence but that single chords would remain individual as sounds.²⁵ Sustained pitches within a changing sequence of chords did paradoxically offer a degree of diversity, but only as I played the pre-compositional chords as discrete units and out of sequence, did I consider that an individual chord might be defined effectively as part of a larger group? The primary consideration became ‘sound’ in the moment, and Arvo Pärt describes the following:

²⁵ See fn. 10 above.

I once had a chat with a janitor in front of our house. I was waiting for a trolley bus. It was cold. He worked and was warm, but I was freezing. I asked his opinion: "How should a composer write his music?" He looked at me. "What a question! I think he has to love each single chord." Love each sound! I had never heard anything like that. This is how a composer must understand music. This knowledge opens up an entirely new world. How to teach that understanding? That's probably a secret which requires much work. But if you know it then it's easier to know what its all about.²⁶

Clearly the above emphasizes a moment-by-moment listening experience; one not defined by momentum or drive. Pärt's emphasis on 'sound' also prompted further consideration of the Bartók string quartets: I found an abundant vein of his material as 'mass', where sound seems defined by how four members of the quartet mass rhythmically together, rather than by any number of functional harmonic relationships. The resonance of Bartók's sound world suggests (to me) that any pre-defined relationships between pitch and time should not confine ones sense of it as music: what often seems in its impact to just be pure 'sound'.

Example 13

Lento, con vib ♩ = 72

* 2/8 bars; - maintain beat before and after.
"As feathers..."

Violin I
pp

Violin II
pp

Viola
pp

Violoncello
pp

The primary chord at the opening of *String Quartet* 'disperses' using a second chord, as shown in Example 13. The material for the dispersal (*as feathers*) comes from Example 11, but the process is essentially 'cadenced' because I – the composer – have a primary rhythmic 'quality' in mind. This rhythmic character – as I term it – requires sound to be derived from pre-existing pitch material. There is consistency, in that here the pre-

²⁶ Dorian Supin (Writer & Director) *Arvo Pärt 24 Preludes for a Fugue* (Paris: Ideale-Audience International, 2002), DVD

compositional material is logically applied, but the chord used for the dispersive material – Example 13, the 2/8 bar – throws up problems, since with the chords repetition a requirement becomes apparent for extra pitches.²⁷ In just the first four bars the conflicting forces inherent in this music become articulate, and I witness the struggle between quantitative and qualitative forces; between the idea of the numbers as pre-defined (i.e. pre-composed) and my (qualitative) input. Although this relationship required further consideration, essentially the proposition is here – that in terms of an overall shape and direction for the music – the composer remains progenitor.

At rehearsal mark A, I split the structure as described earlier. A to B is a distinctive 'block' of material, but so are C to D and H to L. Here intuitive factors come into play: independently conceived blocks of music including rhythm and character develop spontaneously using improvisation at the piano, with the blocks then transcribed and released into the music as a whole. The music at A (violin I and II, in Example 14) is based around a single chord, but a descending element is then defined, producing new music on the viola in this first block, and based on the single (tenor) line from the sequence of six chords shown in A, (Example 9).

²⁷ See fn. 10.

Example 14

A

8 *Con moto* ($\text{♩} = 72$)

Vln. I

Vln. II

Vla.

Vc.

10

Vln. I

Vln. II

Vla.

Vc.

pizz.

col legno battute

mp

f

mp

f

B

12

Vln. I

Vln. II

Vla.

Vc.

arco

pp

arco

pp

col legno battute

ff

nat.

arco

pp

nat.

arco

pp

I have shown – based, as it is on derivatives from a single chord – that the logic of the composition is confused. Chords are not enough – in terms of their limited nature here – to offer a rhythmic dimension, and give a characterisation to the music. This is particularly evident at Bar 15 (Example 15) where pitches from three unrelated chords are required to produce the music. In later scores more complex derivations of chords (but not “clumps” of chords) would be needed.²⁸ Indeed, it seemed necessary for movement

²⁸ See fn. 22.

through pre-compositional material to happen in a far more spontaneously improvisational manner than I had considered appropriate thus far.²⁹

Example 15

In *Ubi Caritas*, specific durations of notes did not give any form of control or focus to the music; in fact, consideration of duration made the music less coherent. In *String Quartet* the interactions of pitch with number are similarly not of themselves enough to create a specific ‘sound world’. Considering this issue did however provide two further approaches:

I

The importance of the chord, as ‘sound’ of and in itself may become amplified (a focus), but not so easily its functionality or progression in time. *Echoes of Poems & Prose* became one way of exploring this dysfunctional relationship.

II

Extending a chord in order to fill empty space is different to the approach I adopted in *Ubi Caritas*, where ‘blocks’ of material are simply that. *String Quartet* is more consistent, in that it uses specific material – with impulsive rhythmic characters defined intuitively from chords – activated, or perhaps more accurately animated in time.

Both *Ubi Caritas* and *String Quartet* merit a discussion of music in blocks. One may think of juxtaposition: one block responding to the next, or indeed confrontation, even

²⁹ See fn. 10.

perhaps the simple touching of blocks etc. The idea here was to bind the blocks together using process; a process defined primarily by engaging limited amounts of material. But in this music improvisation at the keyboard permitted one idea to naturally generate more extensive material. As Stravinsky says in *Poetics of Music*: 'A composer improvises aimlessly the way an animal grubs about. Both of them go grubbing about because they yield to a compulsion to seek things out'.³⁰ Therefore, finding material with distinctive rhythmic aspects but based firmly on pre-compositional work enables a discrete dropping into the score of characterful music. Improvisation (for me) does tend to a concern with the 'moment', but I hoped I might develop a new more 'extended' way of thinking about sound, not using a momentary focus but over time, and with a rhythmic conception.

Morton Feldman describes this approach in another form:

When sound is conceived as a horizontal series of events all its properties must be extracted in order to make it pliable to horizontal thinking. How one extracts these properties now has become for many the compositional process. In order to articulate a complexity of such close temporal ordering one might say differentiation has become here the prime emphasis of the composition.³¹

TWO POINTS

I

In a composition, are not the horizontal elements in a piece of music invariably to do with the engagement of material or events, with time?

II

If so, what is the relationship of musical events to time? How indeed would John Cage consider a series of events occurring over time, and can form really be determined without reference to what it contains?

My reading – in the early 1980s – of Cage's aesthetic had left a barely viable yet intense residual perception. Where splitting music into its constituent elements, – and not

³⁰ Igor Stravinsky, *Poetics of Music* (Cambridge Massachusetts & London: Harvard University Press, 1975), p.55.

³¹ Morton Feldman, *Vertical Thoughts – Morton Feldman and the visual arts* (Dublin: Irish Museum of modern Art, 2010), p.3.

specifically just those of Cage's 'structure, method, material and form' – became something to explore; to help characterize my use of musical material whilst structuring the discourse around it.³²

There is for Cage an overarching aesthetic sense that comes across in *Lecture on Nothing* (1950) where he states: 'I have nothing to say and I am saying it and that is poetry as I need it'.³³ This may – as David W. Bernstein suggests – describe the 'withdrawal of subjectivity' and 'was certainly a critique of the overwrought emotionalism and heroic existentialist narcissism that characterized the abstract expressionist aesthetic'.³⁴ But within this Cage was moving stylistically to abandon compositional control, to make a neutral aesthetic, where listening rather than the idiosyncratic act of creating becomes the focus. Cage defines form in this context to be 'content, the continuity': he continues '...and wants only freedom to be. It belongs to the heart; and the law it observes, if indeed it submits to any, has never been and never will be written'.³⁵

In the article, '*Forerunners of modern music*' of March 1949 from which these Cage definitions come, the terms 'structure', and specifically form, are defined as at either end of a consciousness spectrum correlated by Mind and Heart, (see Example 16).³⁶

As I considered the *String Quartet*, this view was extraordinarily contradictory to my musical sense, in that I considered the mind to be objective and the heart subjective. There were also problems with what a structure might be. Cage defines it as: 'Mind controlled, delighting in precision, clarity and the observance of rules'.

³² Jean-Jacques Nattiez, *The Boulez-Cage Correspondence* (Cambridge: Cambridge University Press, 1993), p.39.

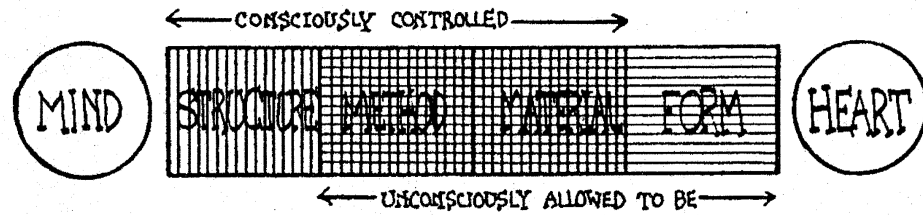
³³ John Cage, *Lecture on Nothing* (Middletown CT: Wesleyan University Press, 1959), p.109.

³⁴ Steven Johnson ed., *The New York Schools of Music and Visual Arts* (Chapter 4. David W. Bernstein - John Cage and the "Aesthetic of Indifference", New York & London: Routledge, 2002), p.120.

³⁵ Jean-Jacques Nattiez, *The Boulez-Cage Correspondence* (Cambridge: Cambridge University Press, 1993), p.38.

³⁶ Jean-Jacques Nattiez, (1993), p.38.

Example 16³⁷



Freedom that a discrete yet applied form offers, ought to be related in some way to the material it encloses. If form is subjective – by Cage’s definition – it gives freedom to an ordered, almost watertight process. This suggests that one could create music using a limited, perhaps even a severely limited, quantity of material. The term ‘material’ is complex for Theodor Adorno however, since it becomes ‘musical material’ together with a form of (social) mediation or (historical) categorisation. In Max Paddison’s view, ‘Adorno’s concept (as Dahlhaus puts it) of material is a historical category, whereas Cage’s idea of matter is a natural one’.³⁸ I would further consider the position outlined here in work toward *Echoes of Poems & Prose*.

³⁷ *ibid* p.39.

³⁸ Max Paddison, *Adorno’s aesthetics of music* (New York & Cambridge: Cambridge University Press, 1993), p.274.

3. Echoes of Poems & Prose

Composition title	<i>Echoes of Poems & Prose</i>
Scoring	<i>violin, viola, violoncello & piano</i>
Duration	32:45
Date of Completion	November 2010
Première	16 th November 2010

Echoes of Poems & Prose is derived from two poems and a piece of prose by Harold Pinter, with each 'setting' musically exploring aspects of the concerns considered in other areas of this portfolio. The characters of the three texts offer distinctive strategies for the conversion of words into music.³⁹

MOVEMENT 1

The first movement is based on *Poem (1)* written by Pinter in 1981. Each line of text in the first two stanzas is short and concise, with the poem as a whole containing many repeated words and phrases: as the text is navigated it grows in narrative complexity. The music, although initially conceived for solo piano was later re-scored for the strings of the ensemble.

I perceived that gaining rights from Pinter's publishers would be a long and complex process so there was to be no use of the actual text, but with careful consideration and using the rhythmic characteristics of words, a musical composition became possible.

Poem

The lights glow.
What will happen next?

Night has fallen.
The rain stops.
What will happen next?

³⁹ Harold Pinter, *Harold Pinter Various Voices Prose, Poetry, Politics 1948-1998* (London: Faber & Faber, 1998).

Night will deepen.
He does not know
What I will say to him.
When he has gone
I'll have a word in his ear
And say what I was about to say
At the meeting about to happen
Which has now taken place.

But he said nothing
At the meeting about to take place.
It is only now that he turns and smiles
And whispers:
'I do not know
What will happen next.'

Harold Pinter 1981

I decided that the shape of the music as a whole, should rhythmically replicate the outline of the words. However, the time between each line of text – a line of text becoming a musical phrase – was not specified. The 'sequencing' of this material perhaps suggests, or implies, an archaic (classical) view of the relationships between chords. I did not encourage this, but then equally each phrase was eventually slurred using a dotted line. Since the music is derived from chords that initially had been defined as individual components, playing them in the form of a sequence is difficult. The complexity of finding harmonics whilst (seamlessly) negotiating the relationship between one chord and the next may become the primary consideration for each performer. Indeed, the disposition of those pitches before (and after) can place constraints on the quality and sound of each chord in the sequence.

After completion of the second and third movements – *Prose* and *Poem (2)* – I listened to a recording of John Cage's *String Quartet in Four Parts (1949-50)*. This music contains numerous harmonics, which together with non-vibrato light bowing techniques give rise to an intense string sound; and this open, 'physical' character became important to *Poem (1)*. In Cage's *String Quartet*, individual chords are deemed distinct, being separately bowed, and Cage's sense of the chord as 'entity' emphasises the profound issues that were appearing at this point around my sense of a chord's functionality.

CONSTRUCTION

I constructed eighteen chords in groups of six, based on a rising (major) scale, from C to A (see Example 17). Chords are not defined in terms of the number of their voices, however the preceding chord categorically determines the following chord and the ordering of a given sequence therefore becomes pre-defined, all be it intuitively. These are not individual aural events, but since the text determines the order and terms of their permutation, each chord may be considered separate, or even as discrete.

Example 17

The image displays a musical score for piano, consisting of three systems of staves. Each system contains six numbered chords, labeled 1 through 18. The chords are written in a major key signature (one sharp, F#) and a 2/4 time signature. The notation uses whole notes for the chords. The first system contains chords 1 through 6. The second system contains chords 7 through 12. The third system contains chords 13 through 18. A dashed line is drawn above the third system, starting at the beginning of chord 13 and ending at the end of chord 18. The chords are arranged in a sequence that generally moves upwards in pitch across the systems.

In Example 18, the ascending numbers down the left hand side denote line numbers within the poem. Minus numbers indicate incomplete chords, and the colours stress sequences of chords that repeat. The first chord of any line in the poem may be freely chosen but as the score demonstrates, there is a clear correspondence between the order of the chords in Example 18, and their order in Example 17: the lines of the poem with consecutive numbers substantially outnumber lines with non-consecutive movement. Even non-consecutive patterns contain successive upward moving elements (numbers). E.g. in Example 18 see chords 10 and 11 in line 8, or 2 and 3 in lines 2 and 3, then 16 and 17 in lines 3 and 4.

Example 18

Poem

1.	3	16	17	6						
2.	1	2	3	4	5					
3.	2	3	16	17						
4.	15	16	17	18						
5.	1	2	3	4	5					
6.	13	14	3	4						
7.	1-	2-	3-	4-						
8.	1	14	3	10	11	6				
9.	9-	10-	11-	12-	2-					
10.	3	4	8	9	10	8				
11.	1	>	2>	1	>	3				
12.	7	8	9	10	7	8	9	3	4	
13.	1	>	2>	1	>	3				
14.	1	1+	1+2	2	2+					
15.	7	8	9	10	7	8	9	10	11	
16.	13	14	15	16	17	6	16	17	18	17
17.	14	15	16							
18.	1-	2-	3-	4-						
19.	1	2	3	4	5					

In *Poem (1)* at ‘What will happen next?’ or ‘meeting’, the relationships and progression between groups of chords – the way the chords repeat with a progressive relationship – suggest conventional harmonic practice. The key point here is that the definition of the form comes from the poem, from the repetition of words and other extra-musical considerations. This implies that although the order and movement of the chords describe the logic of the harmony, it is the words that actually define the overall shape of the score. Ergo, much of the overall shape of the score comes directly from the rhythmical (musical) nature of Pinter’s text.

RHYTHM

In a letter from Bettina Brentano to Goethe describing Beethoven's enthusiasm for his poems, she quotes Beethoven saying that the poems 'exercise great power over me not only by their content but by their rhythm'.⁴⁰ For Beethoven, the suggestion is that the rhythm of words more than their explicit meaning may elicit a musical response, and through this rhythm offer inspiration, even momentum to the music. There is, in *Poem (1)* an unambiguous giving up of 'control' to Pinter's rhythmic character and the form of his words. Is concentration on other aspects of the music here possible? I would answer unequivocally yes; but because definition of the music's form occurs not because of its enclosed material but something outside of it, a hiatus appears where other elements may easily distort or coerce the compositional process involved. Form here is perceived essentially as a frame, since with the text given, my creative focus consequently comes to rest at the boundaries, where marginal areas tend to become significant, even intense. The restorative element is Pinter, who places words to gain their greatest rhythmic affect. In explicitly borrowing Pinter's shapes a referential rhythm is given to the music, with the composer choosing chords in order that they might enable a 'sense' of forward momentum. I will explore later, in *Poem (2)*, aspects of this forward momentum.

In the second movement, *Prose (1975)* the nature of Pinter's text determined a very different approach.

MOVEMENT 2

The Coast

I saw him again today. He looked older.

We walked, as we always used to do, along the promenade, up to the pier, along the pier, back down the pier, and back. He was more or less more or less the same, but looked older. I asked him if I had changed. He said no, as far as he could see. I said no, probably I had not. He said he could see no sign of it, if anything I looked younger. I charged him with jesting. He said no he was not. He pointed out that he had used the phrase *if anything*. *If anything*, he said, and

⁴⁰ Michael Hamburger, *Beethoven Letters, Journals and Conversations* (London: Thames & Hudson, 1951), p.88.

turned his eyes, still bright, on me, *if anything*, you look younger, *if anything*. If anything you look older, I said. There's no if anything about that, he retorted, none whatsoever.

We took the path we always took, wetter than ever along the cliff. Seems wetter than ever down here, he said, uproar in the Channel? How can you put up with such lousy weather? After all these years? Doesn't it oppress you? Not at all, I replied, most congenial, suits me. Do you still have nightmares? he asked. I smiled, into the wind. I haven't had a dream since 1956, I said. Bloody shocking racket you used to make, he said, drowning or something, God what an aggravation. He spat into the fret. One hour in this bloody wet end of the world is enough for me, don't know how you've survived, but nevertheless I'm glad to see you blossoming. Blossoming, I said, no, not quite that, surely, you're jesting.

But he had stopped talking. He was looking down at the sea, the sea he had known so well, the roar of our youth.

He bought me tea at the railway station. I then walked with him to his train. Glad to see you've found your feet, he said, glad to see you're blossoming. I clasped his hand and thanked him for making the journey.

Harold Pinter 1975

Because the 'coastal' space where narrative action happens is so strongly delineated – is an almost continuous presence – I allowed it to run through much of the music. The composition was to be for solo piano, but using a text defined as 'Prose fiction' it was considered that at significant points, the music might be made open to dramatic change. Each word of the text was given an ascending number, so that points in the narrative might be defined numerically. To this scale I applied a time-base using the musical value of a dotted crotchet. Numbers *per se* however, were not considered as directly allied to the words, and the text does not therefore define the music heard.

Because of the manner of its composition, I found myself overburdened with options, and from this recurrent issues arose: the breaks between sections and how they might be negotiated. In addition I was faced with the need to extend passages as continuous music without an applied harmonic concept for their control. Time was spent writing material that would remain unused; indeed time was spent working with lower level processes, which eventually became seen as unproductive. Until the

performance of the score, there remained a troubling insecurity. Would the music be inarticulate: were there just too many ideas? ⁴¹

It seemed logical that an exploration was made of the enormous potential of the piano; the instrument being used in all three movements as a means to unearth material. There is a hardness of sound expected for the right-hand coastal element – I used clusters of pitches at the top of the instrument – that had only a discrete harmonic weight. The high pitches change marginally within a limited interval span and in doing so become rhythmic and varied. I considered this coastal element to be an undemanding space, a landscape not requiring continued work when played alongside the lower pitched (characterful) music.

Example 19: *the coast*

John Goodenough

Moderato ♩ = 66
15^{ma}

Piano *pp*

p

The ‘coast’ material is extended each time it repeats, and this links rhythmically with the additional material below, (see Example 20). I also used the full stops in the text to negotiate extra space within the music. As the length of the lower voices increases, the length and range of the characteristic material above increased with each repetition, (see Example 19).

⁴¹ Lower level processes: processes applied to small areas of the music.

Example 20

In the text of *Prose*, we find two characters in dialogue, initially working toward communality, but later toward difference. This characteristic mode of engagement is applied to the music of the lower stave. Canonic technique, offering an element of speculation and – like finding pebbles on a beach – is adjusted in time to fit with the limited range of pitches given by the *coast* material as employed above; the *coast* material is in actuality helping define these lower voices, so that it may influence, or colour them.

Example 21: the ‘canon’ character, plus ‘coast’ above.

Example 22

The musical score for Example 22 is written in 12/8 time, indicated by the '12' over the '8' in the treble clef. The key signature has one sharp (F#). The score is divided into four measures, each labeled with a number in a box: 1., 2., 3., and 4. Measure 1 shows a complex chord structure with multiple notes in both staves. Measure 2 shows a single chord with a sharp sign. Measure 3 shows a chord with a flat sign. Measure 4 shows a chord with a flat sign. The score ends with a double bar line.

The middle section, marked B, begins with just four primary chords, as shown in Example 22. In *Poem (1)* there had been sixteen distinctive chords, with the primary consideration being that they might (in groups) have a sense of a trajectory and of linear momentum. In *Prose* the idea is to explore the specific sound of each chord so a different strategy appears, with the sounding of the individual chord coming far ahead of any priority to create pattern. Although the ascending and descending numerical sequencing of the chords is significant, the ‘sounding’ characteristics of each gain in importance, they in fact become a starting point for work at *Poem (2)*.

In Example 23, *one*, *two*, *three* and *four* are the pure chords, and *three - four* etc., are melodic pitches taken from those pure chords. *Zero* is a note appearing nowhere else and *five* is a new chord made up of pitches from the pure chords. Here the chords ordered as groups, can be seen over sequences of bars:

Example 23

Prose

Bar 91	1	2	3	4*				
93	4-3-1-2-3-2-2-1-1*							
95	1	2	3					
96	3-4-3-1-2-3-2-2-1-1-3-2-1-2-2-2-2-2-3-2-2-2-2-2							
98	1	1						
99	1	2	3					
101	2	1	3	2	1*	4	3	2
102	2	3	4					1 (Retrograde)
103	2	1	3	2	1			
104	2	1	3	2	1			
106	2-1-2-1-2-2							
107	2	1	3	2	1			
108	2	1						
109	2-2-2-1-1*							
111	3-1-2-3-2-1-1							
112	3-4-4-4-2-4-2-4-2-2-4-4-1-4-4-3							
113	3-1-2-1-1							
115	3-1-2-3-3-4-3-1-2-3-3-1-1-1							
116	3-3-1-3-2-3-2-2-3-3-2-3-1-3-2-0-1-4-1-2-3*							
117	2-3-1-3-2-0-1-4-1-2-3							
118	3-3							
119	5 (33431)							
120	2-1-3							
120	5 (33431)							
122	1-3							
124	1-4-0-3-1*							
125	1-4-0-3-1-4-0-3-4-4-4							

In Example 23 repetition is clearly seen. The copies of sequences of chords used for melody and harmony are both shown here in red, and the primary statement of each new grouping of chords (shown in blue) is also marked with an asterisk (*). *Five* at 119 is a new chord; additionally, there is the willingness to retrograde – shown in yellow – and to freely change a chord’s order in the sequence. Rather than defined by a harmonic process, the chords themselves are ‘pure sounds’, however the pitches, drawn from these chords, define the melodic material.

A simple ABA’ form is used, where A’ is a less focussed version of A and even takes on elements of the B section. The final section of *Prose* is not a repeat, but a drawing together of earlier material whilst developing strictly pianistic textures.

For example, the first chord at bar 129/130 is chord *three*, with the hands each shifted apart by an octave. The sustaining pedal allows this chord *three* – the chord now being given extended resonance – to interact with additional chords, with these ensuing chords offering subtle dynamic shading. There is the return of earlier material in the coda, which (for me) should imply a pulling together of everything coherently. But in terms of this coherence, short-term objectives become profoundly compromised by formal considerations?

I considered *Prose* from a further perspective, as evocative of musical rhetoric, which was widely discussed in the eighteenth century as a three-stage process. The *inventio*, or creation of rudimentary ideas, which might constitute a ‘ground-plan’ of the movement, followed by a *dispositio* or *elaboratio*, an elaboration, ordering, repeating or varying of these ideas. Then finally the *elocutio*, a third stage where the composer shapes all the remaining details of the argument. A particular exploration was made of *Stile Fantasticus* in the keyboard music of Dietrich Buxtehude and Nicolaus Bruhns where, according to Mattheson and Kircher’s scheme, an overt distinction between free and contrapuntal music may be emphasised. The fantastic style ‘is the most free and unrestrained manner of composing that one can imagine, for one hits first upon this idea and then upon that one, since one is bound neither to words nor to melody, only to harmony strongly contrasted with sections of “erudite” counterpoint that are interpolated into this fiery texture’.⁴²

MOVEMENT 3

Poem

and all the others
wary now
attentive to flowers

and all the others
unsmiling
recalling others

⁴² Kerala J. Snyder, *Dietrich Buxtehude* (London New York: Macmillan, Inc (Schirmer Books), 1987), p.251.

smiling in gardens
attentive to flowers
wary now

who recall others
wary now
tendering flowers

who recall faces of others
recalling others
unwary in gardens

who tender their gardens
recalling others
wary with flowers

Harold Pinter 1974

The third movement, *Poem (2)* is a distinctive new approach, yet also contains something considered and explored over many years, which is the idea of allowing something outside of the music to order and control it, thus allowing the composer liberty to concentrate on other musical elements without concern about the form the music might ultimately take. In the text of *Poem (2)* the repetition of words, parts of words, short simple phrases and even whole lines of text, suggest a regulated system; a system that would work clearly, and logically. Initially, I considered the idea of having a chord for each word, the number of chords thereby being limited to the number of words in a line of text. After consideration I took a different path however, defining the music using the poem's letters, not its words. This manner of working seemed a much better, yet more perilous way to go – *perilous*, because the chord is placed in the music without a key element of its aesthetic sense, that being its progression. *Better* because the chord would retain both instrumentation and the orchestration associated with it, indeed there would be no concerns about the duration of the music, since the chords were to be comprehensively defined for each letter as a 'package' or unit.

It seemed right, having used strings in *Poem (1)*, and the piano in *coast* to make full use of the instrumental resources available. Each chord is not a strategic set of pitches from which material might be chosen – a strategy that could by default give another, very

different music – but a distinctive, specific chord. It was decided that a series of five-note chords would be used, selected from an initially much larger set. First considered at the piano, and nineteen letters found in the text, suggested nineteen units (orchestrated chords). Each chord was surveyed and expressed as a single ‘orchestrated’ unit. Decisions about which to use were slow and complex because I considered that instrumental choice and harmonics would greatly affect the final sound. Example 24 shows a selection of the chosen chords. Example 25 shows them placed in the order given by Pinter’s text.

Example 24

Example 24 displays two systems of piano chords. The first system, labeled 'Piano', shows chords for the letters E, A, F, L, and V. The second system, labeled 'Pno.', shows chords for the letters C and U. Each letter is positioned above its corresponding chord in the treble clef, while the bass clef contains the chord's voicing. The chords are five-note structures with various accidentals (sharps and flats) and are presented in a sequence that corresponds to the letters in the text.

Example 25

Example 25 illustrates the application of the chords from Example 24 to a specific text. The text is written in the treble clef, with each letter positioned above its corresponding chord. The chords are arranged in three systems: the first system covers 'AND ALL THESE OTHERS', the second system covers 'WARY NOW', and the third system covers 'AT TENTATIVE FLOWERS'. The bass clef provides the harmonic accompaniment for each letter, showing the specific voicing of the five-note chords.

I have always wished my music to be articulate and expressive, and alongside is a concern for some manner of improvisation. Both these musical issues, and particularly expression, seemed foreign to the approach here, but because work done with each chord gives a final orchestrated form, there is no concern with the final scale of the movement. Moreover sounds are not constrained in terms of the text, and 'character' is allowed simply to develop amongst groups of chords linked with specific words, such as 'flowers' or 'gardens'. Here my objective was to find groups of individual sounds that might engage the listener when simply 'placed' together. Indeed, I did find in this music logic and character that would not be given by an overriding concern to work with the chords individually. Therefore, *Poem (2)* operates as effectively in formal terms, as in the moment of a chord's articulation: the word 'gardens' for instance characterises (affects) the entire score, whilst allowing each individual chord to retain its independence and distinctive character.

Example 26

66

71

77

15"

pp *pp* *p* *pp* *p* *pp*

pppp *ppp*

*F** *L*

ped.

sul C *sul A*

O *W* *E*

sul D *sul C* *sul G*

R *S**

sul G *sul pont.* *sul A nat.*

In *Echoes of Poems & Prose*, because of profound issues raised about form and content, I again considered what – to use Adorno’s term – ‘musical material’ might be?

In *Adorno's aesthetics of Music* Max Paddison discusses 'musical material' at length; he compares it with Cage's terminology for material, which I discussed earlier, and states that:

Cage's relationship to material is holistic and non-dialectical, and through his music he seeks to annul the separation of art from life. Adorno's notion of authenticity, on the contrary, is dialectical and humanistic in orientation, emphasizing the autonomy of the work of art and the emancipation of the Subject from 'mere existence'. The relationship of Subject and Object takes place within the artwork itself. It is, in Adorno's view, necessarily an antagonistic relationship today, characterised by the conflicting demands for unity of form (as Subject) in the face of the need to remain true to a disintegrating material (as Object)⁴³

The relationship between form (subject) and material (object) is also explored by Samuel Beckett who sees Adorno's objective material rather differently, placing the issues with apposite and indeed remarkable clarity. In the course of an interview with Tom F. Driver, Beckett insists that art must admit into itself what he calls 'the mess':

What I am saying does not mean that there will henceforth be no form in art. It only means that there will be new form, and that this form will be of such a type that it admits the chaos and does not try to say that the chaos is really something else. The form and the chaos remain separate. The latter is not reduced to the former. That is why the form itself becomes a preoccupation, because it exists as a problem separate from the material it accommodates. To find a form that accommodates the mess, that is the task of the artist now.⁴⁴

For Paddison, Beckett – almost better than anyone else – articulates the problem of form in relation to a disintegrating material, and so a subjective form becomes in fact the focus. Morton Feldman considers western musical form to be 'paraphrase of memory'. In earlier scores in this portfolio form is *felt*, and not *pre-defined* using time; even in prose, where it seemed essential to draw threads together.⁴⁵ Form here may be more a repository or empty space to be filled, relating well to Cage's use of the term, albeit in his case, requiring 'only freedom to be'. This does not necessarily mean that form ought

⁴³ Max Paddison, *Adorno's aesthetics of music* (New York & Cambridge: Cambridge University Press, 1993), p.275.

⁴⁴ David H. Hesla, *The Shape of Chaos* (Minneapolis: University of Minnesota Press, 1971), p.6.

⁴⁵ Morton Feldman, *Give My Regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.137.

initially be set in its dimensions or ratios as Cage had done using ‘rhythmic structures’ in *First Construction (in Metal)* (1939), just that it might have a truly distinctive trait separate from the (chaotic) material that it encloses.

In *Poem (2)*, the music finds its own scale albeit defined by the musically enigmatic form of Pinter’s poem. The material creates its demands in terms of scale and defines the manner of the music’s construction. These demands give a cyclical, yet satisfactorily varied quality to the music; it literally just needs time to be performed.

My indebtedness to Feldman is profound here, (see Example 26) thinking of scores like *Piano and String Quartet* (1985) and *Piano, Violin, Viola, Cello* (1987). In terms of tempo *Poem (2)* is slow: ♩ = 56 but in terms of the pianist’s sensitivity to pedalling, notation and the sustained nature of the music’s performance – indeed the writing for strings – there are many similarities⁴⁶. My indebtedness is not a concern, since what I found, more than compensated for any imitative bias in the music itself. Under the context of a work there is the opportunity for applying oneself in a different way, to the sounding material. Being at one with this material was the issue, allowing it to find its own form, to cohere in its own way and on its own terms.

⁴⁶ *Piano, Violin, Viola, Cello* (1987) has a tempo mark of ♩ = 63-66 and a tempo marking somewhere near this would probably also be applied to *Piano and String Quartet* (1985) which has no suggested marking.

4. Fountains (String Quartet)

Composition title	<i>Fountains (String Quartet)</i>
Scoring	<i>Violin 1, Violin 2, Viola & Violoncello</i>
Duration	04:45
Date of Completion	October 2011
Première	15 th May 2012

I wrote *Fountains*, *Stato di Cambiamento* and *Triptych* whilst I was absorbed in the composition of *Veni Creator* – a score not included here – and subsequently *Divergenza* the orchestral piece that concludes this portfolio. Many techniques are effectively shared between these concomitant compositions: in addition, due to performance deadlines, I worked with less severity in the shorter pieces, both in terms of process, and the development of material. This method of working became necessary because of *Divergenza's* duration and scale, work on it extending over a twelve-month period. In all coexistent music there was the exchange of challenges, and cross-fertilization admitted to, in terms of both material, and the processes involved.

Fountains, written for a workshop by *Quatuor Diotima*, was to be created as something tangible, colourful, and characteristically Italianate: the Italian fountain. The title is evocative since I was expecting to write in a manner by which light and water's effect on it become palpable in the music. I was attempting to make the refraction and reflection, i.e. of light through water, directly affective of the music that resulted.

I had revisited Stravinsky's *Trois Pièces pour quatuor à cordes*, after a break of several years, and having already emphasized colour with my string writing in *Poems & Prose* I chose to pursue this timbral element further. In particular:

- I would write a richly colourful movement;
- I would take a moment from the Stravinsky score, i.e. a short section from the viola part, and place this several times within *Fountains*;
- I would work from the 'character' of Stravinsky's movement, it specifically being a dance.

Example 28

In numerical order

A musical score for a piano in 2/4 time. The score consists of nine measures. Above the staff, a box labeled 'In numerical order' contains the sequence: 1, 2, 3, 3, 3, 3, 3, 3, 3/5. The chords are: C major (m1), D major (m2), E major (m3), F major (m4), G major (m5), A major (m6), B major (m7), C major (m8), and C major with a 5th (m9). The bass line features a consistent rhythmic pattern of eighth notes.

The limited range of the upper-notes suggested a pitch-based approach, and the chords were therefore described using letters. Considering the pitch order we arrive at Example 29.

Example 29

In pitch order

A musical score for a piano in 2/4 time. The score consists of nine measures. Above the staff, a box labeled 'In pitch order' contains the sequence: C, D, D, D, D, D, E, F, F. The chords are: C major (m1), D major (m2), D major (m3), D major (m4), D major (m5), D major (m6), E major (m7), F major (m8), and F major (m9). The bass line features a consistent rhythmic pattern of eighth notes.

This method of defining material would improve the rate of production of long sections of music, with the harmonic structure not being defined by one specific sequence of chords. The consequence is to allow supple definition of the rhythmic violoncello pattern (*pizzicato*): to produce ‘dance music’ with a ‘flexibly determined’ harmonic structure. I tested chords in different orders, and after spending time labouring with rhythmic patterns of semi-quavers, a grouping of triplet quavers developed (see Example 30 for an early version):

Example 30

I created this ‘dancing’ material early in the process of composition, and as in *String Quartet*, it seemed possible to insert a component at will into the flow of material: I hoped that as a sort of *idée fixe* (Berlioz) it might draw the movement together.⁴⁷ The most characterful and convincing options for the music are the chords termed 1, 2, 3, 3/5 or E, C D and F, in Examples 28 and 29. They offered a range of pitches for the violoncello section, together with a pattern for the melodic line in the upper strings. The pitch order proposed, also allowed the viola pedal note to be used, taken directly from Stravinsky’s *Trois Pièces*: Stravinsky’s material being an important element in my decision to work with multiple linked chords. The aim was not so much to seek distance and disparity occurring in the *Quartet*, but rather to develop a characteristic sound that might ‘infect’ the piece as a whole. I pursued melodic material that might suitably counterpoint the violoncello music and subsequently created isorhythmic patterns, assigning them to the chords given above, either letters or numbers. The melodic rhythm in the Violin, bars 6 to 10 is shown in Example 31, and changes with varied repetition (at B and C) as follows:

⁴⁷ Hugh Macdonald, *Berlioz’s Self-Borrowings* (Proceedings of the Royal Musical Association, 1965), 92:1, 27-44.

Example 31

Violin 2 **A** Bar 6 *ff*

Violin 1 **B** Bar 18 *ff*

Viola **C** Bar 27 *f*

The image shows three staves of musical notation. The top staff is for Violin 2, starting at Bar 6, marked with a box 'A' and 'ff'. The middle staff is for Violin 1, starting at Bar 18, marked with a box 'B' and 'ff'. The bottom staff is for Viola, starting at Bar 27, marked with a box 'C' and 'f'. Each staff contains a sequence of notes and rests, with some notes marked with accents or slurs.

In the score the dancing violoncello material is coloured by the second violin at figure A (see Example 31), using a re-ordered isorhythmic form each time the ‘dance’ motive returns at B and C. The violoncello material similarly uses a variant form each time it is repeated. With this material available, and its variants considered, I then began to write out the score, using the chords 1,2 & 3 (see Example 32). In doing so I was drawn into an appealing milieu of harmonies, wide intervals and *pizzicato*, as if having a ‘colouring box’, sanctioning the character that *Fountains* implies: an intensely colourful ‘refractive’ music.

Example 32

These chords as used in the first five bars are as follows:

1 2 3c 1 2 3e

The image shows a piano score for six chords. The top staff is in treble clef and the bottom staff is in bass clef. The chords are labeled 1, 2, 3c, 1, 2, and 3e above the staves. The notes are: 1 (C4, E4, G4), 2 (C4, E4, G4, Bb4), 3c (C4, E4, G4, Bb4, C5), 1 (C4, E4, G4), 2 (C4, E4, G4, Bb4), and 3e (C4, E4, G4, Bb4, C5).

Example 33: the first five bar period

Fountains
Quartet Diotima

John Goodenough

The musical score is for a string quartet. It features four staves: Violin I, Violin II, Viola, and Violoncello. The tempo is marked as quarter note = 96. The score begins with a fermata over the first bar. Dynamics range from piano (p) to fortissimo (f). Performance techniques include pizzicato (pizz.), arco, and sul ponticello (sul pont.). A '8va' marking is present above the first bar of the Violin I staff.

Problems arose because, apart from Stravinsky's material given at bars 5 to 9, the texture and character of the movement became ever more diffuse as it proceeded. Though strictly defined using just a limited number of chords, the nature of the material provoked me to produce more ideas than necessary. For example, after the general pause at bar 71, I worked resolutely through new blocks of material, almost in defiance, until bar 97 where Stravinsky's music returns to form a coda. The conceptual logic of a music built structurally upon the manipulation of chords gives rise to harmonic material that is strikingly concentrated, but in this case, and with hindsight, is uncoordinated in its use.

Stravinsky essentially uses far less musical material in his movement of similar length, and the Stravinsky material (bars 5 to 9) is informative in three other ways. Firstly, in my attempt to draw on the characteristic of the *Trois Pièces*, i.e. to express something similar and gain a performance of character, I crucially speculated that the *Diotima Quartet* might engage with the sound of the Stravinsky and bring this to my music. Secondly, I considered that the Stravinsky score would help give some 'authority' in that the techniques and manner of composition of this music were new to me. And in the third place I wanted the quotation to become a 'formal' *modus operandi* in my score, in effect tying the music together.

Work on *Fountains* helped me review the urge to incessantly evolve new material and its effect, of sapping confidence in what was already complete. I would now work to make any already extant material more vibrant but in the event perhaps, more compressed and limited. I wanted to attempt an even more heightened expressivity, alongside an experimental concept in terms of organisation.

5. Stato di Cambiamento

Composition title	<i>Stato di Cambiamento</i>
Scoring	<i>flute, bass clarinet in B-flat, vibraphone, piano, violin, viola & violoncello</i>
Duration	05:11
Date of Completion	February 2012
Première	16 th February 2012

One of the primary concerns with the progress of work in this portfolio so far has been form. There is for me the inclination to begin composition with little sense of direction, where the music becomes defined, not to say confined, by the moment, or as discussed in earlier scores, by the use of an externally applied form. An amplification of this central issue in the following two pieces provides impetus toward a new understanding, and points toward the orchestral piece *Divergenza*.

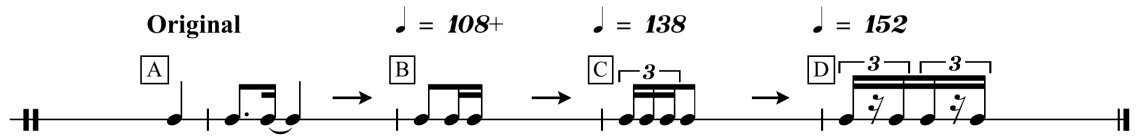
As the title *Stato di Cambiamento* suggests, the music concerns a ‘state of change’. In writing the work, the idea of nothing fixed or given becomes primary; change is fundamental to the music. These moments of change are not signposted or clearly defined, occurring, seemingly at random, throughout the score and suggesting forms of disorder, or entropy.

The music is formed from multiple, spontaneously derived notions of a developmental strategy: from a rhythmic cell (see Example 34), modified in character and tempo over the course of the work, or the continual re-ordering of small blocks of material. Tansy Davies, whose music I explored at the time, describes the type of process I was involved with in the following way:

I use quite basic techniques for developing material, such as taking a line and altering it by augmenting or diminishing its intervals. I also apply this sort of technique to rhythm. I invent rules, games and impose restrictions on material as I go along and they often only apply to a few bars so I tend to forget them. The rules normally come out of the material itself, so they are hard to reproduce...⁴⁸

⁴⁸ Tansy Davies, quote from the Birmingham Contemporary Music Group project (Birmingham: Exchanging notes, 2010).

Example 34



For *Stato di Cambiamento* I produced sets of chords, encompassing the complete ensemble's pitch range, the chords being exclusive to specific points in the composition. Each chord has seven pitches – the number of instruments in the ensemble – and is surveyed for its potential in terms of adding further pitches, the added pitches being based around my subjective perceptions of the material. The process helps develop acoustic colours that are either already present, or perhaps merely implicit, (see Example 35).

Example 35

I derived gestures from the above harmony, by retaining a single chord for longer than I would have deemed 'appropriate' in earlier scores, implying that with the addition of time, a moment becomes in effect harmonic, and may produce gestural character that is shape and movement in terms of pitch, rhythm etc. This transformation may be seen in the comparison of Example 33, the opening of *Fountains*, where chords summarily follow each other – and *Stato di Cambiamento* where twelve bars including a gesture are derived from a single initial chord. Also attempted is the working out of an extensive music from a short rhythmic cell, e.g. the bass clarinet at rehearsal mark C where the rhythm remains, but pitch varies freely, (see Example 36).

Example 36

Bass Clarinet in B \flat

The musical score for Bass Clarinet in B \flat is written in 2/4 time. It consists of two staves. The first staff starts with a dynamic marking of *f* and ends with *mp*. The second staff starts with a dynamic marking of *f*. The music features a series of eighth and sixteenth notes, with some rests and accidentals.

These initial, seemingly slight concepts give rise to fiercely disparate music, not simply juxtaposed, but offering a deep and intense antipathy. This was certainly not the intent: I found the material initially unprepossessing, and the characters just requiring space to develop and function. Essentially, as we approach the final section of the composition, multiple processes are refining materials, materials that as time goes on, grow to be ever more antagonistic. The main component in this parade of individual indeed eccentric characters is an increasing divergence becoming apparent in the music, which its strongly deviating rhythmic character emphasizes. It is not that sections of music are short – in particular toward the end – more that the character of each is distinct and delineated clearly.

I did not independently conceive of sections in a piecemeal fragmentary manner – as I had done with some of my earlier music – where much of the material might be pre-conceived and only later integrated into the score. Neither is there a through-composed agenda, except in some of the shorter sections, or a marked indulgence in planning and the repetition of ideas. Developing material however became very time consuming, as there were several different compound inversions and developments of the harmonic material (chord 1 becoming chords 1.1 and 1.2). One will note that using the pitches present and simply rotating their position does not fully articulate re-creations of chord 1. I added pitches, or even just changed them, in order to ‘re-colour’ the material (see Example 37).

Example 37

Definition, or perhaps even ‘animation’ of the opening uses an extensive range of the available instrumental sounds. *Leggiero* repeating single tones in the piano produce a predefined rhythmic process of shortening and lengthening, and this is put together with *tremolando* strings, plus a subtly relating counterpoint between the piano and vibraphone. I did work at gesture in the harmonic material, particularly at bar 3, but the first section is essentially an exploration of the sound made available by chord 1.

At rehearsal mark B a homophonic theme enters in the woodwind and strings. Based around chord 3 it has a short, yet characteristic rhythmic character: a quaver plus two semi-quavers, derived from the material three bars after A, with the same material being further explored at C, D and E. I explore rhythmic patterns freely at C, and here I remembered moments in Janáček’s *String Quartet No.2*, where a rhythmically obsessive cell intensifies and energizes the material around it (see Example 38). In *Stato di Cambiamento* this section (from rehearsal marks C to E,) is ‘through-composed’, yet the insistence of the small rhythmic cell defines the music absolutely. Crucial to the score as a whole is a seeming contagion imparted to the music, where rhythmic character, and in particular the vertical ordering (which I initially considered to be quite tranquil and colourful) is augmented, associating with an almost ‘arbitrary’ rhythmic development.

As an example, a ‘new’ rhythmic character appears at rehearsal mark E, born out of reconfigured harmonic material that begins as parts of chords 1 and 2. The choice and transposition of these notes is made primarily to allow double-stopping on all three, string instruments.

Example 38

The image displays a musical score for Example 38, consisting of two pages of music. The left page (numbered 46) contains measures 127 through 205. It features a string quartet with a tremolo effect in the upper strings and a 'feroce' marking in the lower strings. Rehearsal marks 127, 148, and 205 are indicated. The right page (numbered 47) contains measures 199 through 280. It includes markings for 'pizz.' (pizzicato), 'Andante', and 'Molto mosso'. Rehearsal marks 199, 270, and 280 are indicated. The score is written for four string instruments (Violin I, Violin II, Viola, and Cello/Double Bass) and includes various dynamic markings such as *ff*, *sf*, *pp*, and *mf*.

The idea is for the intense rhythmic string sound to run under a revision of the ‘melodic’ material from B. However, the new material is rhythmically and harmonically too persuasive for the music around it, irrevocably changing the music’s melodic shape. In reality, the character of this small seemingly routine gesture, derived from material four bars after A (see Example 39) is encouraged to produce something rather different (see Example 40).

Example 39

A

13 **Poco meno** $\text{♩} = 84$ **molto accel.**

Picc.

B. Cl.

Vib. *senza ped.*
pp

Pno. *mp* *mp* *mf* *f* *p*

Vln. **Poco meno** $\text{♩} = 84$ **molto accel.**
sul pont. *arco* *sf* *molto dim.* *sf* *molto dim.* *arco sul pont.* *pizz.* *mf* *arco (nat. non trem)* *sf* *molto dim.*

Vla. *mf* *arco* *sf* *mp*

Vc. *pp* *ppp*

Example 40

E

59 $\text{♩} = 76$

Flute

Picc.

B. Cl.

Vib.

Pno. *f*

Vln. *arco* *ff*

Vla. *arco* *ff*

Vc. *arco* *ff*

Following rehearsal mark F I try again, as I had often done with earlier scores in this portfolio, to pull disparate material together, firstly with a repeat of the quaver-two-semiquaver material from C, though now in the violin, based loosely around chord 2 (+1). The music here is linked to another figure in the vibraphone and piano, which develops like the material six bars after A, from a very inconspicuous start to complete the movement.

G is a coda figure and at three after G, we find a return to the music of three bars before B, (see Example 41).

Example 41

9

Fuoco - con forza

78 **G**

A. Fl. *f* *To Picc.*

B. Cl. *f* *pp*

Vib. *fff*

Pno. *fff* *p*

Vln. *fff* *pizz.* *arco sul pont. Spiccato* *mp*

Vla. *f* *pizz.* *arco sul pont. Spiccato* *mp* *mp*

Vc. *f* *pizz.* *arco sul pont. Spiccato* *mp*

The insistent repeating quavers three bars after rehearsal mark J obviously come directly from bar 3. At the same time however, this is another, more gentle rendering of the string chords at E. My reliance on a rhythmic characterisation as the music reaches its end, is defined as much by the written-out rhythmic *rallentando* of repeated pitches, as by any pre-defined harmonic material, or a focused unfolding of musical 'logic'.

The disturbance engendered by the harmonic material (as displayed following rehearsal mark I, where chords are derived and orchestrated from the pitches of chord one) clearly describes the root of my predicament: opposing rhythmic ideas placed side-by-side are extremely colourful, i.e. a very hard single rendition of a chord placed directly alongside the gentle expansive flowing 'other'. Rhythmic effectiveness seems to become ever more imperative as the harmonic element becomes not a fixed immobile given, but a more freely engineered variable, used simply to support the compositional process.

6. Triptych

Composition title	<i>Triptych</i>
Scoring	<i>flute, clarinet in B-flat (doubling clarinet in A), violin & violoncello</i>
Duration	05:20
Date of Completion	February 2012
Première	2 nd March 2012

The excitement and concerns expressed about *Stato di Cambiamento* remained as work began on *Triptych*. I had already written a *Triptych* for three instruments in one movement, where the material and instrumentation though not the form of the work, define its tripartite structure. Here was the production of three distinctive musical movements, which through the simple characteristics of their material might stand together. I was concerned that the elements used in each movement, particularly in rhythmical terms, be far more severely limited than had been the case in *Stato di Cambiamento*.

As in *Fountains* I considered it necessary to gain the trust of the musicians I was to work with, i.e. that they might clearly see and understand the ethos of my music. Following a recently attended performance of Stravinsky's *Histoire du Soldat* I used the same intense, rough sound world for the Violin in *Diffusione*, the first movement of *Triptych* (see Examples 42 & 43).

Example 42

PETITS AIRS AU BORD DU RUISSEAU
Airs by a Stream Kleine Stücke am Bachufer

Le soldat se met à jouer
The Soldier begins to play
Der Soldat beginnt zu spielen

♩ = 100

VI. *pizz.* *mf* *p* *spiccato* *mf*

C.B. *mf* *p* [sempre]

VI. *p* *spiccato* *poco sf* *ten.* *ten.* *V*

C.B. *p* *poco sf* *ten.* *ten.* *V*

Example 43

1. DIFFUSIONE

Musical score for Example 43, titled "1. DIFFUSIONE". The score is in 2/4 time and marked "Moderato" with a tempo of 112. It features four staves: Flute, Clarinet in A, Violin, and Violoncello. The Flute and Clarinet parts enter with a motif marked "mp". The Violin part starts with a piano "p" dynamic and includes a note marked "nat.". The Violoncello part enters with a "mp" dynamic. A note in the Violin part is marked "f pizz.". A dynamic change from "mf" to "f" is indicated in the Violin part. A text annotation states: "*This opening motif is to be played in the manner of the violin in Stravinsky's Histoire Du Soldat *spiccato".

The second movement entitled *Memoria* would scrutinize memory using sustained harmonics, something I had explored only summarily in earlier music. Putting these string effects together with empathetic clarinet and flute material enables a subtle and serene nature to suffuse the music. In the third movement entitled *Riflessione* I envisaged a hard clarinet sound, being employed to help bring rhythmic reflection resolutely into relief.

Diffusione commences with a direct rhythmic quote from the opening of the first scene of *Histoire* entitled 'Petits Airs au Bord du Ruisseau', or 'Airs by a stream'. In *Diffusione* the first pitches for the violin, drawn from later moments in the Stravinsky score use exactly this same figuration. After six opening bars a prolongation occurs, this not drawn from Stravinsky's score but carrying the mood through to a slower section, where similar music to *Histoire du Soldat* again occurs here using a different tempo, i.e. a canon between violoncello and clarinet (with full note values in violoncello and shortened values in clarinet). The use of canon allowed me not to detract from the coarse character of the violin, but instead to enable a process that might offer gentle forward momentum to the music. I employed two consecutive sections, letters A & B, which once repeated generally retain their rhythmic and pitch characters. I considered Bach's *Chorale Preludes*, where often, supplementary parts are formed as distinct from the slow chorale voice(s) in order to present a strongly rhythmic element, offering contrast and colour. In

my case, it's more the other way around, i.e. with the slow canon element essentially defining the musical character.

I extended sections of the music and was taken back to the revised 1947 version of *Symphonies of Wind Instruments*, also *Symphony of Psalms* in the revision of 1948. In both pieces Stravinsky uses counterpoint to break up and offer relief from the forward thrust of the music. Nothing radically different was necessary; here I just wanted a sense of continuity. At rehearsal mark C the canon moves from a short-note version in the flute to the clarinet, and at F it is played extremely quietly *quasi niente* in a *legato* form, whilst the violoncello answers with a 'short-note' *pizzicato* version. I finally allow the violin to break up the music and ebb away.

The slower movement *Memoria*, was expected to balance the fast outer movements and here I worked with two very simple ideas. The body of the music was conceived quickly, i.e. both in terms of its material, and perhaps more importantly, its simple structural paradigms. Firstly, I wanted the effect of sustained string harmonics to define this movement against the very quiet pitches given by the clarinet and flute. The given wind pitches would interact with the harmonics and coalesce, to produce an intense, still sound world. Secondly, in the very simplest way the music explores memory. Here I did not extend the conceptual element, both in terms of developing 'non-accurate' repetition, or in any radical consideration of what *Memoria* might mean musically. What repetition in music 'is' would be explored in *Divergenza* far more intensely over a more extended period.

The intention is to draw music from the instrumentalists' sound, and not from the somewhat limited notational material. The notation, as Feldman says⁴⁹ is almost 'role playing' in defining what is to be heard; this music demands the musicians' aural skills: that their musicianship be bought to the fore as the music proceeds.⁵⁰

⁴⁹ Morton Feldman, *Give My Regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.145.

⁵⁰ See p.19.

The music begins with an idea in two sections, the second being essentially a development of the first, (see Example 44).

Example 44

2. MEMORIA

63 **H** Lento ♩ = 56

Flute

Clarinet in A

Violin

Violoncello

con sord.

pp

niente < pp

pp

p > pp

sul G

sul G

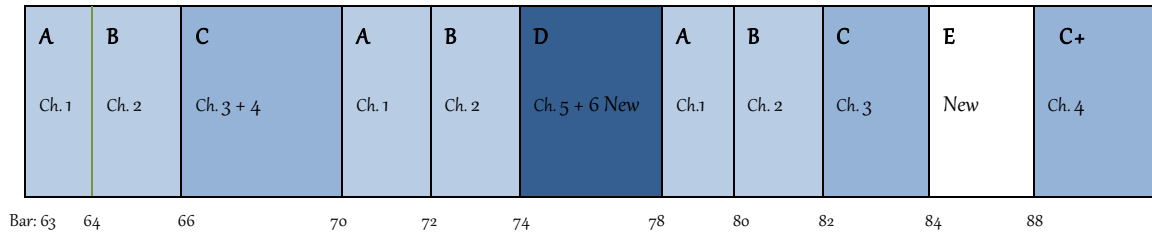
pp

This initial two-section idea repeats three times with its first section changing in time or pitch, at each appearance. I considered the quite subtle rhythmic and pitch inflections should be tangible in performance, but I also deemed this material to be coloured by the other different music that comes between. The complex harmonic language is not similar in its effect to that in *Echoes of Poems & Prose*, since in *Memoria* the chords are much higher pitched and therefore not so clearly defined harmonically. In terms of the sequencing of pitch material the music remains simple: the piece being about the variation in sound made by the instruments – by the musicians’ response to that – this alone (for me) becoming the process.

There is no less consideration here of a weighty pre-applied form (see Example 45), which remains as it had been for much of the earlier music in this portfolio.

Example 45

2. Memoria



Whilst emphasising the idea of repetition I also considered contrast, particularly the new material at rehearsal mark E (coming as it does between the repeating material based on chords 3 and 4 and dividing C into two) as crucial to the ending of the music. There are questions: firstly, are the characteristics of the sounds, the making of which are what the piece is fundamentally about, interesting enough in themselves? Then secondly, does the music perhaps suffer in that its notation, form and materials, are not inspiring enough, for the performers to offer something back to the listener?

Riflessione, the final movement is, as its title suggests, concerned with reflection. It is the exploration of rhythmic reflection here however that is important, and not a strictly imposed use of inversion or retrograde. There is a looser methodology, with the rhythms imagined and notated as partial reflections or refractions.

The pitch reservoir in the outer sections is very limited, just three fundamental chords, with chord 2 being subdivided into 2a and 2b, (see Example 46).

Example 46

The image shows a musical score for three chords. Chord 1 is a single note G4 in the treble clef. Chord 2a consists of G4 and B4 in the treble clef, and G3 and B3 in the bass clef. Chord 2b consists of G4 and B4 in the treble clef, and G#3 and B3 in the bass clef. Chord 3 consists of G4, B4, and D5 in the treble clef, and G#3, B3, and D4 in the bass clef. The chords are labeled 1, 2a, 2b, and 3 in boxes above the staff.

The next examples, 47 & 48 demonstrate how rhythmic ideas in just over the first 13 bars are wound around metrical pivot points, the length of the pivot not being critical. In Example 48 there is reflection, with almost no rhythmic variation. However, and more importantly, no two chords sound the same.

Example 47: sequences a) and b), consecutive in the score

a)

Flute

b)

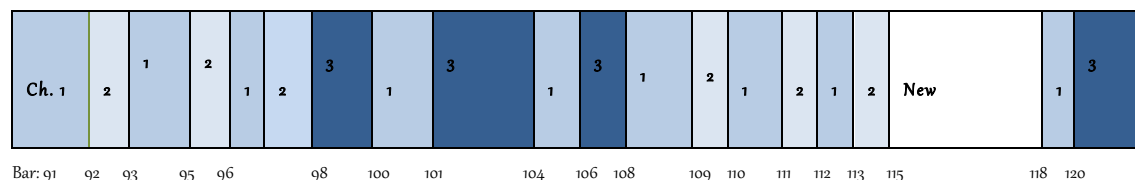
Example 48

Rhythm is allowed to generate horizontal movement; I do not agonize about the nature of the chords or their harmonic logic. Pitches are selected for their potential to counterpoint instrumental timbres, not from the context of any form of functional harmonic thinking. Indeed, I use this facility to add occasional pitches to chords as I had in *Stato di Cambiamento*, to suggest a subtle change of focus whilst retaining much of the original chord's colour.

In the third movement rhythms overwhelm the vertical aspects of earlier music; here rhythm takes priority and essentially engenders a new alliance. The sequence of rhythmic ideas is as follows (see Example 49):

Example 49

3. Riflessione: The 1st A section



The form of this movement is ABA: with B seeming the complete rhythmic opposite of A. The imposition of new material at 115 is noted, but in fundamental terms the repetition of similar pitches in differing orders (which happens at L) is similar to Example 48, and it proves a cogent link between A & B. The rhythmic invariability together with the bowing of the strings give the passage a degree of colour; colour that may be defined and elevated as in *Memoria*, by the performers' listening skills.

The final A-section uses material similar to that found at the beginning of the movement. Two bars after rehearsal mark M however, the initial gesture at bar 91 in flute and clarinet chord 1 just like the previous B-section, allow pitches to exchange freely. The length either side of the short pivot chord 2 at bar 144 being extended, and combined with a new initially *pizzicato* melody on the violoncello. At bar 153 a further pivot idea based on chord 2 emerges, which in the final moments is juxtaposed with chord 3. The clarinet that helps give the movement its *Allegro sempre molto forte, un suono duro* character becomes ever more agile, finally completing the movement with a perfunctory solo gesture, this for the most part developing further the original instrumentation, along with its rhythmic character.

CONCLUSION

Tryptich essentially consists of three distinctive musical miniatures, which even with their distinctive characteristics and detail might stand together. From *Diffusione*, where counterpoint along with aspects of the mimetic is applied, through *Memoria*, where the intention is to draw live sound from a severely limiting notational basis, to *Riflessione* where rhythm is explored (particularly that being associated with the non-

retrogradable rhythms of Olivier Messiaen). I would argue that these miniatures support each other musically, and that issues of 'process' or 'control' of the material, made central to this music's construction (particularly in *Memoria*), do not excessively disturb the music as it 'sounds'. When compared with some of the earlier scores and in particular with *Ubi Caritas*, I believe a balance of sorts is achieved.⁵¹

⁵¹ Morton Feldman, *Give My Regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.65.

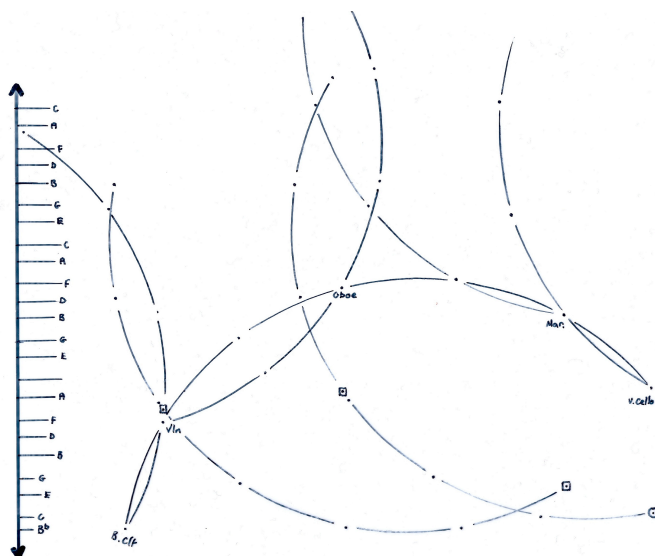
7. Divergenza

Composition title	<i>Divergenza</i>
Scoring	2.2picc.2(II=ca).2.bcl.2.dbsn-4.3.3.1-timp-perc(2)-cel-2hrp -str(12.12.10.8.8)
Duration	32:44
Date of Completion	December 2013
Première	t.b.a.

In March 2013, whilst composing *Divergenza*, I completed a short chamber piece *Sette archi spezzati* for Durham University's *Ensemble 7Bridges*, its title reflecting the ensembles name. Because of circumstance the music was composed quickly - indeed I consider it to be severely compromised because of this. I nonetheless discuss it here, because of its importance to the subsequent discussion of *Divergenza*.

With *Sette archi spezzati* I attempted to define a physically tangible aspect of 'space' by using an applied form of graphic notation to define pitch, this then becoming the basis for the music's harmony.⁵² The primary curve used is the position of the musicians in the performance space (see Example 50).

Example 50



⁵² Included as *Other musical examples*, see page 3.

I was captivated by this way of working but became aware of constraints in any ‘graphic’ conception of harmony, even the kind of harmony that Stravinsky discusses in *Perspectives of an Octogenarian*. ‘Harmonic novelty is at an end’, he states. ‘Its history shows that chords gradually abandoned their direct function of harmonic guidance and began [sic] to seduce with their individual charms’.⁵³ Pitch – and thereby harmony – in *Sette archi spezzati* is devoid of all classical harmonic precedents and a consideration of harmonic practice in those terms, helped further define my exploration of chords and their structural use.

In *Divergenza* – as with *Sette archi spezzati* – I chose to work with a given objectivity: here the Fibonacci series. My use of the series was in large part determined by wanting specific materials to co-exist – in various ways and at different structural levels – much as happens in a Bach Fugue, where using logically connecting thematic strata, material is continually combined in new and often arresting ways.

Professor Max Paddison suggests that:

The problem facing Bach, according to Adorno, was how, in terms of *basso continuo* harmony, music could justify the harmonic progressions as meaningful and at the same time organize itself polyphonically, through the simultaneity of independent voices . . . The harmonic scheme necessitates the extreme rationalization of the thematic material, to enable the fugue subject (or subjects) to remain identical and identifiable even though being subjected to a process of constant ‘tonal’ and motivic variation.⁵⁴

The above proposes that if one is to achieve a strong simultaneously vertical and horizontal (polyphonic) musical relationship between voices, then some manner of process or at least rationale is required. Here the Fibonacci series was applied initially in traditional terms – i.e. as described by Ernő Lendvai – to describe sectional material and emphasise formal balance.⁵⁵ However, I proceeded then to layer the Fibonacci elements producing a greater diversity (and density), which in the event gave nine layers of accurate time relationships.

⁵³ Igor Stravinsky & Robert Craft, *Memories and Commentaries: New one-volume ed.* (London: Faber & Faber, 2002), p.268.

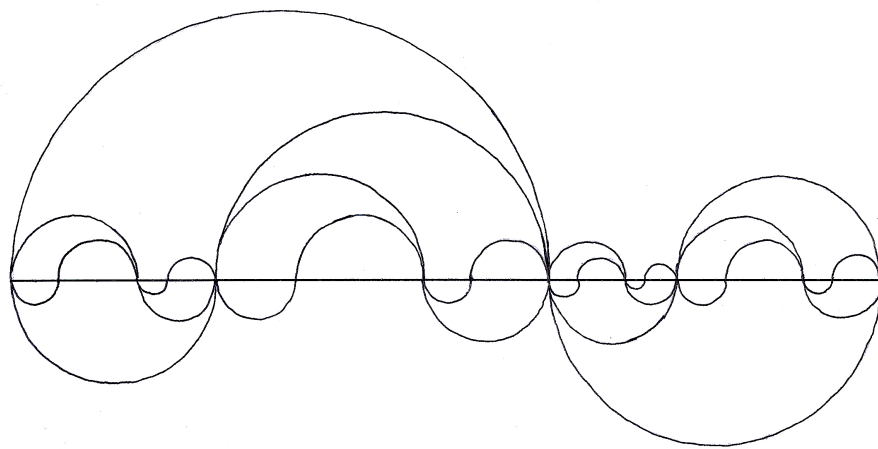
⁵⁴ Max Paddison, *Adorno’s Aesthetics of Music* (Cambridge, New York & Melbourne: Cambridge University Press, 1993), p.228.

⁵⁵ Ernő Lendvai, *Béla Bartok: An analysis of his music* (London: Kahn & Averill, 1971).

GRAPHIC DESIGN

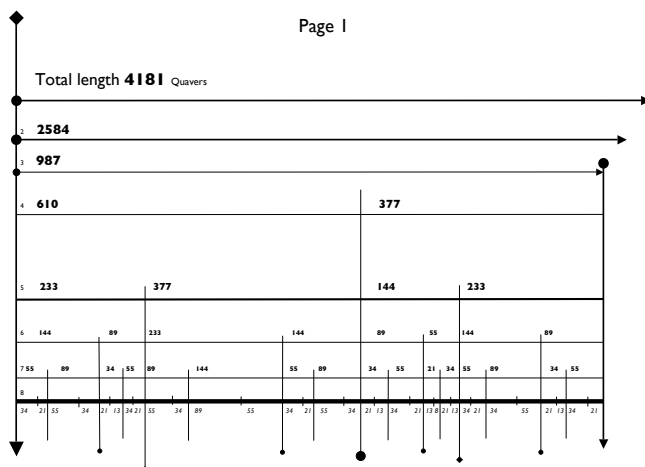
In a similar way to fugue Fibonacci numbers repeat themselves with each further subdivision, and may therefore be thought of as stratified: that is formed into multiple layers. Considering these numbers graphically suggested curves turning about a median line, these resulting in shapes offering both positive and negative numerical patterns, (see Example 51).

Example 51



The drawing of Example 51, although offering clear and persuasive shapes, was limited in its precision because of the scale and accuracy of my drawing. The material was therefore laid out in another way, (see Example 52).

Example 52



Drawing accurately became materially difficult due to the extremes of scale: indeed to gain real accuracy the largest single element (2584) would require to be drawn on almost three metres of millimetre graph paper. The association of number in this score with the value of a quaver is absolute; this fundamental value not being readily split – except for semiquavers, demisemiquavers, and triplet quavers etc. I could have considered a system defined by ratios, but decided that this would make notation, planning and performance – including preparation for performance – overly complex; I wanted directness, simplicity, and most importantly, accuracy. This approach does offer a wealth of formal and small-scaled (phrase) structures however, it offers a profusion of points within the material and the possibility certainly in localised areas for fundamental change.

INFLUENCE OF JOHN CAGE

A pre-planned structure, using numerical values converting to time values and particularly a structure that is graphically defined, suggested a further exploration of John Cage's music. I considered the notational practice inferred in the *Freeman Etudes* (1977) and in *First Construction (in Metal)* (1939), together with *Imaginary landscape No 1*, (1935).⁵⁶ I had already explored Cage's *String Quartet in Four Parts* (1949-50) in working toward *Echoes of Poems & Prose* (2010), and there found persuasive associations between his 'gamut' technique and my use of harmonic 'aggregates', particularly aggregated pitch material tied to letters in the text of *Poem (2)*. Cage describes this type of music as 'a single line in musical space' or 'a single line without accompaniment', and the rhythmic structure appears here to be less 'mechanically' fixed than it had been in his earlier *First Construction (in Metal)*.

Cage traced his views concerning rhythmic structure to Satie and Webern. He also recognized that composers in the middle ages worked with rhythmic structure and that certain non-western music's had similar attributes. As we have seen, Cage's contemporaries had contributed to the development of rhythmic structure. We should also note that Cage's interest in this area was further influenced by his work with modern dancers, for whom he often composed music for previously completed works whose form was determined by numbers of counts. In a manner strikingly similar to Seeger's "verse form," he devised an approach to rhythmic structure that entailed a close coordination between large and small-scale structural units: the same proportion determines

⁵⁶ Mieko Kanno, *metaCage - Cage's Freeman Etudes: Sounding Out* (Leuven, Belgium: Leuven University Press, 2010).

both the phrase structure of sections (microstructure) and the grouping of these sections into larger units (macrostructure).⁵⁷

Viewed in Cage's terms, *Divergenza* would use small-scale and large-scale structural elements to determine both the phrase structure of sections (microstructures), and the grouping of these sections into larger units (macrostructures).

I also gave consideration to Cage's interest in the 'I Ching'. Marc G. Jensen states that: 'In all his work with chance, Cage sought to balance the rational with the irrational by allowing random events to function within the context of a controlled system'. Jensen continues: 'The amount and type of composerly control varied from piece to piece, but these fundamental ideas of control and randomness remain constant throughout Cage's indeterminate and chance derived output'.⁵⁸

The thought of taking *Divergenza* to a free notational condition – simply allowing sounds to engage with empty space – suggested an open, even perhaps a vulnerable manner, particularly as far as the music's rhythmic manifestation was concerned. There remained other elements of concern, not only in drawing graphically with an accuracy to scale, but also as already discussed issues of extreme rationality on one side, moving to a diverse irrationality on the other.⁵⁹ As I looked at aspects of indeterminacy I considered it better – scoring for a large symphony orchestra – to work in notational terms within the confines of classical precedent and thereby to limit the range of potential possibilities for miscalculation or misinterpretation.

OVERALL STRUCTURE: PRINCIPLES OF YIN & YANG

I

In foreground structures, the smaller numbers i.e. quaver time values, were grouped together as bar lengths, with the first beat of the bar defining where a chord would appear. By adding rhythm and orchestration to the chord I established character.

⁵⁷ David Nicholls ed., *Cambridge companion to John Cage* (Cambridge, New York, Melbourne: Cambridge University Press, 2002), p.70.

⁵⁸ Marc G. Jensen, *Musical Times* 'John Cage, chance operations, and the chaos game: Cage and the I ching' (London: Peter Phillips, Summer 2009), vol.150 no.1907, pp.97-102.

⁵⁹ *ibid.*

II

There are larger sections (as described above) also with given locations or fixed points, containing chords that are often the same as those found in other, different middle-ground structures. These chords may retain orchestration and indeed even complete musical shapes given elsewhere, in other sections. In Example 53 (in red) it will be noticed that the opening bar of each level seven section, (as an example see the first 55 section – Example 58) offers all the chords designated by the music's structure at higher levels.

III

At the largest scale, there was a wish to give two overall characters to the music, defined at an early stage just as *Yin & Yang*. These sections were, at the completion of the compositional process modified in the initial largest *Yin* scale by cutting silences, and then in the subsequent *Yang* section by extending notes. The editing process particularly emphasized rhythmic differences between the repeating level seven sections, (changes being made only to the rhythms).

COMMENCING THE SCORE

I began to draw out the time values graphically but as already stated, found the scale I might physically drawn down to limited, so I moved to a strictly numerical form. The first five sections of this scheme are shown in Example 53. In order to define the polarity of these section numbers correctly I used Microsoft 'Excel' software to define length, polarity and amplitude of all the material used.⁶⁰ The graphical representation did clarify the polarity clearly, but once observed I extrapolated down to the further values needed using 'Excel', (see Example 54).

⁶⁰ Microsoft Corporation: Excel software.

The level, or point in this scale at which I had pursued the majority of initial compositional work was level seven (see Example 53 in red). Here the quaver value was set so that the shortest sequence would be a practicable 13 quavers, and the longest 233.

A tempo of ♩ = 63 was set as *de rigour* across the entire compositional space, and as I have already stated the quaver became the value used to describe units, lengths and ratios.⁶¹ During the entire process of construction these two parameters remained unchanged but subsequently, modifications to the tempi, *ritenuti* etc. were applied; once scale, materials and even notation of the score were for the most part clear. These modifications change the scale and structure of the music, but I considered the sense of existing material could indeed ought, to be re-assessed from the large-scale perspective, even though this would distribute a degree of disturbance to the previously conceived structure.

HARMONY

For the vertical element, using the piano to explore material I considered its range. Adding one more pitch to the 88-note keyboard gives the Fibonacci number 89. To define the chords, a sequence of pitches was derived from the Fibonacci sequence, from the bottom of the keyboard to the top (positive values). These values were then reversed from the top to the bottom of the keyboard, giving negative values, the chords subsequently being numbered. These 'found' chords were not considered in terms of instrumental range, but, once formal composition began, I decided spontaneously on the inclusion or exclusion of pitches within each chord. The following example shows the chords for the first section in both positive and negative versions, (see Examples 55 & 56). For the second section (*Yang*), I inverted the chords by interval and produced a further double set.

⁶¹ See p. 71.

Examples 55 & 56

Fibonacci Chords. Left to right bottom G₁ to top C (Positive values). - All notes shown

$\text{♩} = 60$ John Goodenough

Chord progression (Positive values):

- +1 Original
- +2 C
- +3 E
- +5 B
- +8 E
- +13 G
- +21 A
- +34 D
- +55 F
- +89 C
- +144 F
- +233 G
- +377 E
- +610 A
- +987 B
- +1697 G
- +2584 C

Fibonacci Chords. Right to left: Top C to bottom G₁ (Negative values). - All notes shown

$\text{♩} = 60$ John Goodenough

Chord progression (Negative values):

- 2584 Original
- 1597 C
- 987 A
- 610 B
- 377 E
- 233 C
- 144 C
- 89 F
- 55 D
- 34 F
- 21 B
- 13 C
- 8 E
- 5 A
- 3 E
- 2 G
- 1 C

BLOCKS OF MATERIAL

With the level-seven blocks having quaver values, a 144-quaver beat block would obviously last 55 units longer than an 89-quaver beat block. The material in the blocks took time to build up: the same chords often reappearing in other different blocks and implying the production of related material. But then weaknesses of musical logic or pattern emerged, certainly when similar blocks were placed in other, different contexts. With multiple repetitions, any weaknesses became overly conspicuous and required additional work. Whilst changes were made to some already 'completed' blocks, issues often only fully surfaced in the final orchestration phase.

The first eight level-seven sections use in total, only six different blocks (55, 89, 34, 144, 21 & 233), but each repetition may start with a chord from a higher level. This suggested that openings might be particularly different in character (see Example 58 where there are ten harmonic options in the opening bar). As the music grew in scale, maintaining a relationship between change in the moment and the logic of an overall form became of increasing concern.

LARGER BLOCKS OF CHORDS

Over the course of the entire score there are the use of six 144-quaver beat blocks at level seven; the largest single block in the music comprising 233-quaver beats. With these larger blocks I attempted to echo Morton Feldman's imposing description of Edgard Varèse's music: 'His musical shapes respond to each other, rather than "relating" in any sense that the word is used today. This is what gives his music an almost stationary grandeur, like a sun standing still at the command of a latter-day Joshua'.⁶² The response to shapes, discussed by Feldman suggests Varèse worked without applying 'logical' processes to create links. 'Relating' is something I consider to be not quite the same.

As Malcolm Macdonald says in *Varèse: Astronomer in Sound*:

The paradox of Varèse's oeuvre is not only that he seems to create a whole new universe of sound with such a small number of works, but that those works deploy a really quite limited number of elements, revolutionary though those are in effect. To him this was not a paradox at all. Describing his music in terms

⁶² Morton Feldman, *Give My Regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.66.

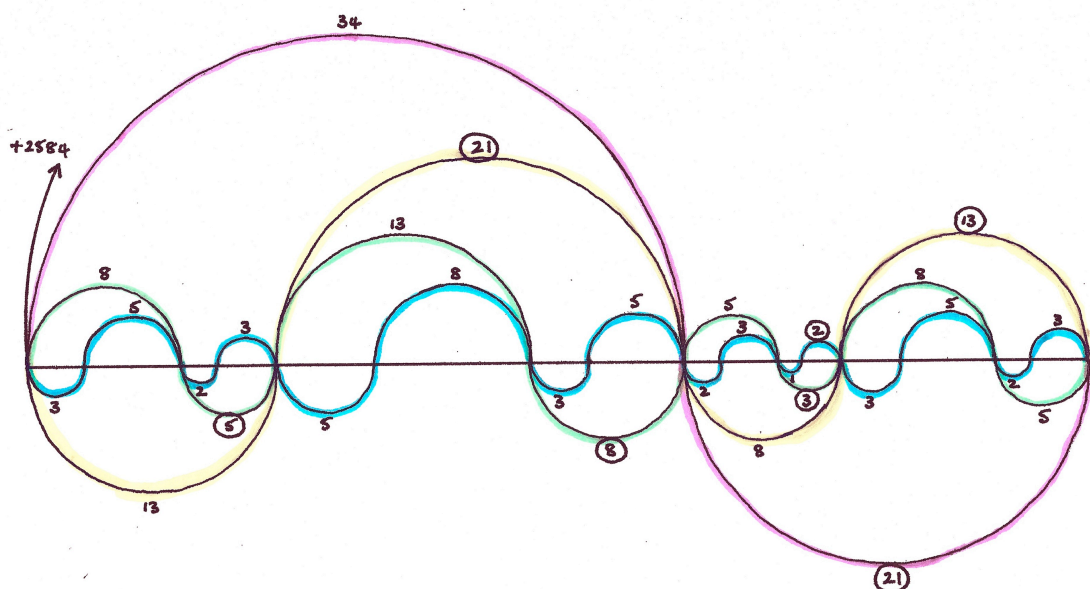
of what became his favourite analogy - that of crystallization - he was content to note that in spite of the relatively limited variety of musical structures, the external forms of crystals are almost limitless.⁶³

In *Divergenza* short characteristic rhythms are sometimes repeated, focusing change at points where one chord shifts to its neighbour and with any significant alterations in rhythm, being aligned to these changes of chord. The predominantly rhythmic blocks might be coloured by solo instruments or additional orchestration, but amongst the patterns of orchestral colour, juxtapositions and melodic pitch shapes there are elements deployed repeatedly.

SMALLER BLOCKS OF CHORDS

I explored the larger numbered blocks (144, 233) in a broad yet related way, but in the case of the smaller blocks I found there to be too many chords within a confined space. Rules had to be devised that might simplify by reduction the number of chords used, and this 'rule' based limitation technique was then applied throughout the score (see Example 57).

Example 57



⁶³ Malcolm Macdonald, *Varèse: Astronomer in Sound* (London: Kahn & Averill, 2006), p.138.

RULES

Looking at the first block - that is **1.55.1**

I

I created a rule stating: where there are multiple curves crossing the median line, the largest number presented by all the curves just prior to the intersection would define the chord to use; all other numbers at the same point would be omitted. In addition, single crossing points would be ignored.

II

I created a further rule, stating: the same number would not repeat at any specific level. In Example 57, which is the initial block 55, I display these levels using different colours, and show the numbers available as circled.

As already mentioned, at the beginning of each template or matrix, I offer the full list of available chords. This offers a choice, between numbers of chords from higher levels, with those impinging directly on the music at level seven (see Examples 53 & 58).⁶⁴

Example 58: *the matrix or template*

1.55.1

⁶⁴ See p.77.

TECHNICAL CONTEXT

Many years ago, I could produce score after score conceived in so called 'Moment-form'. That is one sound, considered and constructed, followed by another: the effectiveness of the current moment simply derived from what had just sounded before. In essence, the sequence of material becoming the basis for the moment that followed. I also became aware of parallels with Stockhausen's approach to 'Moment-form' as mentioned earlier.⁶⁵

Morton Feldman describes this:

Beethoven in such works as the Hammerklavier (Op 106 in B flat major) illustrates this perfectly. All the mosaics, all the patch quilt juxtaposition of ideas happen at the 'right time'. One feels one is being continually saved. But from what? Boredom perhaps. My guess is that he is saving both himself and ourselves from anxiety.⁶⁶

From the earliest music in this portfolio, and indeed previously, I had been concerned to save the listener from the 'boredom' hinted at by Feldman. But with composition of music happening in the 'moment', I found myself struggling all the more for definition of joins and borders, even seams (in relation to form) rather than being able to place the 'moment' itself as central and then working, out and away from this. Earlier I drew attention to Janáček and his consideration of 'spletna' (twine), as an attempt or endeavour to describe how sounds are joined, to interpret the links between sounds, even to place sounds in time. To 'mark out' using time would seem ineffectual here, certainly time employed as a method of defining, even imposing boundaries on music.⁶⁷ As Morton Feldman says: 'I am interested in how time exists before we put our paws on it – our minds, our imaginations into it'.⁶⁸ A truly reciprocal relationship would aid the placement of music in time, thereby proposing a less oppressive method for offering one to the other (music to time).

Divergenza is 'non-narrative', not in the way this term may be used relating to words and dialogue, as a factual exploration of an event without narrative characterisation, but more the way in which the term is associated with film. In film, because the temporal or

⁶⁵ See p. 12.

⁶⁶ Morton Feldman, *Give My Regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.87.

⁶⁷ See discussion pp.25-28.

⁶⁸ Morton Feldman, (2000), p.87.

sequential relationships between images may not be fully perceived immediately, but with the viewers' attention to the images over time, something important and specific is being communicated. It is the articulation of this aspect in terms of tone and sense, which places film in proximity to the way the music proceeds in *Divergenza*. The narrative function is also curious since an explanation of material only by the narrative purpose it serves, at whatever level over time i.e. using a teleological structure, cannot fully define music. Here intuitive change or input is exercised in the smallest areas but is also freely active over the larger 'surface'.

I did not want an emphasis on the music's material *per se*, to any given strategy or formal plan, the Fibonacci sequence etc. Nevertheless, I do give importance to the relationships presented by this sequence. The Fibonacci series – and it could be almost anything allowing such strategic thought – is a vehicle, which allows creative alliances to literally form the music. My technique here was to just allow this to happen. As Iain McGilchrist suggests: 'Music consists entirely of relations, "betweenness". The notes mean nothing in themselves: the tensions between the notes, and between the notes and the silence with which they live in reciprocal indebtedness, are everything'.⁶⁹ Although McGilchrist uses the term 'relations' I think he is expressing a view similar to that of Varèse. Here the tension between moments gains emphasis and as with Varèse becomes about the response to, or tensions between, sounds and certainly not about what might be termed 'predefined' relationships in the material itself.⁷⁰

Therefore, *Divergenza* derives from two seemingly antagonistic (contradictory) prototypes. Firstly, the last movement of *Echoes of Poetry & Prose* where I noted:

The third movement, *Poem (2)* is a distinctive new approach, yet also contains something considered and explored over many years, which is the idea of allowing something outside of the music to order and control it, thus allowing the composer liberty to concentrate on other musical elements without concern about the form the music might ultimately take.⁷¹

⁶⁹ Iain McGilchrist, *The Master and his Emissary* (New Haven & London: Yale University Press, 2009), p.72.

⁷⁰ See Morton Feldman's imposing description of Edgard Varèse's music, p.77.

⁷¹ See p.40.

Secondly, the development of gesture:

by retaining a single chord for longer than I would have been deemed 'appropriate' in earlier scores, implying that with the addition of time, a moment becomes in effect harmonic, and may produce gestural character that is shape and movement in terms of pitch, rhythm etc.⁷²

The intention here is not to stress the importance of one thing above another, but to acknowledge both dynamically, giving each the freedom of association.

Divergenza from its conception was at one level the sequencing of blocks of material, and there is indeed a distinguished tradition of composers using 'block forms'; as Professor Jonathan Cross terms them in *The Stravinsky Legacy*:

Stravinsky's account not only betrays the 'cut and paste' approach he took to the Symphonies (of Wind Instruments) (a reading supported both by Cone's analysis and by Stephen Walsh's study of the works genesis through the sketches), thus drawing attention to the parallels with Cubist art, but also implies a rough or "unfinished" quality.⁷³

Whilst *Divergenza* employs 'block forms' and uses clear repetition, the music also has temporal surface and yes, here there are links with painting though not, as Cross suggests in his discussion of Stravinsky, with the conceptual artifice of Cubist art.

MUSIC'S SURFACE

The application of surface elements in *Divergenza* is not a secondary act; these elements being as important and relevant to the act of composing as the base material with which they engage. In this respect Kit White in *101 Things to Learn in Art School*, talking about 'Facture'; it being the manner in which a painting, drawing or object is made, observes:

It is the combination of brushstrokes, marks, material, and the texture of the surface. Facture is critical to the success of any object. Much of the fascination that accrues to all manual media comes from what can be observed at close

⁷² See p.53.

⁷³ Jonathan Cross, *The Stravinsky Legacy* (Cambridge, New York, Melbourne: Cambridge University Press, 1998), p.20.

range. That distance reveals the foundation, the touch, the sensuality, and the understanding of the material that gives art objects their essential character.⁷⁴

Morton Feldman discusses surface at length; and in conversation with Brian O'Docherty, the latter explains: 'the composer's surface is an illusion into which he puts something real – sound. The painter's surface is something real from which he then creates an illusion'. He goes on: 'a music that has surface constructs with time. A music that does not have a surface submits to time and becomes a rhythmic progression'.⁷⁵

SURFACE AND SURFACE ELEMENTS

An interaction with its surface and surface elements is critical to the music of *Divergenza*. After completion of the basic score the material was adapted in the following ways:

I

The blocks change each time they repeat, with many of the changes based on pre-existing examples, earlier versions or 'moments' in the score that use the same (or similar) material.⁷⁶ As explained, the orchestration needed continual updating so that a section might appropriately fit with those around it. The technology of Sibelius enabled the auditioning of material in a semi-realistic context and in real time; that I might process the orchestration, colour and effect of the music in terms of those sections nearby.

In this regard I think of art, particularly that of Mondriaan or Rauschenberg where what seems defined very clearly at the moment of its conception is in reality cautiously arrived at. As Feldman says: 'There is nothing in music to compare with certain drawings of Mondrian, where we still see the contours and rhythms that have been erased, while another alternative has been drawn on top of them'. Feldman continues: 'Music's tragedy is that it *begins* with perfection'.⁷⁷

⁷⁴ Kit White (2011) *101 Things to Learn in Art School* Cambridge Massachusetts, London: The MIT Press. No. 48.

⁷⁵ Morton Feldman (2000) *Give My Regards to Eighth Street* Cambridge Massachusetts: Exact Change, p.85.

⁷⁶ See pp.77-78.

⁷⁷ Morton Feldman (2000), p.65.

The changes to the surface of *Divergenza* happen over time and to objects that, if merely compared in a fleeting manner appear to be the same. Because of time, differences can be 'drawn out' and treatments of instrumental colour, sound, or strict repetition become of more interest.

II

As discussed earlier an interest in John Cage had offered the concept of *Yin & Yang*.⁷⁸ *Yin*, the passive female principle associated with earth, dark and cold, together with its opposite *Yang* the active male principle associated with heaven, heat and light. I associated *Yin* with the largest 2584 section, which lasts 20 minutes and 45 seconds and *Yang* with the shorter 1597 section, which lasts 12 minutes and 58 seconds, these proportions being in accordance with the Fibonacci series. Whilst composing music for the two largest sections I did not actively consider this *Yin - Yang* classification, but I did expect the *Yang* section to have more directed energy. After listening to Berio's *Points on the Curve to Find...* with its seemingly continuous demisemiquaver figuration, a figuration that offers characteristically forward momentum, I decided to incorporate a similar idea in the *Yang* section of *Divergenza* but here using semiquavers.⁷⁹

Following an initial completion stage I occasionally repeated single whole bars of music, and particularly those bars that seemed memorable in the *Yang* section. With the *Yin* section I began by working in the same way, but found that the material being more rhythmically uneven yet characterful in terms of long and short patterns, needed the opposite approach: the extending of spaces between beats, even within bars, to suggest associations, or emphasize forward movement. These *Yin* and *Yang* methods both imparted modifications to the authentic Fibonacci configuration of sections on the small, medium and large scales, essentially creating varied repetition. However, in the final score these modifications obviously also communicated change to the fundamental logic of the Fibonacci sequence.

⁷⁸ See p.73.

⁷⁹ Luciano Berio, 'Points on the Curve to Find...' for piano and 22 instrumentalists. (Milano: Universal Edition 1974), ue 15908

III

The final factor of adaptation was to make changes to the tempo within the *Yin* section. The musical material had an innate yet limited range of available tempi so I defined where changes would be most advantageous, and how substantial those changes could be. I also reviewed sections, and if necessary changed the tempo marginally as a specific section was repeated. I began this process using related tempi in multiples of three or four but conceptually found working with 'returned-to' tempi to be a stronger binding influence on the music.⁸⁰

There are two extensive sections in the music where the composers pre-determined scheme might disperse, and tempi may be defined more freely.⁸¹ Here I gave freedom to the conductor with '*meno mosso*' and '*più mosso*' markings. These carefully positioned changes enable the acoustics of the venue and the musicians involved to have some (limited) control of events.

In *Divergenza* the concern was to engender a distinctive emphasis on musical material. In order to achieve this, the contention became; firstly, that the composer's memory should function precisely (elegantly), being able to fully negotiate levels or layers of musical material as composition proceeded, both horizontally and vertically. Secondly, that time itself be sensitively worked with, i.e. not simply described as a series of pre-defined points. This implied that subtle relationships be shaped, affecting the progress of the music through a far greater part of the creative process than I had formerly been able to achieve. Both the materials and processes used helped acquire and order relationships, relationships that changed over time; becoming primary, crucial or even simply redundant upon repetition. As the music proceeds, there is an awareness of repeating material. However, repetition being defined by process is certainly changed, is perhaps even illuminated by the material placed within.

⁸⁰ A returned-to tempo is a tempo that is used more than once in a section of the music; but specifically not one related (in any sense) to the main tempo of the movement.

⁸¹ In the score, three bars after G, and two bars after I.

Conclusion

In much of this thesis I have been concerned with the ‘Moment’; its influence on and engagement with time, the expressive material found there. Indeed, attempting to chart my encounter and its effect on the outcome, that is music as it is heard. The almost tactile quality of the moment and Feldman’s counterpoint to this, which is surface are very persuasive and absorbing, but in this portfolio I have become most aware of material’s difficult yet prescient relationship, with another element that influences and orders music’s progress over time, that is its process. I consider both the expressive material and a process to be unconditionally necessary.

In terms of the dichotomy between objective and subjective musical states, I reason that the ‘moment’ is fundamentally objective and live, essentially present, but not prescient. For the subjective, Seán Burke envisages that: ‘There can be no such thing as subjectivity whilst the subject or author – as has classically been the case – is conceived as prior to language which exists as an entirely transparent vehicle or medium for his uses, his designs’.⁸² What Burke describes here in objective terms as language, becomes beguilingly ‘resonant’ or subjective, upon its application to the composer’s, and subsequently a performer’s ‘lived’ time. In making this statement I do note the concomitant relationship of pitch to musical time: that pitch is obviously variable and based on the number of vibrations per second of the sounding body (Hz), this then amplified further perhaps by the ratios of harmony.

I discussed Arvo Pärt’s music in the first chapter, emphasising the all-encompassing ontology (ideology) of Pärt’s approach to his tintinnabuli method and thereby to harmony, even though in his music ‘harmonic sense’ is located to merely the outline of single pitches over time.⁸³ The vertical element thereby combined with time is heuristic (experimental), and becomes what I would term ‘theoretical’ harmony. I would argue that tintinnabuli music, although reliant on a harmonic impulse, actually works through the application of ‘process’ and that it is this, being a decisive form of control, which

⁸² Seán Burke. *The Death and Return of the Author* (Edinburgh: Edinburgh University Press, 1992), p.15.

⁸³ See pp.7-9.

enables a 'transcendental' musical logos to be found. But, as Morton Feldman says of process, 'if I have a resistance to process, it is because I *don't want to give up control*'.⁸⁴

One can explore the logic of this internally, that is within the chord where two seemingly contradictory elements relate. The sound itself, non-existent without time, gives a perceptive 'moment' to the listener. Upon the sound's extension into time hierarchies are made available and defined, offering the production and sequencing of further sounds, perhaps even chords. The initial sound is tangible, however everything that follows and interacts with time is different: being separate, disconnected, historical, and not even primarily essential, but certainly subjective. There are absolutes or structures required, which over time offer process to the music, these absolutes being defined as 'real' and objective. However, processes that apply logic to the work need to be broken into, distorted, perhaps given time and re-made (as subjective) by the composer, but then composer and listener cannot inevitably maintain the same concomitant understanding.

Conspicuous – and here developed from the earlier discussion of my *String Quartet* (in Chapter 2) – is the problem for a composer, of musical intention. In *Bayerische Akademie der schönen Künste* Werner Heisenberg states:

When, from the standpoint of modern science, one attempts to cast around for the now unsteady fundamentals, one has the impression that for the first time in the course of history the human confronts only himself: he finds no other partner or adversary.

And later:

The goal of research is thus no longer the knowledge of atoms and their movement 'in itself', i.e. distinct from our experimental enquiry; rather we are from the very start at the heart of the confrontation of nature and mankind, of which the natural sciences are only one part; thus the common division of the world into subject and object, internal and external world, body and soul, is no longer appropriate, and leads us into difficulties.⁸⁵

⁸⁴ Morton Feldman, *Give my regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), p.65.

⁸⁵ Werner Heisenberg, 'Das Naturbild der heutigen Physik', in *Bayerische Akademie der schönen Künste* 1956, p.41 & p.42 also: M. J. Grant, *Serial music, serial aesthetics* (Cambridge & New York: Cambridge University Press, 2001) p.22-27.

The field of Quantum mechanics, which Heisenberg discusses here, take musical aesthetics to a position where vital issues around authorial control are exposed, and I would also add here controversially, ideas currently being explored by Neuroscience including the relationship between subjective and objective experience; where one may discover just localized fields of sensory encounter, where one has to admit choice and chance.⁸⁶ However as has already been said, music surely requires an element of rational objective fact, perhaps a conceptual factor and here the composer has to seek a strategy of some sort, a 'process' or logic. The use of number in *String Quartet* was an attempt to concentrate the 'objective' material or fact, to discover how the creative impulse might function around this, and conspire with it.

In *Echoes of Poems & Prose* and subsequently in *Divergenza*, I do indeed stress the specific moment. Moment, not as objective, but more as motivated actually animated, so that on many levels changes over time enable the material to transfigure its plain physical fact, to become charged and emotive.

In the introduction I suggested I might 'point toward future concerns', 'to encounter and confront representations or accounts of music'.⁸⁷ Conclusively I will explore my ideas in a wider artistic context, and illustrate connections, indeed indicators that help suggest future potential for my creative work.

With reference to film Robert Bird meditates, in his book about the director Andrei Tarkovsky, on the director's importance of the long 'take':

Like Boriska, (the bell founder's son in *Andrei Rublev*) the director must allow his conception to be shaped by forces beyond his immediate control, what Tarkovsky called "the ceaseless flow of living life that surrounds us" . . . the conception comes alive in the film only through the most direct and immediate contact with reality. The worst and, in my view, most destructive tendency for film is to transfer one's precise mental constructions onto the screen . . . The authorial conception will become a living human testimony, which agitates and interests others, only when we are able to immerse it in the flow of fast

⁸⁶ Antonio Damasio, *Descartes' Error* (London: Vintage - Random House, 1994), p.242-243

⁸⁷ See p.6.

retreating reality, which we imprint in the concrete palpability of each represented instant, in its textural and emotional uniqueness.⁸⁸

This passage demonstrates the importance of the authorial conception, it being absolutely subject to time, and therefore 'reality'. He continues:

the intended effect of Tarkovsky's meticulous preparations and preference for the single take was to create a concrete spatial and narrative matrix within which the stochastic flow of time could interfere at once randomly and meaningfully.

This approach allowed considerable freedom to the material forces and animals that were called upon not merely to be located in the shot but to manifest themselves in activity.⁸⁹

Here the tangible objective space delivered over time – time that film by its nature engages with – sensitively encourages seemingly random, yet in actuality significant and evocative movement so that it may absorb time. The authorial persona becomes more a mediator, offering the time required by a given material liberty or space to function.

I draw further parallels with dance and film, in particular social realism in film and specifically with the work of choreographers Rudolf Laban and Pina Bausch, where I pre-eminently perceive naturalistic situations are being explored, but with less primary concern for tangential, formal or other more diffuse factors.

Valerie Preston-Dunlop suggests Rudolph Laban's view of dance was that it should 'free itself from reliance on a story' – or narrative. 'The medium of dance – that is, the dancer's body and personality, the dancer's movement, the spatial forms and rhythmic patterns in which and with which the dance is made – become the content of the dance'.⁹⁰ Rudolph Laban in *Modern Educational Dance* states: 'In a free dance technique the whole range of the elements of movement are experienced and practised.'

⁸⁸ Robert Bird, *Andrei Tarkovsky - Elements of Cinema* (London: Reaktion Books Ltd, 2008), p.170, this quotation makes reference to Olga Surkova, *S Tarkovskprovisation i o Tarkovkom*, 2nd edn (Moscow, 2005)

⁸⁹ Robert Bird, *Andrei Tarkovsky - Elements of Cinema* (London: Reaktion Books Ltd, 2008) p.171.

⁹⁰ Valerie Preston-Dunlop - Editor Taryn Benbow-Pfalzgraf, *International Dictionary of Modern Dance* (Detroit, New York, London: St. James Press (Imprint of Gale), 1998) pp.448-450.

From the spontaneous combination of these elements arises that almost unlimited number of steps and gestures which the dancer uses'.⁹¹

Later on he continues:

Just as the letters of the alphabet are compounded into words, and the words arranged into sentences, so are the simple elements of motion compounded into more complex movements, and finally into phrases of dance. The significance of the compounds of movements is not conventional as is that of the words and sequences of language. The sense of the phrases of movement can, however, be understood as the expression of definite action moods.⁹²

The material here suggests an element of improvisation, and improvisation has for me always held profound significance as a compositional technique: the physicality of working with an instrument in real time, and using it to explore and define material.⁹³

In *Divergenza* I consider improvisation to be acting throughout the work, harmonically and rhythmically.⁹⁴

Pina Bausch's teacher Kurt Jooss worked and studied with Rudolph Laban, as did the Theatre and social realist film director Joan Littlewood in the late 1940's.⁹⁵ Jochen Schmidt, who interviewed Pina Bausch on several occasions, writes:

Pina Bausch's works' do not grow from the beginning towards the end. They grow from the inside outwards. Above all her early works are full of dances as scenic events. The whole stage is full of activity. Three, four and sometimes more events take place simultaneously. The audience hardly knows where to look and experiences the works, in repeated visits, in a new and different way each time.⁹⁶

⁹¹ Rudolph Laban, *Modern Educational Dance* (London: Macdonald & Evans Ltd, 1948) p.26.

⁹² Ibid, p.26.

⁹³ See pp.23, 25, 26 & 42 et al.

⁹⁴ See 2 & 3 on pp. 84 & 85.

⁹⁵ Nadine Holdsworth, *Joan Littlewood's Theatre* (Cambridge: Cambridge University Press, 2011), p.13.

⁹⁶ Jochen Schmidt, *Ursula Kaufmann fotografiert Pina Bausch und das Tanztheater Wuppertal* (Wuppertal: Müller + Busmann, 2002), Introduction.

We see that emphasis is taken away from the objective moment and placed within a developing system of the event, its response freely forming and only in performance decisively fixed, perhaps even as Varese's concept of crystals suggests; only emerging complete and together in the final work.

This emphasis suggests a process based not on teleological thinking, but around the building up of weight or ballast – of an emotive intensity – In time.

Conclusively, a further reference to Andrei Tarkovsky:

Editing a picture correctly, competently, means allowing the separate scenes and shots to come together spontaneously, for in a sense they edit themselves; they join up according to their own intrinsic pattern. In a curious, retroactive process, a self-organising structure takes shape during editing because of the distinctive properties given the material during shooting. The essential nature of the filmed material comes out in the character of the editing.⁹⁷

In a musical context such an approach would allow a distinctive focus on the material, even whilst producing a characteristic flexibility and openness, to the larger formal scale. Defined like this the small material characteristics give substance to a larger structure. Time is not defined in formal terms, certainly not as a constraint and there is a greater openness to space, indeed, to 'surface'.⁹⁸

I have come quite a distance from (a) my initial concern with harmony's hidden forces, which were a preoccupation when discussing the music of Arvo Pärt and Leos Janáček earlier in this portfolio, to (b) a new and freer conception of how I might re-negotiate process, with process seen even as an enabling mechanism.

In *Echoes of Poems & Prose*, the materials feel robust, almost free-standing. On the one hand logic manifests itself in a method, and on the other I am able to work tangibly, appreciating the relationships between notes, chords, and the masses of sound. Most importantly I attempt to construct music based on an objective fact.

⁹⁷ Andrei Tarkovsky, *Sculpting in time* (Austin Texas: University of Texas Press, 1986), p.116.

⁹⁸ Morton Feldman, *Give my regards to Eighth Street* (Cambridge Massachusetts: Exact Change, 2000), pp.83-88.

The observation of my time spent working at *Divergenza* suggests not only building from a form – i.e. the large scale Fibonacci series – down to the ‘moment’, but equally when viewed from the opposite position, up from the moment to the form. It has been for me a reflective procedure where form gives definition to the moment, but the moment also enables form. I have a newly found confidence with the material yet equally sense the larger formal space, that I might challenge the material, augment and adjust it to fit as composition progresses.

The limitations that ‘material’ might apply to my music however defined, have been palpable for years. I have urgently searched out material, rhythms and shapes that could offer ‘character’ – and I use the term character again, advisedly – to my music. I had thought the problem to be within myself – my skills and approach – but find in reality that it’s more the dysfunction that a historically absorbed practice applies to me and through its influence, the creative compositional process that I am engaged in.