Four Compositions and supporting Commentary

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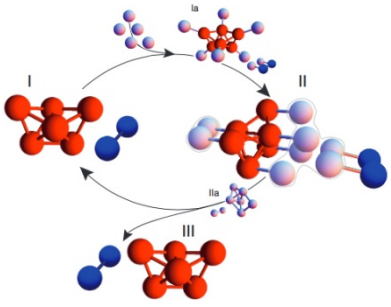
A Commentary on Four Compositions

for

Master of Music (Composition)

At

The University of Durham



By

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Contents

Acknowledgements

This document has been written in accordance with the requirements of the University of Durham for qualification as a Master of Music (Composition). It has been written to accompany the four compositions which constitute my formal submission of 60 minutes' worth of original composition.

My intent has been to use this document as a method of engaging with my past experiences as a musician, my time as a student at the University of Durham, the development of my compositional processes, levels of success, and my thoughts for my future as a composer.

The supervision I have received has been of the highest possible standards available to me, and I am extremely grateful for the opportunities I have been given. I would like to extend my sincerest thanks to the following people for their support: Ray Farr, Prof Bennett Zon and Dr Sam Hayden. Special thanks go to Prof Peter Manning for agreeing to help by supervising me through the major challenge of writing this commentary. My sincerest thanks go to a composer who has provided me with a huge amount of inspiration and support: Dr Richard Rijnvos, without whom the four works discussed in the following text, would not exist.

1. Introduction

Compositional Processes

My portfolio contains four pieces of music: *Dance Suite for Solo Piano, Piano Quintet, Origins for Wind Band* and *Passing Through Three Points – A Suite for Orchestra.* These are the most important pieces chosen from a set of eight works written as a postgraduate student.

In writing this commentary, my objective, through analysis of selected elements of my music, has been to gain a greater understanding of the priorities and preferences which inform the decisions I make as a composer, and to show a curve of development through the various aspects of my compositional thinking; Thomas Christensen states that: 'no musical piece is born in a vacuum. Every composition exists along a plurality of continuums: the composer's own artistic development, the historical unfolding of a given genre or style, evolving social and aesthetic forces'[1].

Planning: Concept and Structure

My initial plans for a new composition revolve around the need to formulate a clear concept. My concept may take the form of a theoretical musical structure, a motivic or phraseological thought, or an abstract idea that lends itself to a musical construct. Sometimes the concept and consequent peripheral ideas come as a result of sketching, drawing and/or writing, but mostly it will develop through extended and prolonged thought. Psychologist John B. Best states that 'The creative act is one of finding original arrangements of accumulated experiences[2].'

Compositional Resources: Construction and Usage

'Composition is the act of forming. But what is being formed and from what?'[3] Robert Saxton asks. Some of the resources I have created have been sufficiently productive as to provide materials for more than one composition: the three chords used as the basis for *Dance Suite for Solo Piano* provided me with sufficient material to compose my *String Quartet No. 1* (not presented within this portfolio); similarly, the source material for both my *Piano Quintet* and *Origins for Wind Band*, two large-scale pieces of music of completely differing nature, which nonetheless use an identical set of twelve-tone rows. In situations where I use the same material more than once, I incline towards avoiding creating pieces that could potentially be visually or aurally related, unless the initial concept has been to create a multi-movement piece or a set of pieces.

Serial composition features as a prominent technique within this portfolio; however, my approach to composition using twelve-tone rows has not been conventional. I am interested in the possibilities presented by balanced and considered use of all twelve tones and have experimented with various different ways of presenting the rows as musical material. During the process of composing the four pieces in this portfolio, I developed an interest in treating pitch and rhythm as separate entities to be prepared and manipulated before reuniting them to form melodic material. Twelve-tone rows seemed to be perfect mechanism for preparing the pitch element of this procedure.

The direction taken by Joseph Hauer (as described by George Perle) is one I found useful and interesting when writing *Passing Through Three Points*. Hauer divides his rows into two or three subsections described as *tropes*. Perle states that 'In Hauer's system the twelve pitch classes of

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[1]Christensen, Thomas, review article in *Music Theory Spectrum* 15 (1993): 110

[2] Best, John B. (Eastern Illinois University), *Cognitive Psychology, Fifth Edition* (London: International Thomson Publishing, 1998): 425

[3] Saxton, Robert, "The Process of Composition from Detection to Confection" in ed. Wyndham Thomas, *Composition, Performance, Reception: Studies in the Creative Process in Music* (Aldershot: Ashgate, 1998): 1

the semitonal scale are divided into mutually exclusive sub-collections of *unordered content* [my italics]. Each transposition of a given partitioning is a different representation of the same "trope".' Perle then goes on to say that: 'The only trope classes that Hauer investigated systematically are those that divide the twelve pitch classes into two hexachords.'[4] Perle's view of Hauer's technique is questioned by John Covach: 'the distinction often made between Hauer and the Schoenberg school – that the former's music is based on unordered hexachords while the latter's is based on an ordered series – is false: while he did write pieces that could be thought of as "trope pieces", much of Hauer's twelve-tone music employs an ordered series.'[5] Whether Perle's assessment of Hauer's methods are accurate, or whether Covach's criticisms of Perle's comments are justified is outside the scope of this commentary; my point, as demonstrated in *Passing Through Three Points,* is that the principle of partitioning a twelve-tone row into tropes, and working in a free and unordered way within the boundaries of each respective trope has proven to be a productive and interesting compositional method.

Methodology

Having introduced my portfolio, and some of my compositional processes, it would be erroneous to conclude that I have created each piece purely within the context of the above-mentioned qualities. Jan LaRue's *Guidelines for Style Analysis* provides a useful working model for deconstructive analysis and for constructive composition. LaRue's Sound, Harmony, Melody, Rhythm and Growth (SHMRG) [6] model of analysis gave me a solid basis for my analytical thinking as an undergraduate student, and this remains a useful tool today; therefore, I have used elements of LaRue's methodology in order to rationalize some of my musical procedures and decisions.

Some of the conclusions I have arrived at, through the writing of this commentary, are necessarily retrospective, having written the pieces over a five-year period of study. Having said that, the concept of the piece always came before the compositional process, at no time was it ever the intention or the case that the creative process resulted in a surprisingly different piece to that conceived. When referring to his analysis of *The Rite of Spring,* Pierre Boulez said: 'we must not be preoccupied with the mechanism that has the work as its goal, but rather the work itself, which, once written – by the very fact that it has been realised – sets all that initial research rocking in the night [fait basculer dans la nuit]' [7].

Jacques Chailley, teacher of musicology at the Sorbonne University in Paris, took a contrary view to Boulez: 'since analysis consists of 'putting oneself in the composer's shoes' and explaining what he was experiencing as he was writing, it is obvious that we should not think of studying a work in terms of criteria foreign to the author's own preoccupations.'[8] Chailley's approach to analysing music through the experience of the composer is useful within the context of looking at my own music. Understanding the development of my concepts and my compositional processes is equally as important to me as understanding the actual compositions themselves: I see the compositions as a snap-shot of my creative progress. Having outlined some of my compositional methods, and my approach to compositional concepts, it is now fitting to engage with analyses of each of the four portfolio pieces. My intention is to identify threads of stylistic common ground in the four works and to give context to some of the processes discussed above.

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[4] Perle, Georg, *Twelve-Tone Tonality,* 2nd ed. (Los Angeles: University of California Press, 1996): 3
[5] Covach, John, in Whittall, Arnold, *The Cambridge Introduction to Serialism* (Cambridge: Cambridge University Press 2008): 24
[6] LaRue, Jan, *Guidelines for Style Analysis,* 2nd ed. (Michigan: Harmonie Press, 1997)
[7] Boulez, Pierre, "Relevés d'apprenti," (Seuil, Paris 1966) in Nattiez, Jean-Jacques, *Music and Discourse, Towards a Semiology of Music* (Princeton: Princeton University Press 1990): 138
[8] Chailley, Jacques, "Traits historique d'analyse musicale," (Leduc, Paris, 1951) in Nattiez, Jean-Jacques, *Music and Discourse, Towards a Semiology of Music* (Princeton: Princeton University Press, 1990): 137

2. *Dance Suite* for Solo Piano

I. Toccata
II. quasi Allemande
III. quasi Menuet
IV. quasi Sarabande
V. quasi Aria
VI. Finale

(Total Duration: approx. 8 mins)

Introduction

The earliest composition in my portfolio is *Dance Suite* for solo piano. In conceiving *Dance Suite*, I wanted to create a set of six movements following in the footsteps of JS Bach. Without exception, all movements are based on the limited musical material of a mere three chords, as illustrated in *Fig 1.*

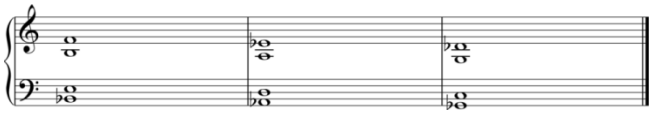


Fig 1: Three chords used as the basis of Dance Suite

All three chords are identically structured and it could be argued that they are merely one chord in three different transpositions. Within the context of this piece however the move from one chordal area to another, informs the structure of the movement, and it is my intention that the move from one pitch set to another be understood by the listener in the same manner that a modulation might be perceived in a tonal piece. The structure of any root position triad is the same as another root position triad, and yet within a tonal context it is recognised as being a different chord; my intention is for the same principle to be relevant for the *three* chords used as the basis of this piece.

Dance Suite is loosely based on a Baroque dance suite. I refrained from fully committing to the conventional nomenclature of the individual movements; the titles of the inner four movements carry the prefix '*quasi'* to make the point that the implication should not be interpreted too rigorously. The exceptions to this are the outer two movements, which indisputably are a *Toccata* and the *Finale*.

<u>Rhythm and Pitch, Percussion and Lyricism</u>

In 1992, LaRue stated that: *'Rhythm results from changing combinations of duration and intensity within all elements and dimensions of growth.'*[9] He returned to this theme in the 1997 edition of his book to revise his definition of rhythm: *'Rhythm results from patterns of tension/relaxation within larger patterns of tension/relaxation in all elements and dimensions of music*. '[10] My intent was to vary the role of the piano, sometimes using it as a percussion instrument, sometimes as a lyrical melodic instrument. To achieve this I focussed on the manipulation of groups of natural and added accents in order to consolidate the rhythmic structure of the music. Whilst writing *Dance Suite* I observed that the following equations made useful tenets to work from:

(Irregular accents & expanding/contracting rhythmic activity) + (limited macro-harmonic range) = greater percussive effect

(Regular natural accents & repeated rhythmic activity) + (free macro-harmonic range) = less percussive/greater lyrical effect

[9] LaRue, Jan, *Guidelines for Style Analysis* (Harmonie Park Press, Michigan, 1992): 90
[10] Ibid.: 276

Clearly these two principles are only generalisations which should be used in conjunction with texture, tempo, dynamic etc., but they are, nonetheless, a useful basis from which to work. They should also be used in conjunction with each other, thus balancing the percussive and lyrical characteristics of the music.

Rhythm forms the foundation of *Dance Suite*'s structure. I was influenced by rhythmic techniques and ideas used by Béla Bartók, and have adopted some of his methods in the composition of this piece. The first technique I adopted was to reduce or increase the length of repeated rhythmic patterns by one semiquaver or one quaver for each exposure (see *Fig 2, page 5)*. Janós Kárpáti's describes this process as 'rhythmic mistuning'[11]. In the same document Kárpáti justifies this description by maintaining that, '[…] since mistuning – in the last analysis – is simply the +/- modification of a given perfect structure by the smallest unit of the system. Accordingly, if the structure moves in "musical space", the smallest unit is the semitone, and if it moves in "musical time", the smallest unit is the denominator of the fraction marking the metre (usually the quaver or semiquaver).'

My only reservation with the above statement is the final phrase; the smallest unit is not necessarily the denominator of the time signature, but instead, it must be the shortest note played within the phrase. Within a hypothetical passage written in common time, the denominator refers to a crotchet; however, repeated phrases within this context can surely be 'rhythmically mistuned' by a semiquaver.

A further technique I adopted from Bartók is in conjunction with the first: I adapted time signatures in order to accommodate the shapes of the phrases, thus redefining the natural accents within the metre. László Somfai states that 'in Bartók's scores music usually moves ahead in clear metrical situations. The beats of the bar imply real stresses; the syncopation shifts true metrical accents; the agogics control the speed of a real pulsation of metre.'[12] Somfai refers to this process as *'metre breaking'.*

Elements of Somfai's statement require clarification: the *clear metrical situations* refer to phrase lengths, and agogics can be defined as *extended* notes – and are of a greater importance in controlling the pulse of the music. Rather than the syncopation moving against a regular bar-length, the time-signatures are altered to fit around the *real* stresses which work to define the *clear metrical situations* (phrases). Agogic notes may be closer in value to the denominator of the time signature than the shortest note of the phrase; in this case it will have control over the pulsation of metre, as suggested by Somfai.

Movements 1, 3, 4 & 6 use *limited pitch sets*[13]; movements 2 & 5 are freely composed. Movement 5 (*quasi Aria*) is at the furthest extreme of freedom. The music is in the style of a blues improvisation. There are no dynamic directions, and this is also the only movement without a metronome mark, and the tempo (*Moderato, ma tempo rubato*) is deliberately ambiguous. *Toccata* and *quasi Aria* represent opposing extremes of style and compositional technique in *Dance Suite*, which is why I have chosen these two movements for subjective analysis.

[11] Kárpáti, János, "Alternative Bar Structures in Bartók's Music," *Studia Musicologica Academiae Scientiarum Hungaricae* 47/2, Budapest (2006): 128
[12] Somfai, László, "Analytical Notes on Bartók's Piano Year of 1926*," Studia Musicologica Academiae Scientiarum Hungaricae* 26, Budapest (1984): 30
[13] See the three chords in *Fig 1 & Fig 5*

An Analysis

1. *Dance Suite: I. Toccata – Allegro Vivo*

Rhythm

Throughout *Toccata* there is almost constant temporal instability: time signatures fluctuate creating a constantly shifting natural accent. The technique of *metre breaking* is a characteristic of the *percussive* aspect of the suite; however, it does not occur during the *lyrical* movements.

The common link for most bars is a divisibility of 3 beats in each bar: sometimes 3/4, 3/8, 3/16, 6/16; time signatures which do not fit this pattern: 5/8, 5/16, 7/16, are merely an extension of the 3-beat bars; that is to say, these bars all end with triplet-group of 3 notes.

Fig 2 illustrates two examples of 'rhythmic mistuning' from the *Toccata*. The examples from bars 5, 8, 10 and 12 illustrate the quaver pattern contracting by a semiquaver at each playing; the examples from bars 6, 9, 11 and 13 show the semiquaver pattern also contracting by one note per exposure. Regrowth happens throughout bars 16, 18, 19 and 20, and in bar 26 the two rhythmic ideas impose themselves on each other to reform the original semiquaver idea from bar 6.

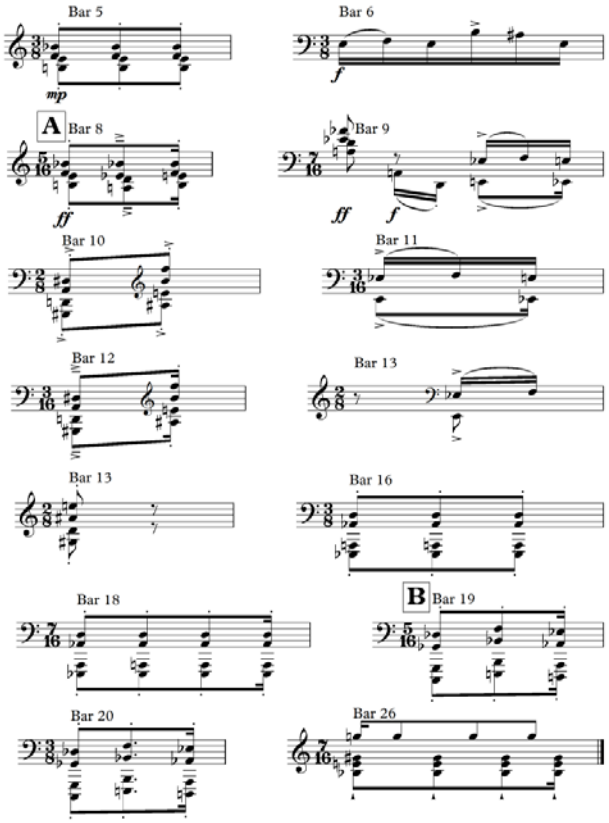
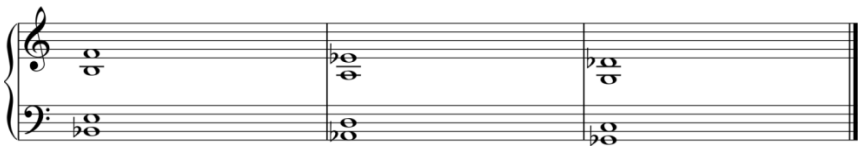


Fig 2: Growth process of two motivic elements of Toccata *from* Dance Suite *using "rhythmic mistuning".*

Limitation of Macro-harmony

Deliberate control over a constantly changing ratio of *rhythmic stress levels* to *macro-harmonic pitch density* provided an interesting concept to build on. Dmitri Tymoczko defines macro-harmony as *'…the total collection of notes heard over moderate spans of musical time.'*[14] I divided the chromatic scale into three chords which were structurally identical (see *Fig 3* below); the chords differ by a major second respectively. My intention was to use the three macro-harmonically to gain the same effect as tonal areas. From here on in I will refer to these harmonies as Chord I, II or III respectively. The rehearsal marks in the score are also structural markers.



Chord I Chord II Chord III

Fig 3: The three chords used as the macro-harmonic areas in Dance Suite.

[14] Tymoczko, Dmitri, *A Geometry of Music* (Oxford: Oxford University Press, 2011): 4

Manipulation of these chords is supported by structural factors, such as: regulation of harmonic, contrapuntal, and textural intensity; harmonic austerity and clarity; and also, a greater degree of necessary repetition. Meyer proposes that '[a] figure which is repeated over and over again arouses a strong expectation of change both because continuation is inhibited and because the figure is not allowed to reach completion. '[15] Inevitable pitch repetition in *Dance Suite* creates a sense of expectation, and opportunities for moving from one structural section to another.

Structure

• *Exposition*

The first four bars introduce the pitch-set of *chord I*; the remaining bars through to rehearsal mark A establish the two textural motivic patterns: quaver chords and semiquaver counterpoint. At rehearsal mark A, the addition of *chord II* relieves the growing sense of expectation; from letter A to B the two chords have been kept separate in some areas and are allowed to blend in others, thus expanding and contracting the breadth of pitch. In exploring differing pitch 'zones' it was my intention to create a sense of differentiation and modulation, similar to the same experience in tonal music. The music between letters A and B has three macro-harmonic aspects: *chord I* on its own, *chord II* on its own, and *chords I & II* blended. Deliberate repetition of *chord II* in the three bars before *letter B* recreates the sense of expectation leading to *chord III* at *letter B*. The section from *letter II* to III is the shortest by far: the tension is at its highest due to the isolation of all three chords. The harmonic tension dissolves into free chromatic harmony at *letter C*, the rhythmic stress levels relax into even semiquaver formations.

The macro-rhythmic analysis below (*Fig 4)* shows the exposition, and provides observations regarding the different macro-harmonic areas (chords I, II and III). *Figs 4, 5* and *6* all use the traffic-light system of colours to illustrate use of the three individual chords.

Start through to letter A:

4-bar introduction exposing macro-harmony, and triplet rhythmic pattern.				Establishment of chordal and semiquaver motifs.		
3 4	6 16			3 8		3 16
Most restrictive macro-harmonic density = highest level of expectation.						

Letter A to letter B showing high levels of *metre-breaking*:

Chordal (Tension)	Counterpoint (Release)	Chordal (Tension)	Counterpoint (Release)	Chordal (Tension)	Counterpoint (Development)		Chordal (Tension)	Counterpoint (Release)	Chordal (Tension)
5	7	2	3		2	5	3	3	7
16	16	8	16		8	16	8	16	16
High level of rhythmic activity and concentration of natural accents = highest stress level. Rhythmic contraction and growth takes place in this section.									

Letter B to letter C:

Chordal, rhythmic growth. (Tension)		
5 16	3 8	2 8
All three chords now in use in isolation, resulting in highest level of harmonic tension. Quaver motif letter A now used		

KEY: Notation from only from Chord I | Notation from only Chord II | Notation from only Chord III | Free chromatic writing

Fig 4: Illustrating the exposition (start of the piece to rehearsal mark C in the score).

[15] Meyer, Leonard, *Emotion and Meaning in Music* (Chicago & London: University of Chicago Press 1961): 135

• *Development*

The development is split into two sections: the first (*letter C* to *letter D*) consists of free chromatic development in a stable rhythmic environment; the second area deals with the (unstable) rhythmic expansion of the music. The second section of the development can also been seen in two parts: the first part deals with the breaking down of isolated chords, and the second part reverts to free chromaticism. Each of the parts of the second section divides into a transitional passage followed by an episode which heads towards a cadence point.

The development section is immediately apparent: all twelve chromatic notes are now blended in free composition. The use of free composition after a significant period of restriction certainly constitutes an important landmark. It should not be seen as an abandonment of the robust musical structure, more an element of that structure. The following intervals feature strongly in the three chords that form the basis of the Suite: major 7^{th}, augmented 4^{th}, perfect 5^{th} and minor 2^{nd}. These intervals now became important components for intuitive free composition. Rhythmic structures were taken from the opening sections for contraction, extension and alteration as required, again, intuitively and freely. This section was conceived as an opportunity for development of previous material.

As in *Fig 4*, the following macro-rhythmic analysis below (*Fig 5)* illustrates the structure of the development.

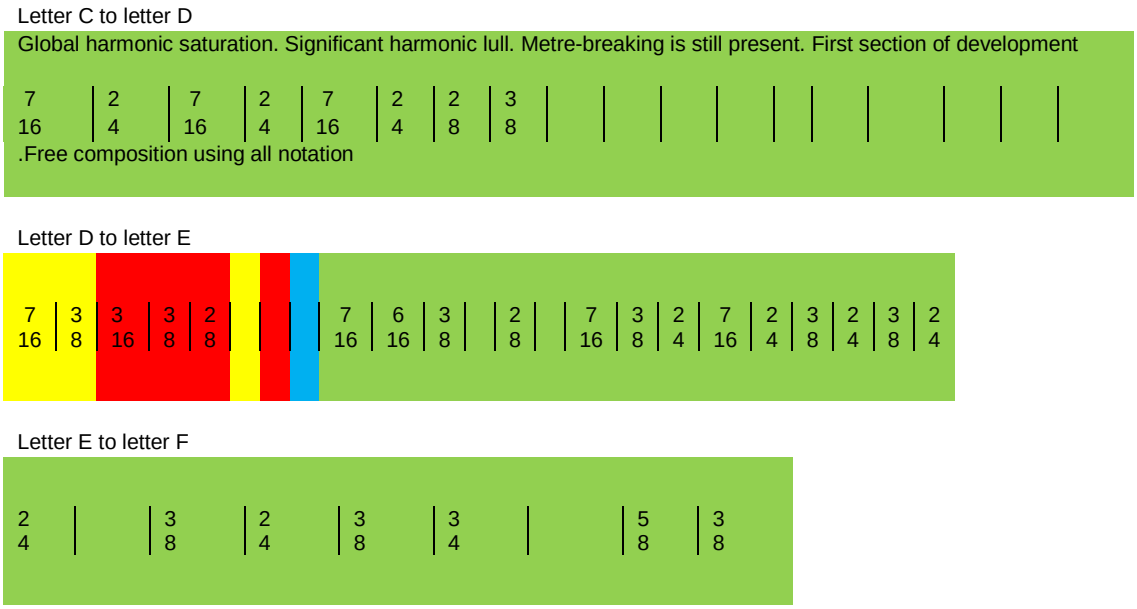


Fig 5: Illustrating the structure of the development (rehearsal mark C to F in the score).

• *Recapitulation*

The final section is not a true thematic recapitulation; it is a reaffirmation of the three chords in isolation after a passage of pitch saturation. The texture of the previous section is maintained; it is a stylistic and chordal recapitulation.

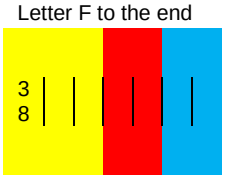


Fig 6: Illustrating the recapitulation (rehearsal mark F to the close of the movement).

Through the above illustrations, a sense of the rhythmic pace of the piece can be seen; the erratically changing time signatures, designated ‘metre-breaking’ by Bartók, create an evolving pattern of accents and stresses which drive the percussive nature of the music.

There is no blurring of the structural edges in this suite; the music has defined geography. Limiting and controlling the ebb and flow of the macro-harmony was done in a bold manner: the changes had to be explicit rather than obscured. My intent was to create clusters of *natural* and *added* accents of varying density; the aim was to create high and low level of stress, and forming rhythmic patterns on low and high architectonic levels; these patterns served to consolidate the structure of the music, and thus dictate how to shape other stylistic changes.

Fig 7 (overleaf) gives a comprehensive illustration of the structure of the development section, highlighting levels of emotional and rhythmic stress achieved through use of harmonic limitations, phrase lengths and consequent levels of stability.

It is appropriate at this point to quantify my perceptions of stability. In a harmonic environment, I see restrictions as imposing stability. If all pitches are in use, then the harmonic environment is less stable. In terms of rhythm, I see regular rhythmic patterns as creating stability; metre breaking and rhythmic irregularity creates rhythmic instability. Melodic stability therefore balances harmonic and rhythmic stability, and consequent melodic interest will be achieved through managed use of instability and stability.

Higher level structural view	***Reh'l Marks***	***Structural Areas and Conditions***	***Texture/Contrast***	***Harmony***	***Melodic Levels***	***Rhythm***	***Growth***
Focus on harmonic growth and development	C – D	***Transition***: Harmonically rhythmically unstable. Becoming more stable after exposition.	Mainly two-part counterpoint. Final bar: chordal repetition: sense of expectation. ***Moderately stable***.	No pitch restriction. Harmonic saturation: ***harmonically unstable***.	Longer phrases than in the exposition; more ***melodically stable***.	Change of time signature in each bar leading to a constant shift in natural accent; contraction and expansion of phrases: growth/development. ***Rhythmically unstable – however more stable than exposition.***	
		Episode: Lull Most stable area. Therefore, area of least growth.	Four-part counterpoint featuring imitation. Regularity and sequential part writing. ***Highly stable***.	No pitch restriction. Harmonic saturation: ***harmonically unstable***.	Longer phrases. Descent of pitch concurrent with diminuendo. ***Least stable aspect***.	Single time signature, regular natural accents. ***Highly stable***.	Growth in expansion of phrases; consequent melodic growth. ***Less stable***.
Focus on rhythmic growth and development	D – E	***Transition:*** Expectation of further rhythmic and textural stability through repetition.	Single line of broken chords. ***Most stable aspect.***	Return to isolation of three chords, broken chords changing with every bar, reinforcing the natural accent. ***Stable***.	A single line moving up through tessitura. Growth and expansion of shorter phrases. ***Less stable.***	Regular semiquaver pattern. Regular time signature changes. Second four bar phrase no change of time signature. ***Gaining in stability.***	Rhythmic repetition: expectation ; rising in pitch and volume. Growth through movement. ***Stable.***
		Episode: High level of rhythmic activity using three chords.	Block chords ***Most stable aspect.***	Confirmation of three isolated chords. ***Harmonically stable.***	Short rhythmic ideas leading to ***Melodic instability***.	Time signature changing almost every bar, syncopation tied over bar-lines, rhythmic unison, contraction and expansion leading to rhythmic growth. ***Highly unstable.***	
	E – F	***Transition:*** ***Least stable area.*** Highest level of expansion/contraction: growth/development.	Changing between chordal and semiquaver patterns; does not conform to natural accents. ***Unstable.***	Changes between isolated chords and free notation. No natural accents. ***Unstable.***	Phrases short; rapid changes from chordal to semiquaver; not conforming to natural accents. ***Unstable.***	Irregular contraction and expansion of small rhythmic cells (quavers and semiquavers), irregular time signature changes, all leading to changing shape and growth on a motivic level. ***Unstable.***	
		Episode: New rhythmic pattern achieved through growth from previous section. Scaling down of activity in all areas. ***Heading towards stability.***	Regular fluctuating semitone line. Irregular accents on chordal interjections. ***Gaining in stability as natural accents become established.***	Pairs of notes from three isolated chords used against regular A/B flat fluctuating ostinato line. ***Gaining in stability through the phrase.***	Reinforced accents providing a detached melodic outline separated by ostinato semiquaver accompaniment. ***Gaining in stability.***	Semiquavers with heavily accented chords; rhythmic dissonance. Added accents become less intense. ***Gaining in stability.***	***Growing in stability*** as stress and tension are released from all areas.

Fig 7: Table illustrating shifting areas of stress, stability, tension and activity within the Development section of Toccata *from* Dance Suite

2. *Dance Suite*: *V – (quasi Aria)*

Dynamics

I have chosen to examine *(quasi Aria)* for two reasons: firstly, to outline my motives for refraining from adding dynamic instructions; and secondly, because it appears from a stylistic point of view to be the polar opposite of the *Toccata*, that is, at the lyrical extreme from the percussive nature of the *Toccata*.

The instructions at the opening of *(quasi Aria)* are ***Moderato, ma tempo rubato***, *dynamics ad lib.* I have made a conscious decision to allow the performer the autonomy to make informed musical decisions regarding the tempo and dynamic levels of this movement.

In performance dynamics tend to be far from an exact science: one player's interpretation will always vary with that of another player, and different musical instruments will often vary in their power of production. The inclusion of dynamic instructions may very well be seen as a necessity; the performer's rehearsed perception of a new piece is arguably the most interesting stage in the development of a new composition, and to entirely exclude those instructions from a composition requires the performer to take a greater degree of responsibility for the performance than might otherwise be the case.

Phraseology

The phrases in this movement contain motivic repetition, contraction and expansion, and a wide spread of pitches and intervals, and they all vary in length. My intention was for the performer to be able to understand clues from within the structure of the music, and to interpret them accordingly. My interest as a listening composer would be to hear whether or not the performer managed to grasp the phraseological structure, the rhythmic shape, and the harmonic tension needed for the delivery of a persuasive performance.

In his article "Freedom of Interpretation of Twentieth Century Music" Charles Rosen states that:

> 'It is not illegal to interpret a work of music against the express intentions of the composer. No jail sentence is imposed for playing a piece wrong. Nevertheless, we often feel that, if not illegal, it is in any case immoral to deliberately flout the author's indications, to play *forte* where the score gives *piano*, or *legato* where *staccato* was demanded. For one school of performance, any deviation from the authentic text is a sin, venial or mortal depending on the gravity of the transgression.
>
> A strict adherence to this austere position creates numerous problems, but we can understand how and why the dogma arose. The opposing school of performance practice that proclaims the absolute freedom of the interpreter ends up in nonsense.'[16]

Most parameters in musical composition are unambiguous, most notably pitch and rhythm. This leaves us with the question: how accurate should a composer be with dynamic markings? Should we be over-bearing and detailed to the highest level, or pursue the very opposite approach and leave the responsibility wide open to the performer? The concept of the *quasi-Aria* is my response to these questions.

One could argue that *(quasi Aria)* might give opportunity for elements of *indeterminacy* in the context of John Cage's definition of the term[17], but I do not believe it is correct to acknowledge the

[16]Rosen, Charles,"Freedom of Interpretation in Twentieth Century Music," in ed. Thomas, Wyndham, *Composition, Performance,Reception: Studies in the Creative Process in Music* (Aldershot: Ashgate, 1998): 66

possibility of *chance*. I have provided musical information which evokes a wider margin of interpretation than normal, for the performer to draw decisive conclusions from surface-rhythmic groups, phraseological rhythm, intervallic and registral pitches, and from the general shape and movement of the piece. Analytical points can be seen in *Figs 8 & 9.*

Approach to the interpretation of *(quasi Aria)*

Leonard Meyer raises an interesting observation with regard to the relationship between pitch and dynamics:

> 'The elements of sound are interdependent with respect to neutrality and divergence. For instance, changes in pitch are generally accompanied by changes in dynamics, timbre, and sometimes tempo. The relationship is physical as well as psychological….Thus, it is possible to build one divergence upon another. For instance, if tempo is fast and pitches are high, very soft dynamics will be experienced as a divergence, not only from the neutral state of moderate loudness, but also from the "contingent neutrality" in which a rapid tempo and high pitches are generally accompanied by loud dynamics.'[18]

In the very nature of *(quasi Aria)* any kind of divergence would be inappropriate. To that end, Meyer's observation regarding dynamic expectation in relation to other aspects of the music supports my own assertion that a dynamic performance is feasible even when the musician is confronted with a limited selection of musical parameters.

The stability of the left hand provides a firm basis for phraseological exposition and development in the right hand; this methodology was intentional in order to eliminate any doubt about the shape of the phrases. Chopin is quoted to have said: 'the singing hand may deviate from strict time, but the accompanying hand must keep time'[19]. A similar approach is required in the context of *(quasi Aria)*. My intention was for the two hands to function as an instrumental duet, or – if you like – as a singer with accompanist. Redressing the balance between rhythm and pitch, percussion and lyricism, was my objective.

Having focussed on rhythmic regularity in the left hand, I allowed myself a much greater degree of freedom in the approach to rhythm in the right hand. The focus of growth and movement in *quasi-Aria* comes from pitch and tessitura in relation to rhythmic density. The phrases in *(quasi-Aria)* are much more expansive and lyrical in comparison to the shorter percussive phrases in *Toccata,* these phrases are the result of free pitch organisation and regular rhythmic activity in the left hand.

Macro-rhythmic Structure of *(quasi Aria) (Figs 8 & 9)*

This movement is 32 bars long, and is essentially constructed in two equal halves. Phraseological analysis can be seen (*Figs 8 & 9 both overleaf)* in the two macro-rhythmic analyses. Each of the two respective tables gives bar-by-bar comments and observations relating to *Right Hand Pitch, Left Hand Pitch, Right Hand Rhythm*, and *Left Hand Rhythm*. The traffic-light system of colours within the boxes shows the intensity levels of emotional stress and tension on various architectonic levels. From a distance, the rhythmic ebb and flow of the music can be seen quite clearly.

Fig 8 shows the first 16 bars of *quasi-Aria.* Most of the left hand is shaded green: indicating that the music is stable. The right hand parts are shaded either red or amber: the variation of colours illustrates the breadth of levels of activity. Stresses and lulls in pitch or rhythm provide sufficient

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[17] John Cage's definition of *indeterminacy* is "the ability of a piece to be performed in substantially different ways": Pritchet, James, "The Music of John Cage," in *Music in the 20th Century* (Cambridge: Cambridge University Press,1993): 108

[18] Meyer L, *Emotion and Meaning in Music* (Chicago & London: University of Chicago Press, 1961): 263

[19] *Grove's Dictionary of Music and Musicians*, ed. Coles, Henry (New York: Macmillan, 1936): I, 635

guidance to the pianist regarding the contours and shapes of phrases; this information leads to an understanding of the dynamics of the music.

Fig 9 represents the final 16 bars of the movement, and paints a similar picture to that of *Fig 8*. *Fig 8* shows two high-level activity-areas (resulting in instability) with two intervening lulls. *Fig 9* shows even more stability in the left hand, and a wider variety of stress in the right hand, thus creating less overall stability in the second half of the movement.

An interesting dynamic arises: in the first 16 bars pitch variation is diverse, but the rhythmic activity is less so, whereas in the second half of the piece pitch and rhythm are both highly active. Consequently, this half of the piece is much less stable. The resulting dynamic implications are much more obvious: less stability results in a wider dynamic range. This conclusion tallies with Meyer's contention that elements of sound are interdependent[20].

[20] See reference 20 on page 10.

Fig 8: Macro-analysis of the first 16 bars of (quasi-Aria) *from* Dance Suite

Bar number:	***Anacrusis***	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***	***14***	***15***	***Resolution (Bar 16)***
RH Pitch Observations:	Min 2nd and maj 7th, aug 4th and dim 5th intervals – important feature from the 'three chords'. Ascending tessitura by bar. High degree of tension and uncertainty through intervallic limitation. Sense of expectation.				Descending tessitura by bar. Use of semitones and maj 7th intervals. Limitation creates uncertainty. Unstable.		First use of maj 2nd interval. Less unstable.	Descending tessitura by bar. Although the intervallic range does not change, the pitch range does change, reduces instability.		Single-pitch repetition – sense of expectation.	Imitative use of maj 7ths and min 2nds. Intervals leaping upwards in pitch. Range covers 2½ octaves. Unstable.	Maj 7ths and Min 2nds. Retrograde presentation of bar 10. Again, range covers 2½ octaves. Unstable.	Very tight grouping of pitches – mostly staying within the range of a min 3rd. Settling, growing in stability.				Final note of the first half of the movement: same pitch as the first note: a sense of structural close. Stable.
LH Pitch Observations:	Rest. Instability due to lack of defined pulse.	Much greater density of harmony than RH, has the effect of reducing the austerity of RH melodic language.		Chord broken – reduces harmonic density. Change creates tension.	Broadening of macro – harmonic range. First use of a maj 3rd within a chord (bar 5).		Chord broken – reduces harmonic density, increases clarity. Less stable.	Return to chordal texture. Re-established stability.		Broad macro-harmonic range. First use of perfect 4th and 5th. Dense harmony, sustained through the bar. Descending line leading down over an octave. Regular, stable.							Final note of the first half of the movement: final note of an octave descent. Stable.
RH Rhythmic Observations:	Insufficient rhythmic activity to establish pulse. Unstable.	All 3 beats articulated. Stable	Off-beat notes tied across barlines – natural accents avoided. Unstable.		Off-beat notes tied across barlines – natural accents avoided. Unstable.			Rhythmic imitation of bar 7. More stable.		Rhythmic dissonance against left hand – instability.	2-note syncopated rhythmic cell repeated. Less unstable, expectant.		Rhythmic resolution: 1st and 2nd beats articulated. Fairly stable.	1st and 3rd beat articulated.	1st beat articulated. Syncopated after 2nd and 3rd beats.	More rhythmic activity approaching to the lull. Moving hesitantly towards a relaxation.	Feeling of closing the half with a cadence point. Stable.
LH Rhythmic Observations:	Rest. Instability due to lack of defined pulse.	3-bar phrase defined by 3-note anacrusis. Natural accents - stable			3-bar phrase defined by anacrusis of 3 semiquavers. Natural accents - stable			2-bar phrase. Rhythmic repletion: stable.		2-bar phrase. Articulation on each crotchet beat: rhythmic stability.		Articulation on beats 1 and 2. Sustained through the bar.	Articulation on each crotchet beat: rhythmic stability.	Descending sequence. Towards cadence point closing the first half of the movement. Stable.			
Bar number:	***Anacrusis***	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***	***14***	***15***	***Resolution (Bar 16)***

Bar numbers	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
RH Pitch	Pitch range of maj 7th, use of perf 4th. Less stable.	Feature of falling semitone repeated at higher pitches; tension rising, dynamic increase implied. Less stable.	Falling semitones in addition to repeated G#s: level of expectation lifted. Implied crescendo. Unstable.	Fall in pitch, use of falling semitones; relaxation, diminuendo implied. Less instability.	Added accent in the centre of the bar. Unstable. Maj 7th leap with grace note unstable in the centre of the bar by highest stressed note, followed 4th and 5th leaps downward. Unstable.	Repeat of leap in centre of the bar, followed by semiquaver leaps of 4th and 5th. Slight alteration for growth, maintains instability.		Falling chromatic pattern with rising grace notes. Less unstable.	Falling chromatic scale after repeated B flats. Stable.	Leaps of maj 7th, min 2nd and aug 4th. Instability after chromatic scale. Star of rising tessitura. Expectation.	Much closer range of pitches. Semitone movement is prevalent. Tessitura stable. Overall less unstable.	Pitch range of a tone. Only semitone movement involved. Stable. Tessitura higher, but smaller and stable.	Pitch range of maj 7th. Rhythmic activity imacts on pitch content. Tessitura wider, and at highest point in the movement.	Descent of tessitura from previous bar. Pitch range of over an octave. Intervals of maj 7th and min 2nd prevalent.	Complete pitch range semitone higher than previous bar. Similar rhythmic pattern, but changed pitches.	Widest pitch range in the movement : 2½ octaves. Widest variety of intervals in one bar.	
LH Pitch	Dense harmony, chords built on 4ths. lowest register of the piano. Less stable.	Four differing pitches creating balanced harmony. Falling sequence by bar. Stable.		5ths and falling semitones. Six- bar falling sequence using a bar-long pattern. Highly Stable.						A falling sequence of three notes to a bar: maj 7th interval between each note, thus forming a nominal chromatic scale descending, thus: E, D sharp, D natural. This pattern falls chromatically by semitone for 6 bars. Stable.						Consecutive perfect 4ths moving downward by step into the cadence.	
RH Rhythm	No natural accents. Less stable.	1st beat articulated, harmonic activity around tied notes, creating rhythmic uncertainty Unstable.	All natural accents articulated with additional activity: quavers and semiquavers Stable.	1st (triplet) and 2nd beats articulated 3rd beat dotted: Less stable.	Grace notes unstable first beat; denser activity throughout. Added accent central to the bar destroys stability.	Altered rhythm from previous bar. 2nd beat stress is central off-beat: rhythmic dissonance – unstable.		No 1st beat due to tie. 2nd and 3rd beats sequential and stressed by grace notes. Less unstable.	No natural accents. Increased activity towards the end of the bar. Anacrusic triplet.	1st beat articulated. First silence in RH since bar 11. Five semiquavers close the bar. Same pattern occurs in bar 26. Less unstable through repetition.		No 2nd beat articulation. 3rd beat reinforced by grace notes, increased stress on the 3rd beat as anacrusis to bar 28.	Highest level of rhythmic activity in the movement. 2nd and 3rd beats articulated, 2nd with grace notes.	Syncopated semiquaver activity. The only natural accent occurs on the 3rd beat as anacrusis to the next bar.	Same rhythmic pattern apart from compressed dotted rhythm on 3th beat.	2nd beat is the only natural accent.3rd beat provides the same anacrusis as from bar 16 into bar 17.	Sustained through the bar.
LH Rhythm	Beats 2 and 3 of bar 16. Stable.	All three beats articulated; falling sequence by bar. Stable.		All three beats articulated. Six-bar falling sequence using a bar-long pattern. Highly Stable.						Change of rhythm: bass note follows natural accent; semiquaver leads to 2nd beat. This pattern is played sequentially over six bars. Stable.						Highest level of rhythmic activity in LH since bars 3 & 6.	1st and 2nd beat articulation sustained throughout the bar.
Bar numbers	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Fig 9: Macro-analysis of the final 16 bars of (quasi Aria) *from* Dance Suite

Summary

As stated above, my intention in writing *Dance Suite* was to explore the percussive and lyrical qualities of the piano. I have been long been fascinated by *percussive sounding* piano music, and as a pianist, I have always considered the skill of try to perfect lyrical sustained lines as one that is, generally speaking, unidiomatic of the instrument; my desire to use the piano as a percussive instrument seemed appropriate.

The concept of connecting pitch limitation with rhythmic prominence and consequent structural implication is one made as a result of reading articles on the compositional techniques of Béla Bartók (see *references 12 & 13*). The equations expressed above came as a result of trying to gain a closer and more detailed theoretical focus on use of pitch and rhythm as separate musical entities. They were intended less as creative solutions, and more as expressions of a compositional attitude or approach.

Proof of the effectiveness of the approach of the hypothesis discussed above becomes evident in a performance of *quasi-Aria*. A persuasive delivery of the music depends on the performer's understanding of the structure of phrase, rhythm and pitch; the lack of printed dynamic directions should not hamper a convincing presentation of the piece.

3. *Piano Quintet*

I. Lento – Allegro vivo
II. Adagio
III. Andante – Allegro vivace

(Duration – 17'42'')

'*I wish it were possible to force everybody desirous of attempting orchestral composition to start his career with a number of string quartets.'*[21]

Introduction and Resources

In composing my *Piano Quintet*, my aim was to create a multitude of textural possibilities including accompaniment writing and concertante writing for the piano, texture is a fundamental aspect in the evolution of the role of the piano within the piece. As will be seen in the next chapter, the *Piano Quintet* shares common resources with *Origins for Wind Band* in that they are both based on the same three 'all-interval' tone rows with slightly different usage of the consequent harmonic building blocks[22]. My own method of constructing all-interval tone rows is illustrated in *Fig 10.*

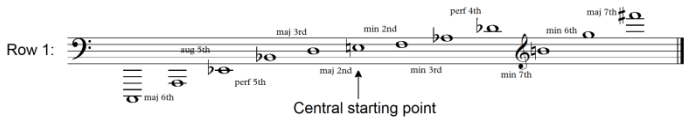


Fig 10: Method of construction of an all-interval tone row.

My choice of all-interval tone rows gave me defined pitch ranges; so, for example, the opening of the quintet exposes all three rows in their intervallic positions, thus exploring the extremes of instrumental registers. The resonance of each complete row can either be exposed as a sustained large-scale harmonic element; or for melodic use, I had the option of placing all pitches in 'closed position' (within one octave).

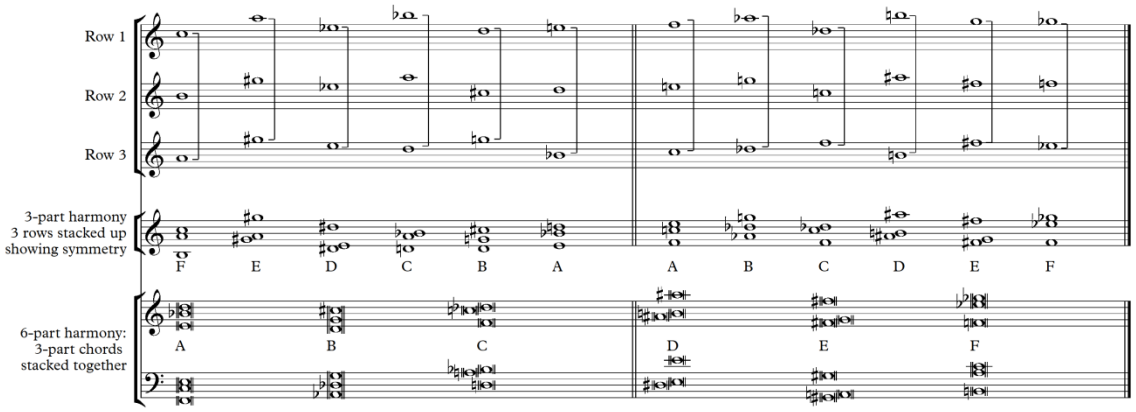


Fig 11: Three tone-rows superimposed, subsequent triads, symmetrical formation of six chords.

The layering of three twelve-tone rows to form twelve triads provided me with a point of departure. The next step was to overlay the triads on top of each other, working out from the centre to form six 6-part chords (see *Fig 11*). The triads form a symmetrical pattern of intervals (see the triads working from the centre outwards). The symmetry was unintentional, but in all probability grew out

[21] Strauss, Richard, "Foreward" to Berlioz, Hector and Strauss, Richard, *Treatise on Instrumentation* (New York: Kalmus, 1948): III

[22] It is worth comparing these notes with those of *Origins* in order to gain context of two works being consecutively, using the same three tone rows as raw material, but having a considerably different outcome.

of the fact that the rows were constructed in a similar fashion. These resources are the structural backbone of the first movement (see below for analysis).

The subsequent two movements become less rigidly structured as free intuitive composition becomes more of a feature. Though the same pitch sets remain in use as basic musical components, they have less bearing on the overall structure of the piece as they did in the first movement. Instances of areas of intuitive composition become more frequent through the second and third movements of the *Quintet*.

An Analysis

1. *Piano Quintet: I. Lento – Allegro Vivo*

The Lento introduction starts by exposing each of the three rows in turn as simple arpeggio figures. Two completely different interpretations of the 3-part chords follow in different contrapuntal contexts, the lines moving melodically through increasing rhythmic and dynamic activity. These two exposures are played by strings alone. A single silent bar follows before the piano plays the six 6-part chords in reverse, leading into the *Allegro Vivo*.

I – *Allegro Vivo* ♩= *140* (Letter F[23] - L)

Twelve Bar Phrases

For the remainder of the movement, the macro-harmonic range is regulated mathematically in order to build a rigid structural framework. The structure is formed around the six 6-part harmony formed from layered tone rows (see *Fig 11* above) as follows: the notation from chord A is used for twelve bars, this is followed by the notation from chord B, also used for twelve bars; the notation from each of the six chords is used as a macro-harmonic restriction for 12 bars respectively.

The regulated control over pitch served not only to build tension, but also to underpin the structure. The tempo builds in stages alongside the macro-harmonic changes; this also helps to reinforce the build-up of stress levels in the music. The notes of the fourth chord are used from the *poco agitato* marking, the fifth chord at the *un poco più mosso*, and at the sixth chord *più agitato.* During the initial 72 bars of the Allegro, the piano fills the role of an accompanist playing arpeggio quavers using the respective notational macro-harmonies; the metre fluctuates between 3/4 and 6/8 – although on paper the music stays in 3/4; the string pizzicato through this section provides rhythmic dissonance, hinting of 6/8, whilst the melodic line generally reflects 3/4; the increased levels of instability and consequent tension are the result of the fluctuations in metre.

Six Bar Phrases

From letter L, the pitch-set cycle restarts, this time each chord is used for only six bars. The metre is now clearly 6/8 time, and the role of the piano is moving away from accompanist towards that of soloist. At letter P, syncopation from the piano destabilises rhythmic regularity through syncopated shock-chords, before re-establishing rhythmic stability at letter Q. An *accelerando* builds through to the *Presto* at letter R.

Three Bar Phrases

The macro-harmonic area is now reduced to three bars per pitch-set. The time signature is now 3/4, the tempo has increased again, and the prevailing pulse is now one in a bar with three-bar phrases. This pulse rate is similar to that of the slow introduction of the movement. The new-found temporal steadiness and stability provide a point of departure for the final build-up towards the climax and coda.

[23] Rehearsal marks in the score.

Single Bar Phrases

At letter S, the time signature returns to 6/8, at *L'istesso Tempo* the dotted crotchet (compound-time) replaces the simple-time crotchet, so the effective tempo is now faster, and each respective macro-harmonic pitch-set is allocated only one bar.

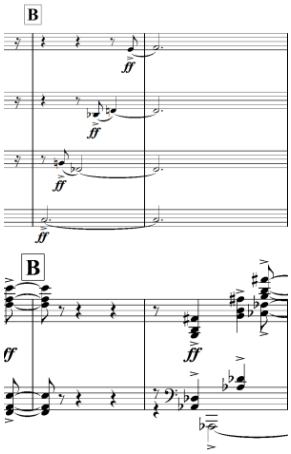
Coda

The three rows are played out on the piano as *fortissimo* accented crotchets, whilst the strings punctuate every 1½ bars with the same six chords. Letter U is marked *Prestissimo*; the piano restates the six chords in reverse, whilst the string players play sporadic bursts of quavers in groups of 6, 3, 2, and single notes as the dynamic recedes to *pianissimo*. The rapid temporal and dynamic regression diffuses the tension, and the movement closes quietly.

2. *Piano Quintet: II. Adagio ♩= 66*

Structural comparisons

The mathematical approach to structure of the first movement does not continue into the central slow movement. The second movement does make use of the twelve triads and the six six-part chords, but in a less structured way. The overall dynamic pattern of the *Adagio* is the reverse of that of the first movement: the music builds over six bars to reach an early climax (at letter B), the dynamic plateau lasts for six bars before receding into a calm which lasts for the remainder of the movement; this was a deliberate approach designed to give an extensive period of lull between the concentrated activity of the first and final movements.



Analysis

The piano opens by quietly and slowly playing all the notes of the six-part chord A spread over seven octaves (see *Fig 11*). The strings then enter as two duets: the two violins playing rhythmic unison (rows 1 and 3), and the viola and cello playing likewise (row 2).

Rhythmic and dynamic growth start from rehearsal mark A and progress through to the climax at letter B. The full ensemble reaches *forte* four bars before letter B, and two bars later the crescendo builds to *fortissimo.* The three pairs of bars between B and C are an exposure of the three tone rows in a similar presentation to the opening of the first movement.

Fig 12: Letter B showing the first tone row at the point of climax.

At letter C (*see Fig 11)* the piano plays the 6-part chords whilst the strings play small fragments from the rows: 1st violin (row 1), viola (row 2), 2nd violin (row 3), cello (row 1), 1st violin (row 2), viola, 2nd violin, cello (all row 3). Letter D sees the first *tutti* section since the exposure of rows at letter B. The technique of using fragments to surround a melodic thread features in my larger compositions as an approach to applying "orchestration" as a structural device.

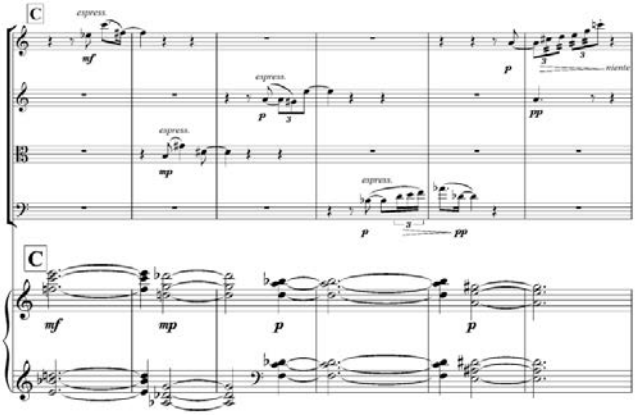


Fig 13: Letter C: sustained piano chords supporting solo fragments from the strings.

The rows weave together contrapuntally, before resolving into harmony at letter E with the final cello solo (see *Fig 14*). The final 6-part chord, in tonal terms can be understood as B major with an added diminished 5th, this is the same chord which closes the quintet. Whilst the strings reiterate this chord, the piano repeats the six central 3-part chords in the highest register. The music concludes quietly.

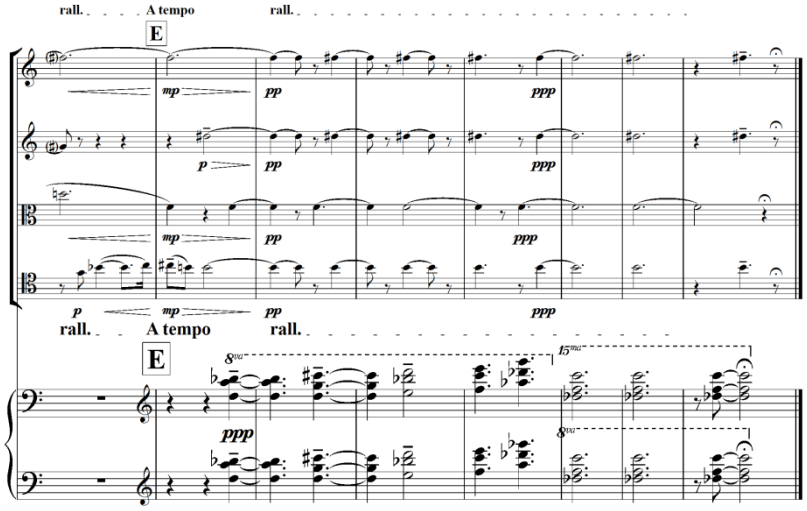


Fig 14: The close of the central slow movement.

The following macro-harmonic plan (*Fig 15)* gives an overall picture of the dynamic structure of the central slow movement:

Rehearsal Marks	***Tension level***	***Orchestration***	***Texture***
Start - A	Lull – respite from first movement.	Piano solo	Contrapuntal
A – B	Transition	Strings, occasional piano chords	Two duets, each duo in rhythmic unison – double counterpoint.
B – C	Climax – high tension.	Climax - Tutti	Layered counterpoint
C – D	Lull	Piano chords – string interjections.	Solo fragments accompanied by piano chords
D – E	Transition/development	5 bars – Tutti; 10 bars varied, never tutti	Layered counterpoint
E - End	Lull	Tutti	Chordal with slightly displaced movement.

Fig 15: A macro-harmonic plan of the slow movement of the Piano Quintet*.*

3. Piano Quintet: III. Andante ♩ = 72 – Allegro Vivace ♩ = 144

In the final movement the role of the pianist continues to evolve towards that of a concerto soloist. The piano opens this movement playing the triadic row in a *meccanico* style whilst the strings re-expose all three individual rows. At letter F, piano has its first substantial solo section before the strings re-enter at the transition to *Allegro vivace* at letter H.

From letter H to J, the music is structured in small three to six note cells, which are constructed from respective rows in the piano part, but by free composition in the string parts. The added accents within these cells vary to cause erratic stresses and consequent tension. The result is a strong sense of rhythmic drive with the strings working in response to piano statements.

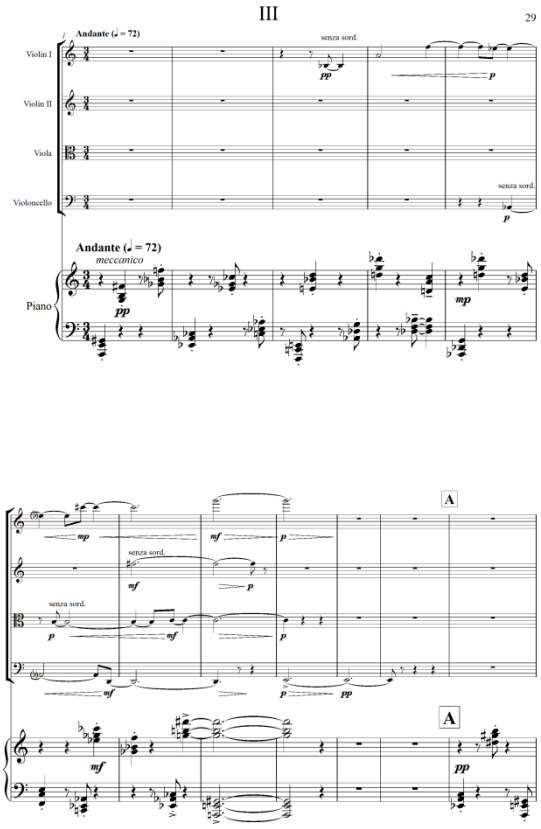


Fig 16: Start of the third movement. Note the meccanico *chords which recur at Letter O.*

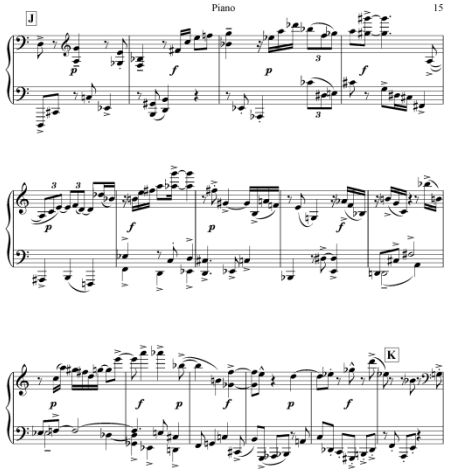
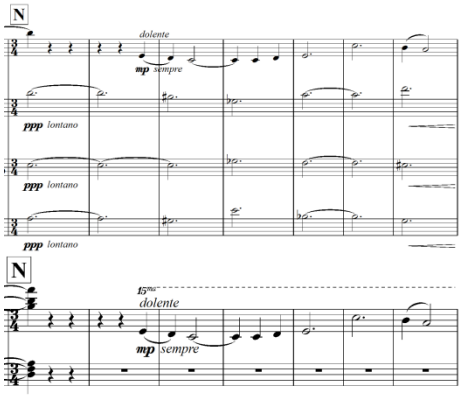


Fig 17: Letter J: the piano, active as soloist.

The piano solo between letters J and K has been created through free composition. As the roles of pianist and strings have become more distinct, the approach to composition has become less restrictive: the structure has become less defined, the harmonic and melodic freedom has increased, and consequently, the melodic language has become 'colourful' through chromaticism. As equality of pitch decreases through greater opportunity for repetition; some pitches appear more often, and a consequent sense of hierarchy emerges[24].

[24] The terminology *hierarchy* when related to pitch is chosen guardedly, and does not imply tonality. Merely that some notes crop up more often than others and therefore can be used to give structural direction to melodic, harmonic or rhythmic figures.



The strings enter at letter K and the music now builds through processes of free composition to a climax at N. Letter N is the most evocative point in the piece, introducing a quotation of *My Love is Like a Red, Red Rose* by Rabbie Burns. My late friend Hugh and I used to play the song in a ceilidh band during our time in the Army. Hugh died whilst I was writing this movement, and the idea of using this inherently tonal melody pushing doggedly against a tide of atonality appealed greatly; it seemed like an appropriate metaphor for how Hugh struggled after leaving the Army.

Fig 18: Letter N: 'My Love is like a red, red rose' *by Rabbie Burns.*

The 1st violin and piano play the main tune with the violin playing the lower register, whilst the piano plays two octaves higher, both *mp sempre*. Beneath the tune, the remaining strings use the original three-part chords in various formats as a constant progression of dotted minims in rhythmic dissonance to the melody. The chords start *ppp lontano* and build to a central *ff strepitoso* with reinforcing accents, the *mp sempre* melody being drowned out in the harmonic mêlée. As the chordal elements start to fade, the melody re-emerges, and all components of the music die away to a final *ppp* chord. The final chord is held whilst the piano initiates a recapitulation of the *meccanico* figure that opened the very start of the movement.

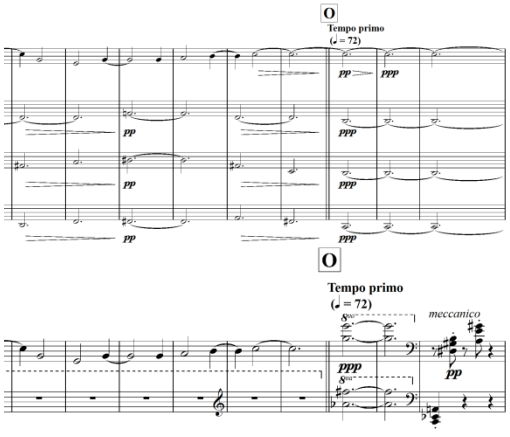
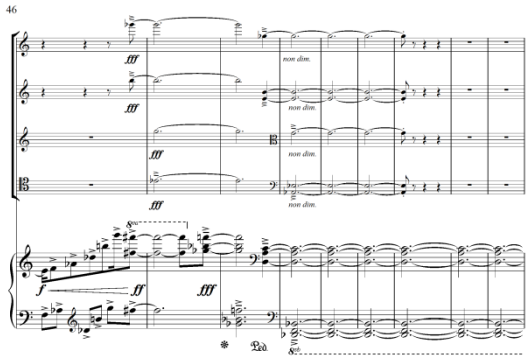
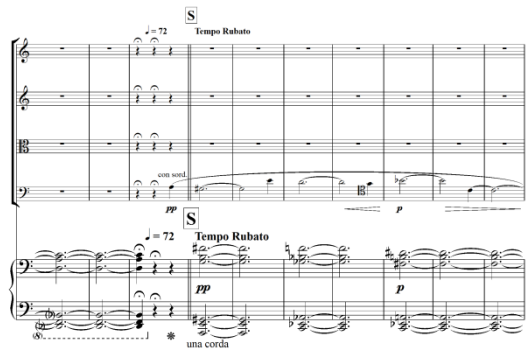


Fig 19: Close of Burns' song, return to the meccanico *figure in the piano*



Over the second playing of the *meccanico* figure at letter O I have made another reference to the Burns melody; this time, it disintegrates into a transitional passage which builds in rhythmic impetus, tempo and volume, right up to the Presto passage at letter Q. This is the final quick section of the piece; it contains references to material from all three movements, and heads towards a close on the final climax. The paused *fff* chord should be allowed to sustain for a considerable amount of time.



As the sound and tension dissipate, the slow, reflective, peaceful coda of the Quintet opens with a cello solo (Letter S, Tempo Rubato). A viola solo, a violin duet, and finally all instruments come together to rest on the final chord: *ppp dim. al niente*.

Fig 20: Final climax, dissipation of sound and tension, and start of coda.

Summary

The *Piano Quintet* was the first multi-instrumental piece composed for this portfolio. The main point of interest for me in writing the *Piano Quintet* was structural design; the opening movement being a rigid mathematical structure that gradually unravels through the second and third movements, to the final point of climax, where free composition predominates. I made a decision from the start of composition of the first movement to focus on controlling the pace of growth through a rhythmic structure based on a formula of organised divisions of music, which constantly decreased in duration. Having completed the first movement, it became clear that to approach the construction of all three movements in this way would only serve to create an undesirable pattern of predictability. The overall structural balance of the *Piano Quintet* was achieved through allowing increasing compositional freedom through the second and third movements. Divergence from the rigidity of the first movement was gained through gradually breaking down the elements which established the parameters of the opening movement: phrase lengths and structural section durations become increasingly flexible; I adhered to the pitch restrictions less, introducing sections of free, intuitive composition based on material developed from the more structured sections.

An outcome of this approach was a growing focus on the evolution of the roles of the respective instruments: over the span of the three movements, the role of the piano changes from one of accompanist essentially providing harmonic rhythm through broken chords, to concertante soloist by the final climax of the last movement. Substantial piano solos start at the opening of the slow movement, then feature at key structural points in the final movement. The solos are intended to sound improvisatory in nature, and the string role becomes subordinate, punctuating the piano solos.

Examples of the piano's concertante in role can be seen at the following rehearsal marks in the score: letters F – H, J – K, M – N.

Jeremy Begbie states that: 'wherever it happens, from the small-scale phrase all the way up to the shaping of an entire piece, maintaining the 'not yet' of resolution through delayed gratification is generally reckoned to be one of the crucial skills to be learned by any composer. Be it rock song or symphony, ballet score or ballad, a huge amount depends on learning to fashion the dynamic space between tensions and delayed resolutions in ways that are coherent enough to sustain expectation and yet interesting enough to sustain attention.[25]' This view as formulated by Jeremy Begbie in his 2008 publication "*Music, Theology and Time*" has been of great influence in the composition of this and other works.

[25] Begbie, Jeremy, *Theology, Music and Time* (Cambridge: Cambridge University Press, 2008): 100

4. *Origins* for Wind Band

(Total Duration: 11'10'')

Instrumentation

Through experience in military bands, establishing the scoring is an initial issue when writing for a wind band. There is no definitive instrumentation for the wind band. Wind orchestras, symphonic wind bands, wind bands and wind ensembles all vary extensively in scope of ensemble, and poor decisions can easily be made as to whether a selected work provides the appropriate scoring for a specific band.

My choice of scoring in the case of *Origins* was a simple one: the piece is written for wind band, that is, one or two players per part. When *Origins* was rehearsed by a large symphonic band[26], the instrumental balance and ensemble lacked clarity and rhythmic focus, the accuracy of the performance was hampered by too many players. When the piece was rehearsed by a standard British military band of 35 musicians[27] (generally, one player to each part) the balance of orchestration and dynamics was much clearer and more defined – as the piece was conceived. Use of a smaller, more focussed ensemble gave greater scope for effectively writing for solo instrument and chamber-ensemble-like textures within the band setting; this is a reoccurring aspect of my writing, and is an approach I enjoy.

Resources

Origins was composed shortly after *Piano Quintet* was completed. Having decided to use the same three twelve-tone rows in both pieces, there were many options open as how to recycle these resources whilst still managing to produce an entirely different composition. Comparison of the analysis of Origins with that of the preceding work is advantageous, if only to highlight similarities, diversity and compositional progression.

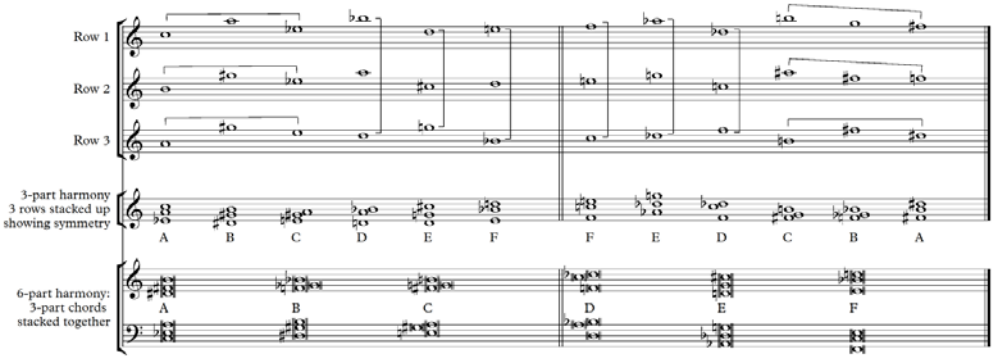


Fig 21: Process of forming harmony through stacking of three tone rows.

Using the same basic procedure in this piece as with the *Piano* Quintet, I superimposed the three rows on top of each other to produce twelve triads, and then added pairs of chords together to form six-part harmony. My treatment of the first three and the final three triads was sufficiently different (see *Fig 11)* to give departure from the harmonic structure of the *Piano Quintet*.[28] Despite the slight differences, the unintentional symmetry was still present in the triads.

[26] 'New Scores' Workshop held on 13 January 2013, organised by BASBWE, run by Phillip Sparke and Peter Meechan, and performed by Derbyshire City & County Youth Wind Band.
[27] Rehearsed by the Heavy Cavalry and Cambrai Band at their facilities in Catterick, North Yorkshire, on 23rd January 2013.
[28] I have labelled the chords A – F respectively; this has no bearing on any tonal name for the chord.

In addition to the twelve-tone rows, I also created a 12-note rhythmic row[29] (with its own inversion). Having constructed the row in small motivic subsections, the rhythmic row gave me scope for growth and development.

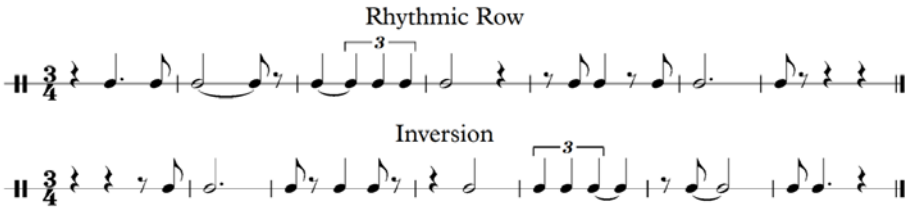


Fig 22: Twelve-note rhythmic row with its inversion.

Although I created the rhythmic row intuitively, I designed it in two, three or four note segments to give obvious opportunity for motivic use. All areas of the piece use these elements in the original position, augmentation, or diminution.

The following compositional resources are used in this piece:

1. Three twelve-tone rows; each with the forty-eight possibilities of Prime, Retrograde, Inversion and Retrograde Inversion.
2. A set of twelve triads (used together as a chorale) with possibilities of inversion, suspension, etc.
3. A six-part progression consisting of six chords, again with the possibilities of inversion, suspension, etc.
4. A twelve-note rhythmic row in conjunction with the above three resources.

As all of the above numbers are divisible by three, this number is a common link between the various resources. It features as a numerical/structural device within the piece, e.g.: there are three presentations of a particular feature, triplet patterns, three-note motifs, etc.

Rows & Motifs

The long unbroken melodic lines in the piece are generally complete twelve-tone rows. These rows are left relatively undeveloped and used as structural themes; for example, row 1 has three complete exposures: firstly, by a clarinet in the slow introduction; secondly, by a bassoon in the central slow section; and finally, by a trombone in the closing bars of the piece. Furthermore, the orchestration of these rows does not alter during the course of each exposure. The smaller fragmented phrases surrounding the melodic lines are the aspects that are open to growth and development. In their smallest, most basic forms these motivic elements are usually only three or four notes long, and display features from the tone rows; however, these are the unstable elements which are given the maximum amount of room for expansion. The principle is that the longer static phrases give stability, and these are progressively destabilised by smaller developing cellular growths.

Comparison

The first movement of the *Piano Quintet* is founded on progressive structural compression; subsequent degradation of the structure through the second and third movements results in growing creative freedom and consequent thematic expansion. *Origins* progresses in an entirely different manner: the music is mostly through-composed. This free method of composition allows

[29] Looking back, this was a positive development in my own progress as a composer: the final movement of *Passing Through Three Points* involves isorhythm (i.e. the mediaeval technique of pairing unequal sets of rhythms and pitches).

abundant scope for motivic expansion and *Origins* expands at an irregular rate, through development on a cellular, motivic and phraseological level.

In the *Piano Quintet,* the texture of the music and the textural role of the respective instruments evolve in a gradual and controlled manner. The textures in *Origins* evolve through expansion and contraction of the phrases and the spontaneous dynamic shape of the music. Structure is fundamental to the *Piano Quintet*; whereas *Origins* is much more rhapsodic and free in its nature.

An Analysis

Structure: Tempo Relationships

The table below gives a macro-harmonic view of the large-scale structure of *Origins*. The piece follows a structural pattern of building and releasing rhythmic intensity, expansion of orchestral dynamic and tempo to a cadential climax before releasing the dynamic tension and starting a new section at a slightly quicker tempo. The music should have the feeling of moving to the next 'logical' temporal stage[30].

Rehearsal Marks	Bar Numbers	Sectional	Textural/Instrumental Observations
START – A	11 Bars	Slow Intro	Percussion only
A – B	29 Bars		Clarinet solo, then flute, oboe, cornet, horn, saxophone.
B – C	18 Bars	67 Bars	Trumpet solo, brass sustained chords leading to Chorale.
C – D	9 Bars		Brass sustain; development towards rhythmic/tone row.
D – E	14 Bars	First quick section	Stage 1: Thin texture, flute/oboe/horn soli + stacc chords.
E – F	8 Bars	60 Bars	Stage 2: Texture slightly broader, increased use of triplets
F – G	11 Bars		Stage 3: Growth of rhythmic intensity more focussed.
G – H	18 Bars		Stage 4: Clarinet semiquaver ostinato; rhythmic growth.
H – I	9 Bars		Row re-exposed as melodic figure: bassoon + low brass.
I – J	18 Bars	Central slow section	First climax; alternation between *tutti* and solos. *ff - pp*
J – K	17 Bars		Counterpoint: 3 rows. Central cross 3rd bar.
K – L	16 Bars	51 Bars	Bassoon solo: row 1. Percussion accompaniment.
L – M	15 Bars	Second quick section	Growth from solo bassoon to full band over 15 bars.
M – N	12 Bars		All rows in sustained harmony on augmented rhythmic row.
N – O	15 Bars	42 Bars	Build to final climax. Intense rhythmic activity. Full band.
O – P	24 Bars	Slow coda	Sustained chords, quieter. Chorale in brass. Less rhythm.
P – Q	12 bars	71 Bars	Row 1 in three sections. Heartbeat in the background.
Q – END	35 Bars		Heartbeat continues, trombone solo row 1.

Fig 23: Macro-rhythmic analysis of Origins *illustrating the rhythmic structure of the piece.*

Section 1: From nothing to full ensemble. *Lento ♩= 52*

The first eleven bars are played by percussion before the 1st clarinet enters with the initial exposition of row 1. Through the eighteen bars leading to letter B, 1st horn, 1st cornet, 1st trumpet, 1st trombone and tenor saxophone, in turn, play fragments of rows one and two in prime and retrograde forms accompanying the upper woodwind. In addition to being of structural importance, these fragments are demonstrative of my interest in writing for small groups of soloists within a

[30] This progressive development is also used in the *Piano Quintet* where it is much more mathematically structured and less rhapsodic.

larger ensemble. This technique is applied throughout this composition, as well as in *Passing Through Three Points.*

From letter C through to three bars before D, cornets and trumpets play ostinato patterns of three quavers. Triplets and three-note cells are a feature of the rhythmic row that also occurs in rhythmic motifs and patterns throughout the piece. The three bars leading to letter D feature the tubas, euphonium, trombones and bassoon playing the complete row 3 using the rhythmic row in a rhythmically compressed form. Rows one and three are played in full by 1st clarinet and 2nd horn (row 1 in octaves), and flute and 1st horn (row 3 in octaves) all using the rhythmic row.

Chorale

Throughout the introduction, the music builds towards a full presentation of the rhythmic row in the seven bars leading to letter C: the horns, trombones and tuba play the three twelve-tone rows superimposed over each other to form a chorale. Within this chorale passage some of the pitches have been adjusted between the voices to address part-writing issues. The chorale occurs again during the recapitulation.

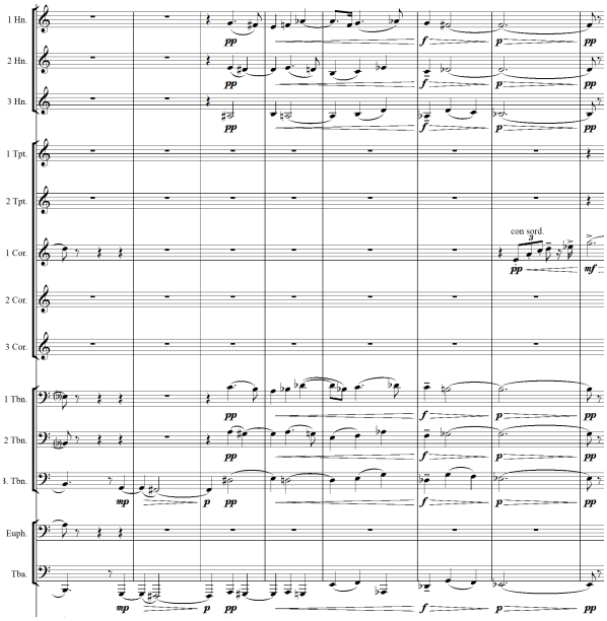


Fig 24: The three-part chorale exposed for the first time

Section 2: *Doppio Movemento ♩= 104 (Letter D – I)*

The *Lento* introduction (the exposition) changes to the *Doppio Movemento* at letter D in the score (see *Fig 25*). Apart from the texture becoming less dense, no change in pulse or tempo should be evident during performance. The section from letter D to letter I features growth and acceleration in staged levels of intensity, as alluded to in the introduction (see *Fig 23*). The process of reducing the intensity whilst increasing the tempo evokes the perception of a structure with varying lengths, leading to the first major climax at letter I. The score excerpt below shows the passage from E through to G, illustrating levels 2 – 4, described below.

- *Stage 1: Letter D*

  The first stage of activity shows a relatively moderate level of rhythmic activity. The motivic figures fluctuate between patterns of stress and lull throughout the passage. The tempo varies through *Più mosso, Meno Mosso and poco accel* through the six bars leading to letter E. The overall result is one of instability.

- *Stage 2: Letter E*
  At letter E the tempo lifts to *Tempo più mosso ♩= 112.* There is a greater density of contrapuntal lines, and a higher level of rhythmic activity. A *martellato* triplet before rehearsal mark F constitutes a cadential motif which will gain importance as the music evolves.

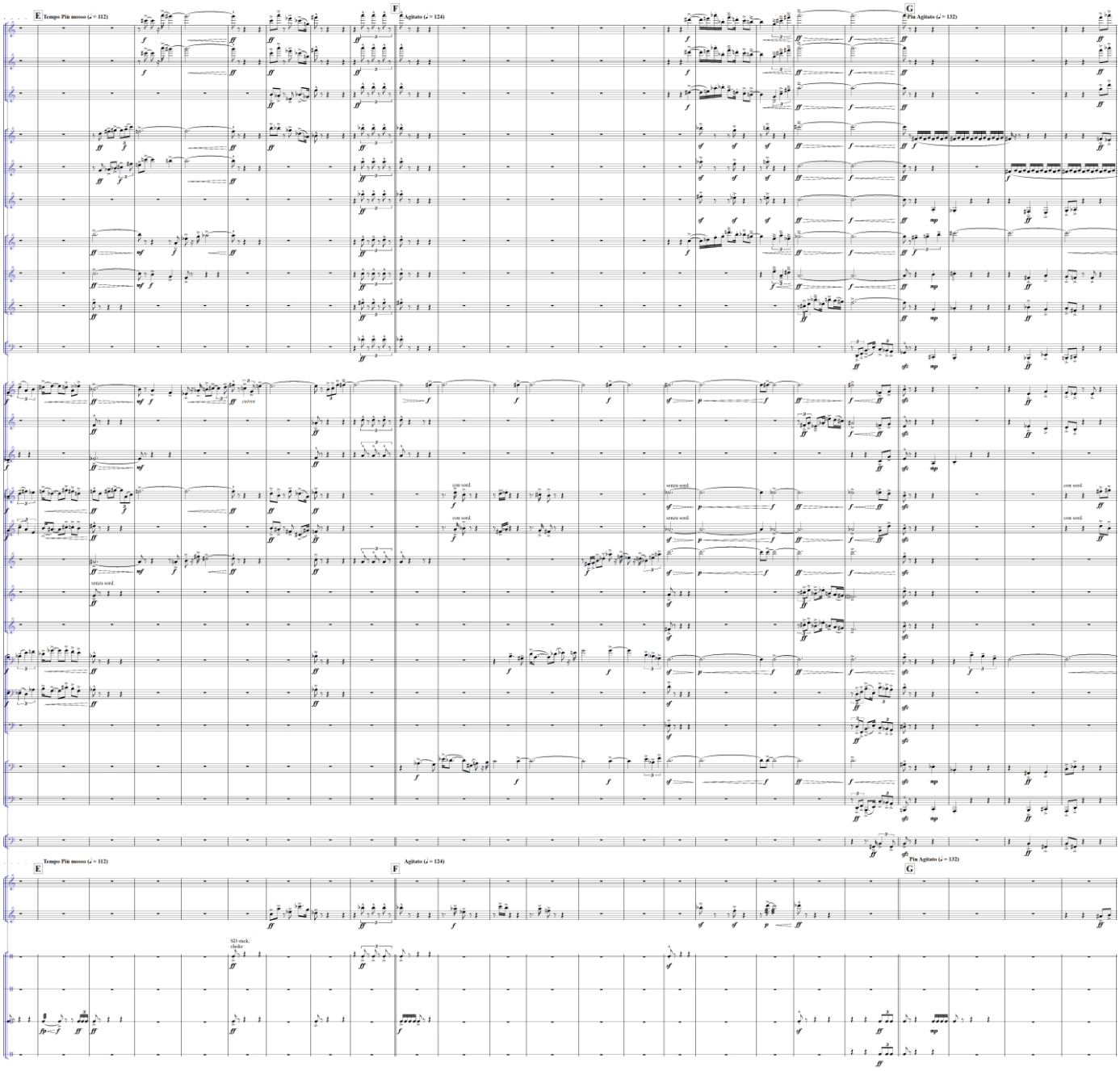


Fig 25: Illustrating levels of temporal change: Level 2 (letter E), Level 3 (letter F) and Level 4 (letter G).

- *Stage 3: Letter F*

The new tempo at letter F is marked *Agitato ♩= 124.* Rows one and three are used both melodically (fully) and motivically (fragmented). The euphonium and 1st trombone play row 3 and row 1 in a canonic setting before the 1st cornet plays a rhythmically expanded inversion of row 3. Additional rhythmic interjections of accented two-note motifs are heard in trumpets.

- *Stage 4: Letter G*

A semiquaver ostinato pattern of repeated semitones in the 1st and 2nd clarinet parts provides a structural thread from letter G to letter H. The tempo marking here is (*Più Agitato ♩= 132).* The dovetailed semiquaver thread in the clarinet parts provides rhythmic stability for the syncopated tutti chords which articulate the three twelve-tone rows in various melodic guises, played by 1st trombone, 1st horn, and 1st trumpet respectively.

- *Stage 5: Letter H*

Letter H is marked *Un Poco Più Agitato ♩= 136*. The 6/8 passage leading to the double bar is of a transitional nature in that rhythmic repetition is used to build to the climax at I. The repeats are four-note semiquaver motifs in the woodwind (originating from the clarinet thread in the previous passage), punctuated by accented chords in tenor saxophone, bassoon and lower brass. One and a half bars before letter I, *tutti fortissimo* chords in rhythmic unison establish the first climax of the piece. The final stages of the transition to this climax are shown in *Fig 26.*

<u>Section 3: *Largamente ♩= 78*</u>
<u>*(Letter I - L)*</u>

This passage of consists of three sections which constitute a slow central movement of 50 bars; the flanking sections are 127 bars and 113 bars retrospectively, meaning that the balance of the piece is almost even.

From letter I to letter K the music slows down by stages, returning to 52 beats per minute, the initial tempo of the piece. The clarinet solo from nine bars before J through to letter K, is supported by sustained harmonies. All the instruments used in these chords are playing in their lowest registers, resulting in a dense, rich organ-like timbre. This passage leads to the unaccompanied bassoon solo at letter K, and creating contrasts with the high woodwind counterpoint at letter L.

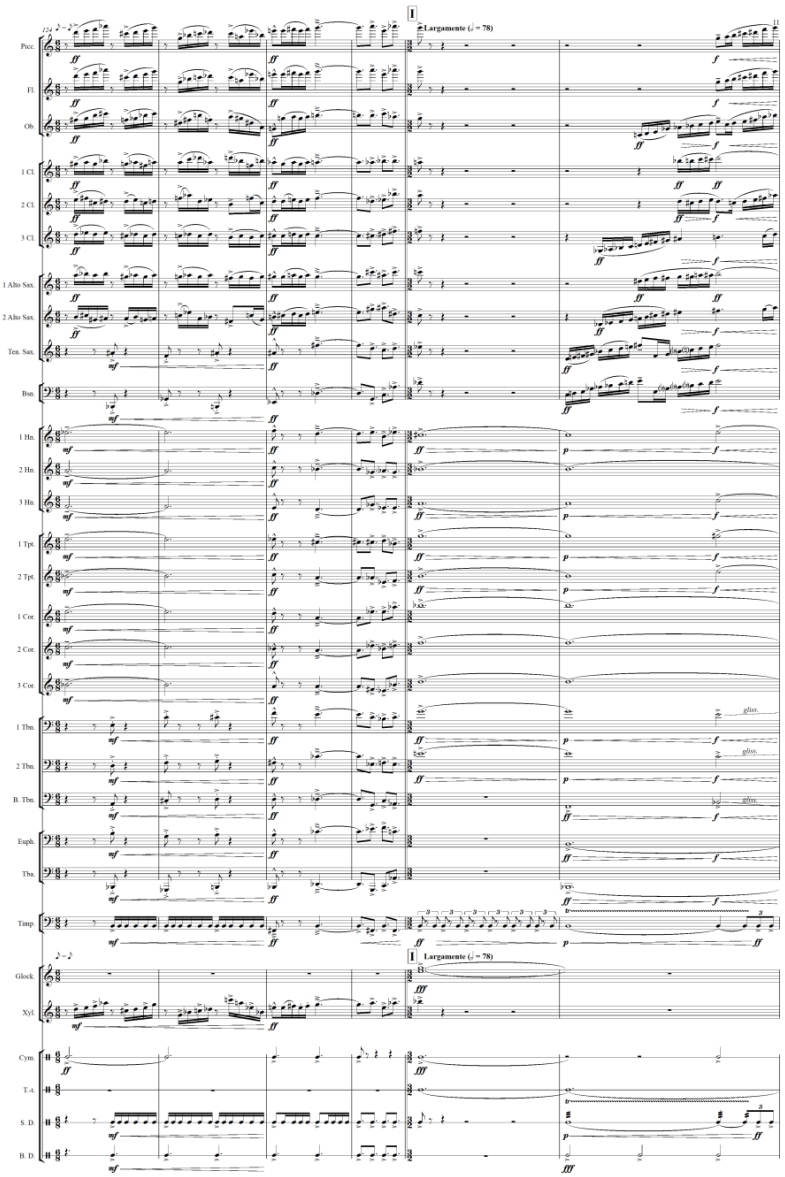


Fig 26: Transition from the quick first section through to the first climax at rehearsal mark I, and the subsequent dissipation for tension ready for the slow central movement.

From letter I to letter J (*Meno mosso ♩= 66)* the music slows down in stages, in opposition to the staged increase of tempo during the previous passage.

The third bar of J is the midpoint of *Origins*, after which, a trumpet and trombone duet based on rows one and three appears. The duet culminates in a cadence point exploiting the same deep rich instrumental timbres as used prior to letter J. A reiteration of row 1 emerges from the final dying chord of the cadence, starting with a sustained note in the 1st bassoon, accompanied by quiet percussion. The timbre of the bassoon in its highest register is one that I had particularly wanted to use in a solo role; the unaccompanied central section proved to be the ideal point for this[31]. The accompanying percussion is organised into three-note and four-note cells, i.e. in a more structured format than the percussion accompaniment of the solo clarinet opening. The final sustained note bridges the gap between the slow central section and the final Allegro Molto at letter N.

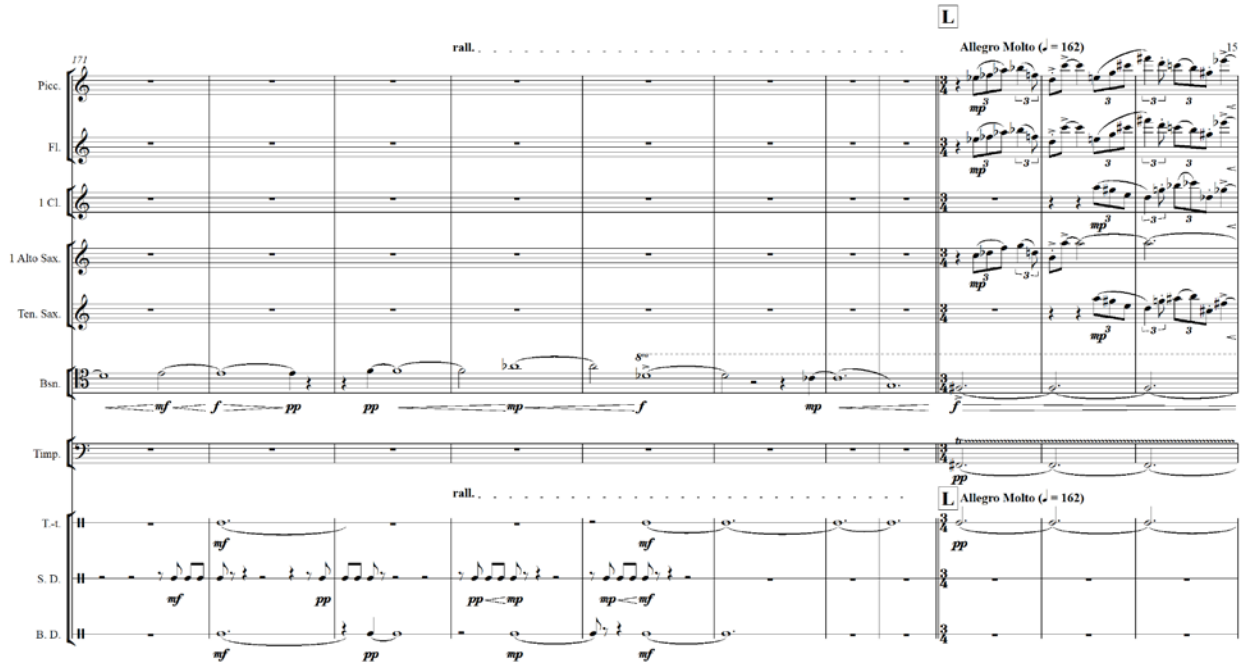


Fig 29: The end of the bassoon solo leading into the final section of Origins. *Note the four-not cells in the percussion, and the timpani supporting the bassoon F# at letter L.*

Section 4: *Allegro Molto ♩= 162 (Letter L - O)* - Transition to final climax:

The final note of the bassoon's solo is a sustained F# taken over by timpani rolling quietly at the same pitch. The *Allegro molto* at letter L deliberately starts out very sparsely orchestrated, thus allowing growth and development from nearly nothing. The rolling pedal played by the timpani supports a contrapuntal *scherzando* triplet quaver figure played by woodwind solo lines.

The accompaniment figure marked *alla pizzicato* at letter M consists of staccato quaver repetitions of all three rows. These repetitions support an extended sustained passage, again using all three rows in a chorale style. This twelve-bar passage is a transitory period of stability, moving towards letters N and O. Three bars before letter O, the final climax of the piece occurs. The contrapuntal section at letter N employs most of the band playing *fortissimo.* The music is simultaneously fragmented and concentrated, and involves all twelve-tone rows and fragments of the rhythmic row.

[31] The obvious inspiration being the high-register bassoon solo opening *Le Sacre de Printemps*. There are many examples on *YouTube* of players demonstrating the strength of the bassoon's *altissimo* register exceeding the C which opens Stravinsky's masterpiece by a full octave.

In the seven bars leading to letter O, triplets and duplets alternate. The resulting ostinato pattern is a mere five quavers long, forming a rhythmic dissonance against the natural accent of the metre. Repeated three times, the five-quaver pattern creates a strong sense of instability and expectation prior to the climax. Rhythmic stability is restored four bars prior to letter O through a single bar of accented quavers, my intention being to regain the focus necessary to reinforce the climax in the following bar.

Section 5: Climax and Coda

The climax of the piece is a presentation of the four-note pattern (a triplet plus one crotchet), heavily accented in rhythmic unison by brass and snare drum. Out of the final triplet emerges the new 'heartbeat' motif played by timpani. This ostinato figure now persists, barely audibly, until the end of the piece. Creating a sense of expectation over the final 78 bars, the heartbeat motif is the thread of consistency throughout this section.

The final presentation of the 6-part harmony is played as a seven-bar phrase over the ostinato heartbeat motif; then follows the final playing of the 3-part harmony. Row 2 is played for the final time fragmented into three, in flute and alto saxophone, followed by piccolo, 1st clarinet and 1st trumpet, and finally in the oboe and bassoon.

The opening theme, as played by the 1st clarinet, and later repeated later by a solo bassoon at letter K, is now heard in 1st trombone at letter Q, to close the piece.

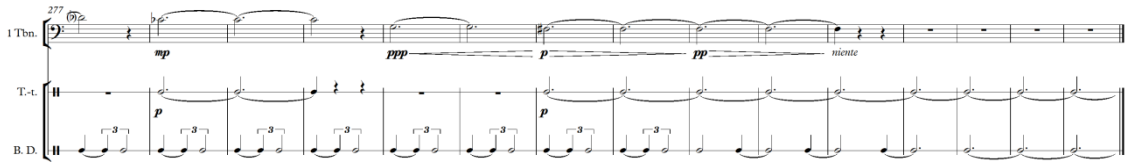


Fig 29: The final bars of Origins *for* Wind Band.

The final bars of the piece are shown in *Fig 29.* All three exposures of the row have been underpinned by percussion: the percussion accompaniment to the first playing appears to be random in nature; the second (central) playing is supported by three-note and four-note patterns; the third and final playing by the trombone is accompanied by the more sinister ostinato heartbeat motif, bringing about the feeling that an aspect of the music has changed, evolved or mutated. Without the apparent disorganisation of the first two percussion exposures, the final 'heartbeat' effect would fail to convey its musical impact.

Summary

My approach to composition usually tends to be one of planning around an initial concept, drafting and sketching ideas before going anywhere near manuscript paper. However, when I embarked upon composing *Origins*, I had no intention of creating the same sort of mathematically measured structure as I did with the *Piano Quintet*, or *Dance Suit*e. Free intuitive composition was the primary drive behind the creation of *Origins*. My aim was for the piece to develop out of itself, for the evolution of small motivic elements to drive the growth and movement of the music. Although *Origins* is the only piece in my portfolio that was composed using this approach, I have written other pieces in this way since completing my student compositions[32].

[32] *Four Haiku* for soprano and chamber ensemble was composed 'intuitively' in early 2014. Again, this piece met my intensions.

5. *Passing Through Three Points*

A Suite for Orchestra

I. Passing Through Streets – Andante
II. Passing Through the Geodesic – Allegro Vivace
III. Passing Through the Origin – Adagio

(Total Duration: 23'41'')

'The true art of orchestration is inseparable from the creative act of composing music.'[33]

Introduction

Passing Through Three Points is a three-movement suite scored for large orchestra. Written directly after *Origins*, my aim was to continue using the same approach to orchestration, my preference being solo lines and small chamber ensembles as a point of departure. As previously alluded to, I believe that the strength of a new concept is in the detail: my initial musical ideas should include characteristics such as phraseology, dynamic variation, and details regarding orchestration.

The suite features techniques that I have used in some of my previous compositions; they are of personal stylistic interest, and are therefore of value to this commentary:

- My interest in rhythm, and my understanding of how other composers have used it, has grown with the development of each new piece. Bartók's techniques of rhythmic-mistuning and metre-breaking which I adopted in *Dance Suite*, and the development of the mathematical framework used in the *Piano Quintet,* have served to draw my focus to the imaginative methods of manipulating rhythm in structure.

- *Dance Suite*, the *Piano Quintet* and *Passing Through Three Points* all make use of macro-harmonic restriction; I have found this technique extremely valuable in reinforcing structure. Through the use of various defined macro-harmonic areas[34], I have found that changes from one zone to another can be experienced and understood by the listener in the same way as tonal modulation might be felt.

- Through the process of orchestrating *Origins* and *Passing Through Three Points,* I have found that using a solo instrument, or a blend of instruments for the full duration of a given melodic structure, provides a thread of stability, continuity of movement, and structural reinforcement. Use of fragmented subordinate elements in counterpoint to the melody/row, serve to increase or reduce instability – as I require.

All three movements of the suite refer to the idea of *'passing through…'* and although this seems on the surface to be the only common ground, the mutual connection is one of musical progress through rhythm and structure[35]. I will begin my analysis by giving some general observations regarding all three movements of the suite; however, the main focus of my attention will come to settle on the final movement of the suite.

[33] Piston, Walter, *Orchestration* (London: Gollancz, 1955): 1
[34] See Ref 14, Page 5 for definition of Macro Harmonic Areas.
[35] Conceiving compositional structures through rhythmic means has become a pervading feature of my compositional thinking since completing *Dance Suite.*

Three Movements – General Observations

Three Component Movements and their Respective Features

The structures of all three movements have their links and differences, and it is pertinent to look at some of these areas briefly before focussing concentrating on an analysis of the final movement.

- *Passing Through Streets*

The title of the first movement is a loose translation and interpretation of the term *passacaglia.* The repeated theme is a twelve-tone row that is used in alternation between exposures of an adapted version of the same theme. The adaption is formed by use of pitch sets referred to as 'tropes'; the tropes are partitioned from the original row (see *Fig 30*).

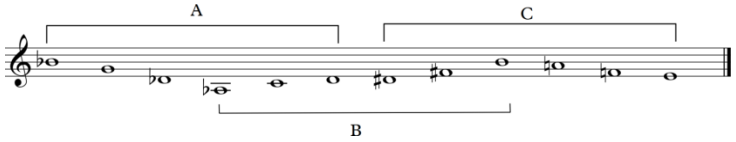


Fig 30: Twelve-tone row forming the basis of the passacaglia theme. Note the row is partitioned into three 'tropes'.

The three six-note 'tropes' (labelled A, B and C in *Fig 30*) occur in the form of episodes of similar construction to the main passacaglia theme (see *Fig 31*). The episodic material is made up of unordered pitch content from each respective trope, used in the manner of Josef Matthias Hauer, as described by George Perle[36]/[37].

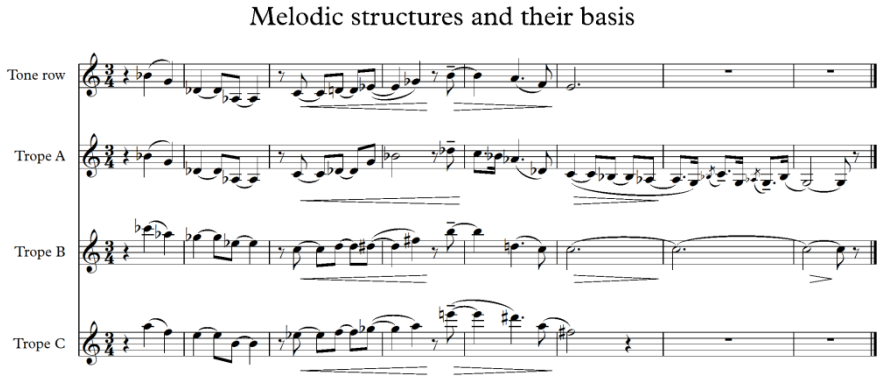


Fig 31: Comparison between the passacaglia theme formed from the twelve-tone row, and the thematic episodes formed from the three respective 'tropes'. The adaptions give opportunity for growth and development of the passacaglia theme.

- *Passing Through the Geodesic*

The second movement is a scherzo. A *geodesic* is a circle or sphere constructed from short straight lines, and the structure of the music reflects this geometrical arrangement through use of fragmented phrases taken from the twelve-tone row of the first movement.

The unequal fragmented phrases result in considerable rhythmic instability, compounded by constantly fluctuating orchestration. *Passing Through the Geodesic* has an overall ternary structure; the central part of which is an extended sustained theme in which each

[36] Perle, Georg, *Twelve-Tone Tonality*, 2nd ed. (Los Angeles: University of California Press, 1996): 3-5
[37] Perle, Georg, *Serial Composition and Atonality, An Introduction to the Music of Schoenberg, Berg and Webern,* 6th ed., rev.(Los Angeles & Oxford: University of California Press, 1991): 5-6

exposure is played on a single instrument, thus creating a transitory sense of stability. This technique is similar to the one used in the first movement, as well as in the preceding piece, *Origins*.

- *Passing Through the Origin*

The final movement is isorhythmic in structure. The balance between the independent qualities of pitch and rhythm, are of great interest to me, and inform this movement. *Passing Through the Origin* is the mathematical term for a straight line that runs through zero at 45 degrees on a graph. The musical significance relates to the Y axis (pitch) and the X axis (note-duration), and the consequence of the 45 degree line demonstrating equality between rhythm and pitch.

Although isorhythmic structuring reached its zenith in the 14th Century, the technique has been re-visited by Alban Berg in *Wozzeck,* and by Olivier Messiaen in his *Quatuor pour la Fin du Temps*. My own use of isorhythm grew out of an interest in using older compositional techniques in newer contexts; and, as identified previously, from an increasing awareness of rhythm and pitch as individual musical entities[38].

***Passing Through the Origin* – An Analysis**

Resources and Structure:

The pitch element of my isorhythmic structure is made up of three independently conceived twelve-tone rows. The first row was intended for use in a clarinet concerto, and started with the six notes running from low G to middle E on the instrument[39]; during the composition of this piece I referred to this row as the 'hexachord row'.

The second row consisted of intervals that I felt would prove to be melodic in nature (mainly thirds, fourths and fifths); I labelled this the 'melodic' row.

The third row was designed as a symmetrical pattern that might have been usefully split into two separate voices: one ascending by semitones, the other descending by semitones. Having submitted this row for discussion, I was advised of its similarity to the main subject from J.S. Bach's Prelude and Fugue in E Minor BWV 548 ('Wedge' Fugue); since then, this row has been referred to as the 'wedge' row. All three rows are shown in *Fig 32.*

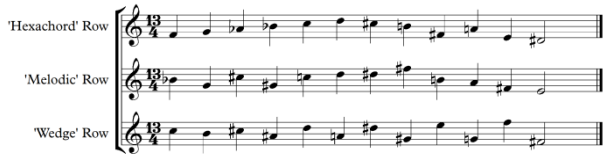


Fig 32: The three tone rows

The rhythmic aspect of my structure is formed from three eight-note rhythmic rows. Each of these rhythmic rows is specifically allocated a tone row (described above). All three rhythmic rows are similar to each other; this was intentional: my feeling was that stark differences between the

[38] It is worth comparing techniques used in *Passing Through Three Points* with those used in *Dance Suite.* Although the two works are entirely different in concept, and are four years apart in composition, the autonomous regulation of rhythm and of pitch are features which define the conception of each piece independently.

[39] My intention with the *Clarinet Concerto* was to create a twelve-tone row around the solo instrument I was writing for, in the same way Alban Berg did with the row he composed for his *Violin Concerto*.

rhythmic rows would prove to be problematic in trying to maintain sense of continuity and development.
The three rhythmic rows are shown in *Fig 33.*

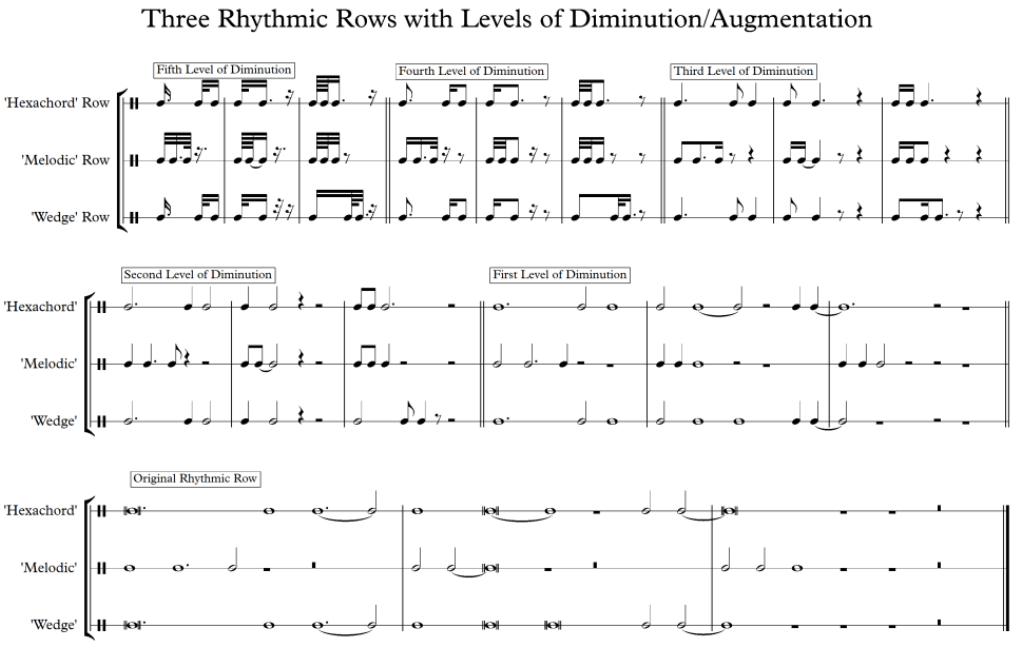


Fig 33: The three rhythmic rows illustrating the levels of rhythmic diminution. N.B. The retrograde presentations are not shown on this example.

Each rhythmic row consists of three note-durations, and for each row I formulated five levels of diminution, and a retrograde presentation. From three original rhythmic rows I created six prime presentations and six retrograde presentations for use in conjunction with the three twelve-tone rows.

Balance of Pitch and Rhythm within an Isorhythmic Structure

Although the tone-rows and the rhythmic rows are used in conjunction with each other, they are absolutely independent entities. As the rhythmic row comes to a close, it moves onto a higher level of diminution despite the fact that the tone row will not have completed. The tone row however must also run to completion, and will run beyond the second completion of the rhythmic row. The final outcome is a presentation of twenty-four notes, this line provides a useful line for use in a melodic or contrapuntal dimension. Within an isorhythmic structure, each repetition of the pitch-set produces rhythmic variation; and each rhythmic repetition produces pitch variation. Use of multiple isorhythmic themes to form a contrapuntal texture results in a complex structure which an uninformed listener would, in all likelihood, only identify as a melody line; this is, for me, the beauty of the design.

Texture and structure

Passing Through the Origin consists of layers of thematic lines. Each successive addition to this contrapuntal texture occurs after either a complete presentation of the previous melodic line, or, more often, at a seemingly random point during the preceding thematic presentation. One reason for random entry is to reduce predictability; in Leonard Meyer's words: 'delays and irregularities are most effective precisely when patterns and shapes are distinct and tangible; for it is then that

expectations of continuation and closure are most clear and unambiguous.[40], Another reason for delayed entries is to influence or manipulate the harmony as required. I will refer to this factor in greater depth in due course.

The flexible approach to texture and structure, outlined above, is an important difference between this orchestral piece and the two piano compositions in my portfolio[41]: in the piano pieces, thematic or motivic material occurs as a result of restrictions imposed on respective pitch-sets. This process requires a higher level of focus on rhythm, and results in cellular groups of stresses and accents of varying intensities. Isorhythm demands use of specified pitch and rhythm sets, therefore resulting in music with a linear, contrapuntal nature. The overall structure of the final movement can be understood clearly through the dynamics of texture and orchestration, rather than through a specific thematic reference. *Fig 34* gives an illustration of the structure of the final movement.

Rehearsal marks	Number of bars	Structural reference	Features
0 – 32	53	String exposition	Contrapuntal string texture established
32 – 39	51	Wind/brass exposition	Introduction of wind/brass solo lines – first climax
39 – 41	13	Transition/codetta	Transition; release of tension after first climax
41 – 48	51	Growth through dynamic/textural change	Expansion of wind/brass lines, change of wind texture; string texture is subordinate – second (main) climax
48 – 50	15	Transition/codetta	Transition; release of tension after first climax
50 - 53	47	Recapitulation/Coda	String texture

Fig 34: An outline of the overall structure of Passing Through the Origin.

- *Opening bars to Rehearsal Mark 32: String Exposition – Textural Formation*

All string instruments are introduced independently, thus establishing a sustained texture over which wind and brass could be deployed, and this sustained texture underpins most of the movement. The strings enter in the following order: violas, 2nd violins, cellos, 1st violins. I have refrained from introducing the instruments according to their range order to increasing the effect of each new entry through variety. The introduction of each new instrument is punctuated by a chord from harps, string bass[42] and percussion, creating a structural 'land-mark'. These 'punctuation chords' expand in breadth in conjunction with the texture. *Fig 35* shows the start of the movement.

[40] Meyer, Leonard, *Emotion and Meaning in Music* (Chicago & London: University of Chicago Press, 1961): 157

[41] *Dance Suite* and the *Piano Quintet.*

[42] Use of pizzicato string basses to punctuate removes them from the linear texture being created by the remaining elements of the string family.

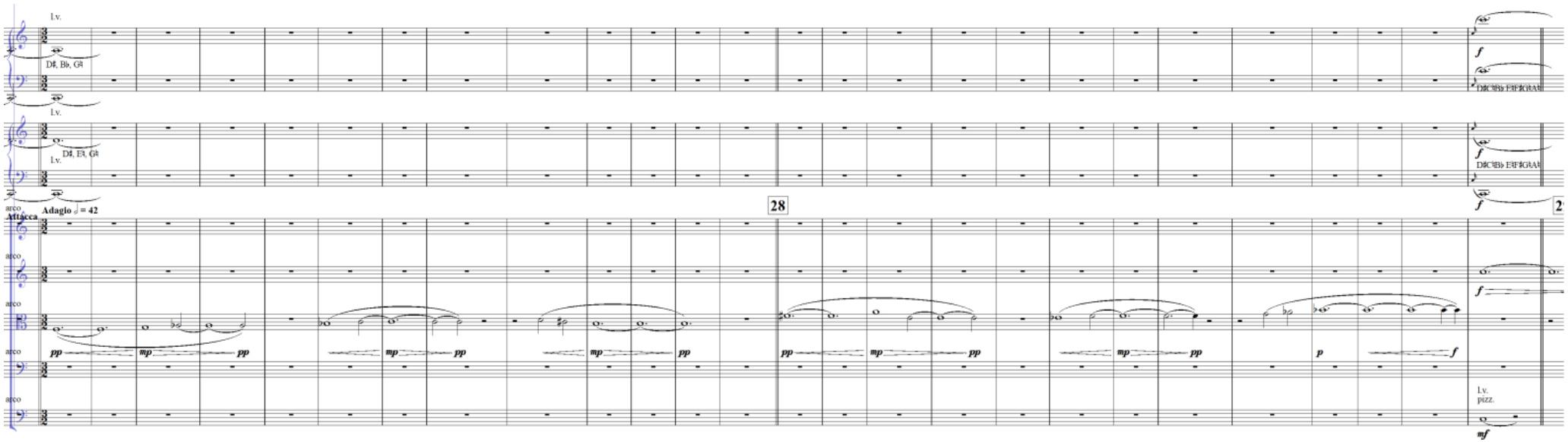


Fig 35: The opening bars of Passing Through the Origin *illustrating the first isorhythmic phrase, played by the violas using of the 'hexachord' tone row in conjunction with the 'hexachord' rhythmic row. The 2nd violins enter after 16 notes (two playings of the rhythmic row, or one and a half playings of the tone-row) in order to manipulate the harmony; the next entry (cellos) occurs after the full presentation (24 notes) by the violas, and 10 notes by the 2nd violins. The final bar of this example also shows phraseological punctuation from the harps and string bass.*

As mentioned above – timed entries, and balance between the individual parts – is occasionally influenced by harmonic possibilities: at certain points, tonal triadic chords have briefly been allowed to occur; when respective pitches coincide to form a tonal chord within an atonal environment, the effect is one of a noticeable aural landmark within the harmonic structure.

Phraseological rhythm is, on occasion, manipulated to facilitate this effect. Examples of this can be seen in the bar before 30 (chord of E flat major), and in the bar before 31 (chord of G major) – see *Fig 36 below*; in both cases, the preceding entry has been manipulated in order to allow the respective chords to sound. This characteristic only occurs in the string exposition, and in the final coda section (chord of F# minor one minim before 53).

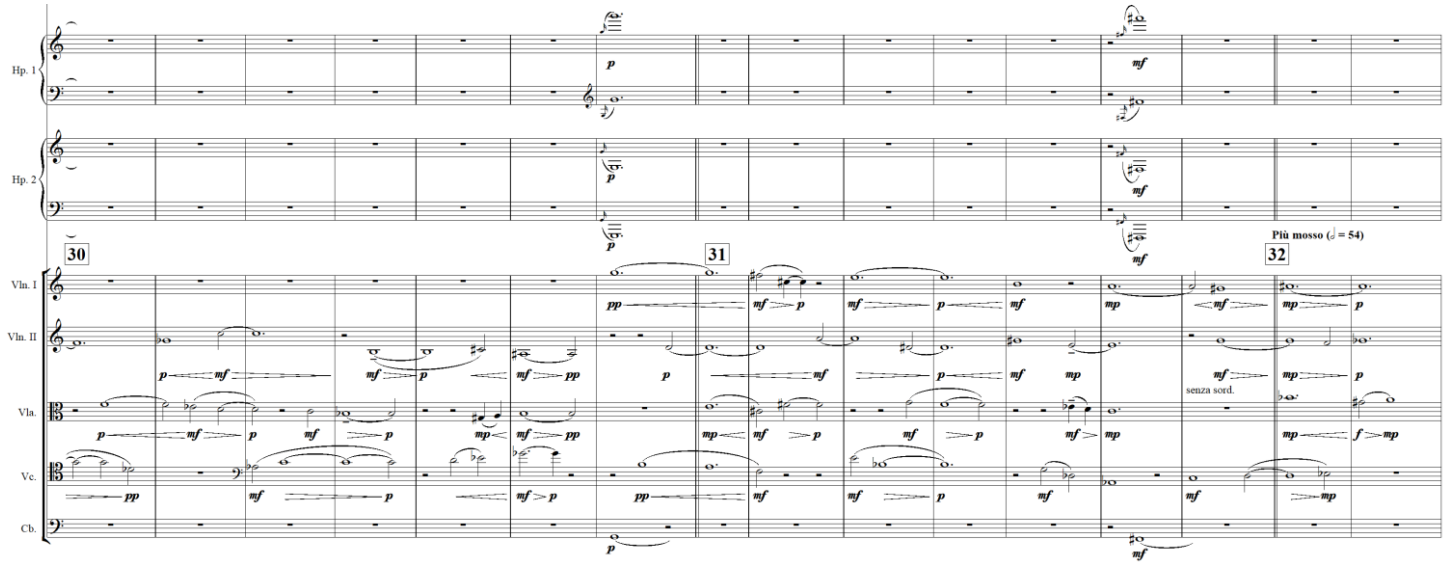


Fig 36: Illustrating dynamic variety between instruments influenced by melodic and rhythmic shape. Note the chord of G major, briefly permitted to sound in the bar before rehearsal mark 31.

My views regarding the balance of pitch and rhythm[43], are relevant within the context of the current analysis. In the two piano compositions, rhythm is given greater prominence; therefore, the music is more percussive and less lyrical. At this point in the orchestral suite, greater importance is given to pitch (to the extent of tonal considerations in some areas) and a lesser focus on rhythmic activity, the consequence is a more obvious level of lyricism.

- *Rehearsal Mark 32: Wind/Brass Exposition – Solo Entries*

My intention for this section of the movement was two-fold: firstly that the homogenous texture of the string section is preserved as a supporting structure; and secondly, to use wind and brass instruments of sufficient diversity of timbre and range to ensure that solo clarity is achieved and maintained. The wind instruments work together as three pairs of duets: horn joined by trombone, oboe joined by flute, and subsequently double bass that is joined by bass trombone.

- *Orchestrated Crescendo*

The progression of entries from the start of the movement institutes a graduated crescendo that reaches the first point of climax at rehearsal mark 39 (see *Fig 37 overleaf)*. The overall shape of the movement, and the position of the point of climax is similar to that of the opening movement of

[43] See Chapter 2, outlining the analysis of *Dance Suite*.

my *Piano Quintet*. The process of building levels of dynamic tension through contrapuntal layering of voices leads inevitably to this point of climax.

From 31 through to 39, the strings progress through various levels of the respective rhythmic rows; and as the orchestral and instrumental dynamics expand in the wind section the rhythmic patterns in the strings become denser and more compressed, thus reinforcing the growth of orchestral dynamic.

- *Rehearsal Mark 39 to 41: Transition*

Having reaching the climax at 39, the orchestral dynamic immediately reduces, leaving a chord played by lower brass and strings; the brass element dwindles, leaving the string chord fading away. The tension dissipates with the decreasing dynamic. Horn and trombone have the densest rhythmic activity at this point, a result of progression through various rhythmic levels due to early entry into the contrapuntal texture by each instrument.

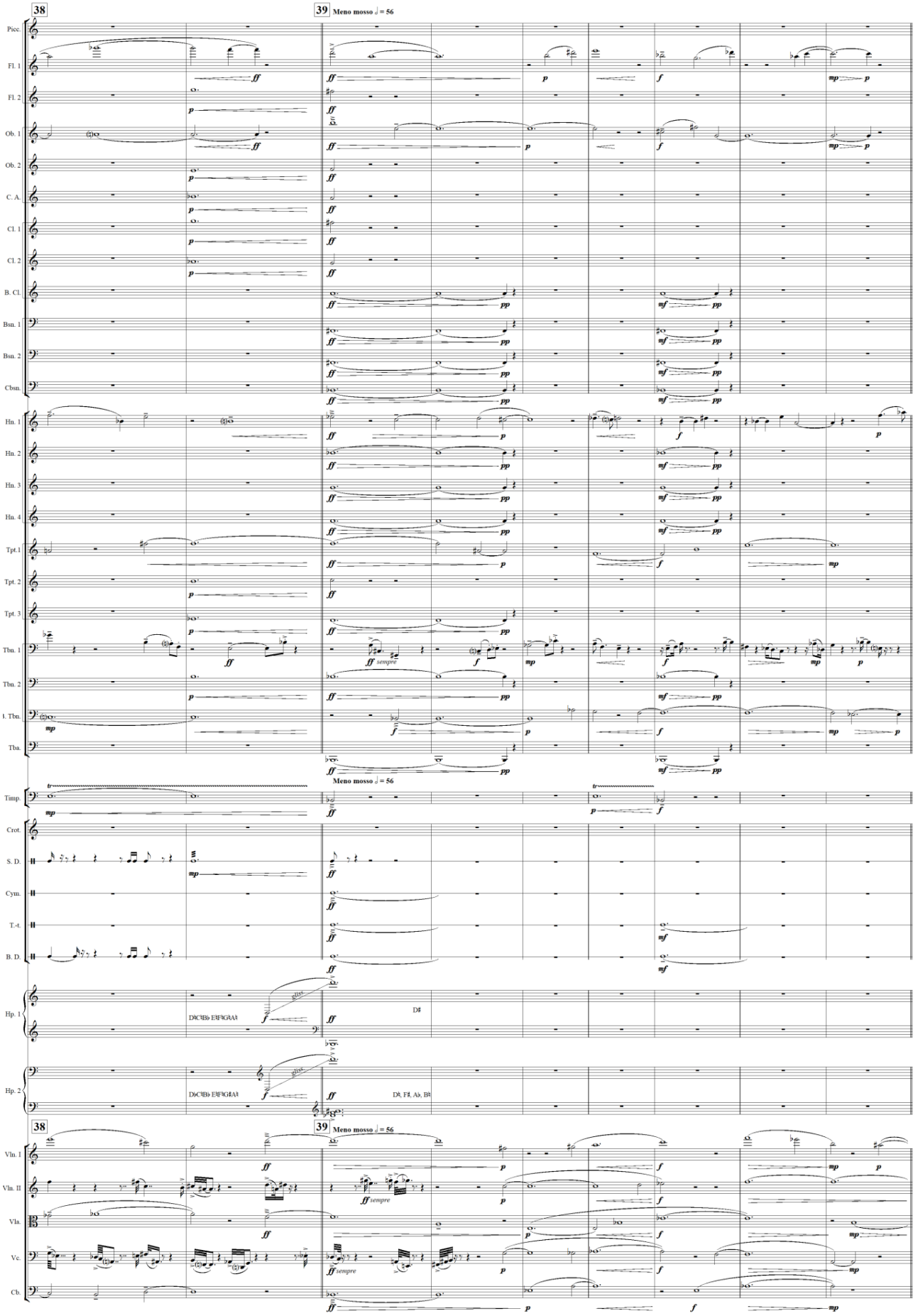


Fig 37: Illustrating the first point of climax at 39. Note the final addition of instruments leading to 39, and the dissipation of tension through decreasing orchestral dynamic and reduced rhythmic activity starting immediately after 39.

- Textural Development

The string texture continues from rehearsal mark 41 through to the climax at 47, and the process of building to a second, more dramatic climax begins. The contrapuntal relationship between solo wind instruments has changed: in general, there is closer integration between wind instruments and between wind-instrumental ensembles.

- Central Section

The process of textural layering from the start of the movement takes a considerable amount of time, and the change of style at rehearsal mark 41 is an important point in the music. The central section concludes at rehearsal mark 47, and returns to the original textural style to finish the suite; it is therefore useful to view the movement as a ternary structure on a large scale.

The central section starts from rehearsal mark 41, and concludes at the main climax of the movement at rehearsal mark 47. At the start of this section, a melody is played by a blend of piccolo, bass clarinet and harps (see *Fig 38 below)*: the extremes of the blend being three octaves apart. There are four points in this movement where a single melodic line predominates: the opening viola line, the horn solo at rehearsal mark 32, the current blended melody, and the final bassoon solo in the coda These elements signify important structural figures: the string exposition, the wind exposition, the development, and the recapitulation.

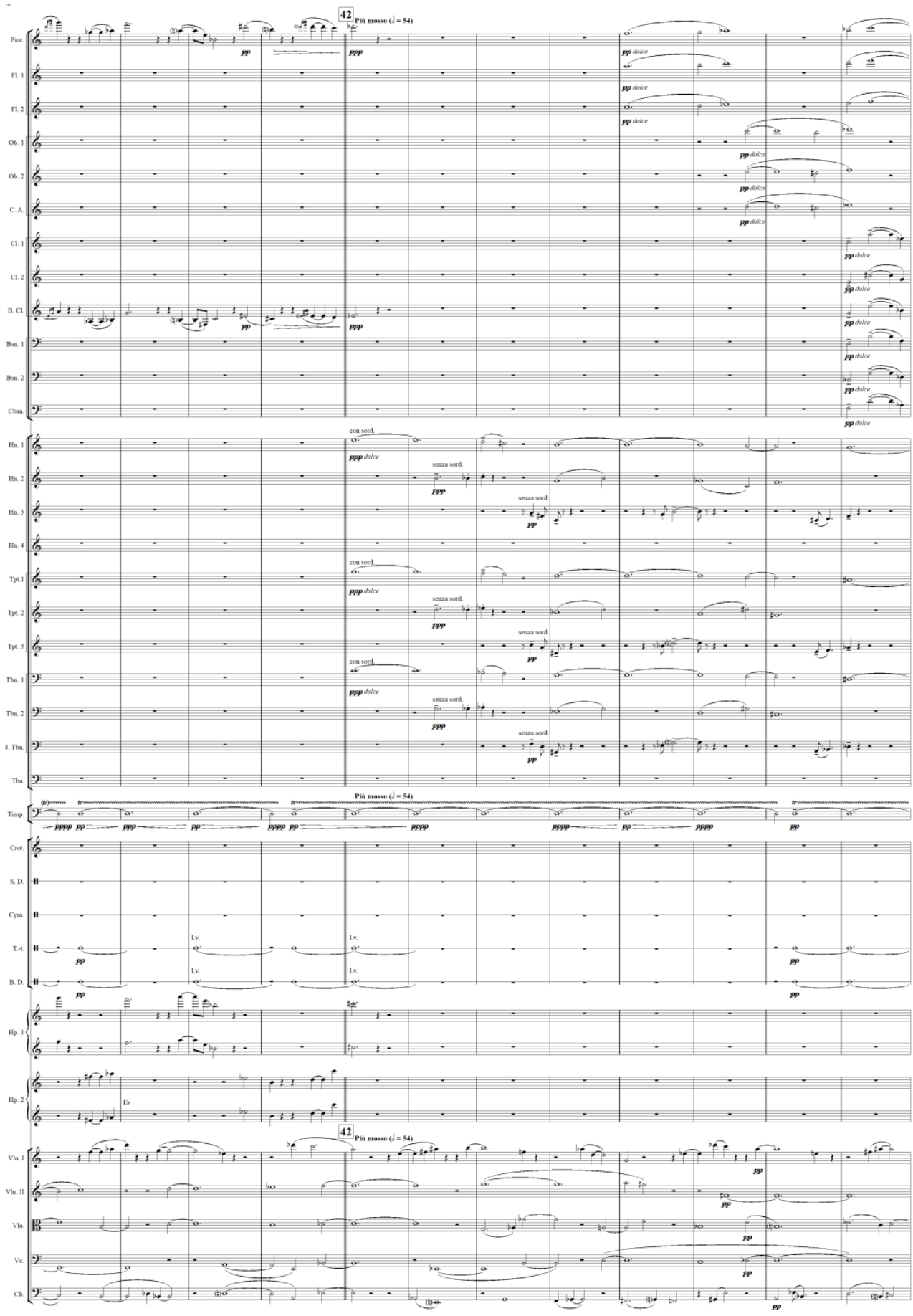


Fig 38: Illustrates the close of the 'blended' melodic structure leading to 42. From 42 the triadic elements can be seen in brass and woodwind. The sustained string texture continues to support the solo wind lines.

From rehearsal mark 42 – 45 the brass and woodwind texture is compressed into harmonised triads: each group consists of a horn, a trumpet and a trombone. The dynamic at this point is extremely quiet, muted in the sustained line (all 1st players) and without mutes in the second and third groups (all 2nd and 3rd players respectively) (see *Fig 38)*.
Each triadic group has been allocated different harmonies[44]; the effect is one of staccato triads creating points of dissonance when blending with sustained consonance. The three woodwind ensembles are configured differently to the brass, the woodwind groups are formed from individual instrumental species, i.e. piccolo/1st flute/2nd flute; 1st oboe/2nd oboe/cor anglais; 1st clarinet/2nd clarinet/bass clarinet together with 1st bassoon/2nd bassoon/contrabassoon. As the texture becomes denser, the harmony becomes less clear.

- Climax

The final climax occurs at rehearsal mark 47 (see *Fig 39 overleaf)*. The tension does not dissipate immediately; the brass, woodwind and percussion maintain the dynamic level of *fortissimo* for seven more bars. At rehearsal mark 48 the volume of the music is reduced to *piano* to facilitate a four-bar long crescendo leading to another climax.

Although this second peak reaches the same dynamic level as the one eleven bars earlier, it has less substance and less structural importance due to the lack of growth in the approach, and the lack of duration upon reaching it; the effect is more of a dynamic fluctuation in the phrasing. After the second climax, the tension subsides almost immediately. The only activity remaining now is a presentation of all three rhythmic rows (24 notes) played by timpani and bass drum, and supported by sustained chords from lower brass and strings; the harmony fades by stages, and the rhythm remains.

[44] The brass and wind writing in this section can be seen as either triads moving in parallel motion, or as identical tone-rows starting on different pitches. The effect is the same, the theoretical approach entirely different.

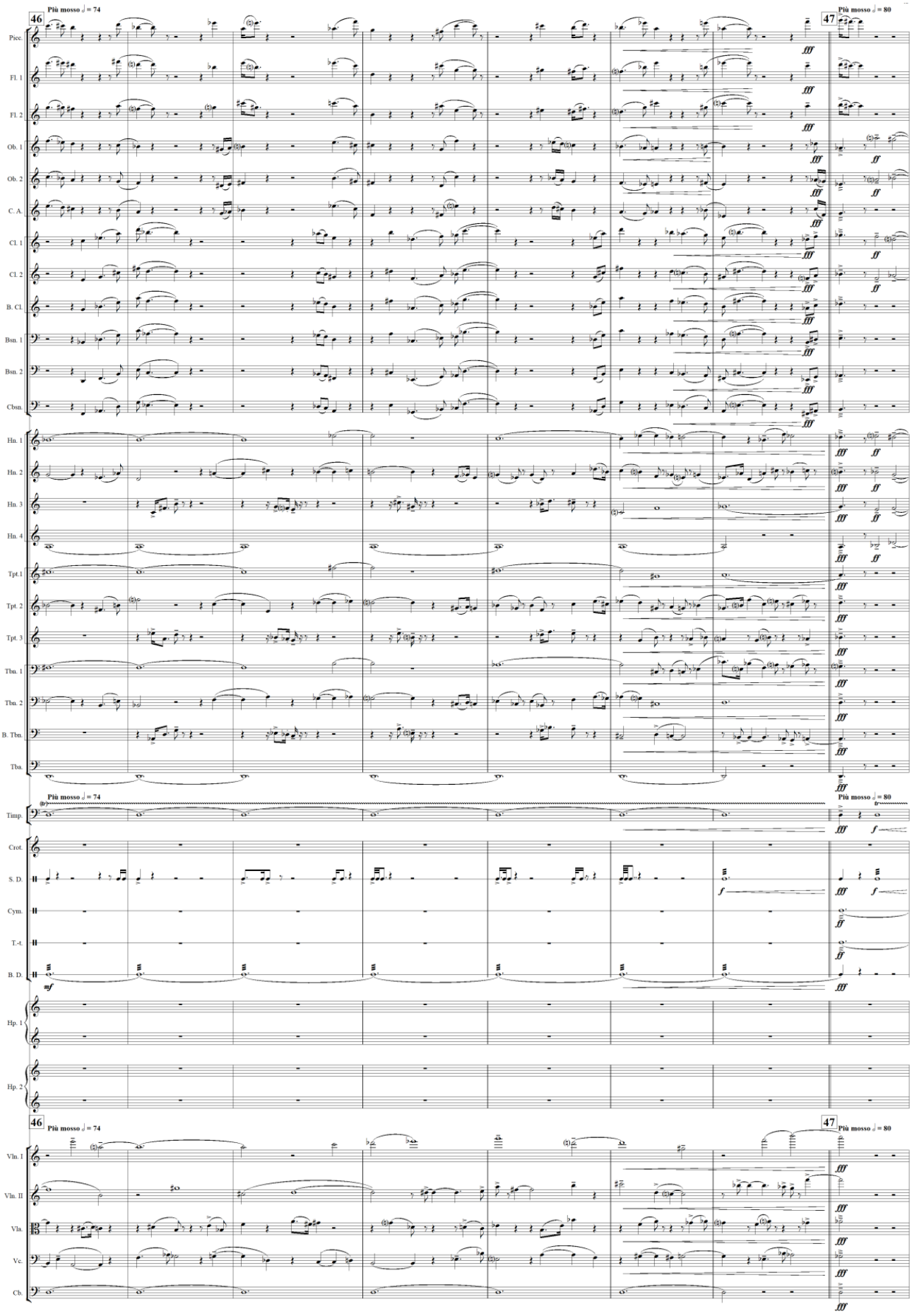


Fig 39: Illustrating the build to the final climax

- Recapitulation and Coda

The coda of the piece represents a recapitulation of ideas and styles from both expositions, but refrains from a literal thematic repetition. The string texture returns with fragmented interjections from a clarinet and a horn. These instruments were chosen for timbral reasons: in particular for their ability to play relatively quietly, with a *dolce* tone in the upper registers of their ranges, whilst still projecting clarity of sound over sustained string harmony; James L. Mursell asserts that, 'tone as such has a very powerful emotional influence. It sets up organic conditions which are involved in strong feeling[45]', this emotional influence was exactly the condition I sought through using the timbres of clarnet and horn.

The close of the woodwind duet is shown in *Fig 40.*

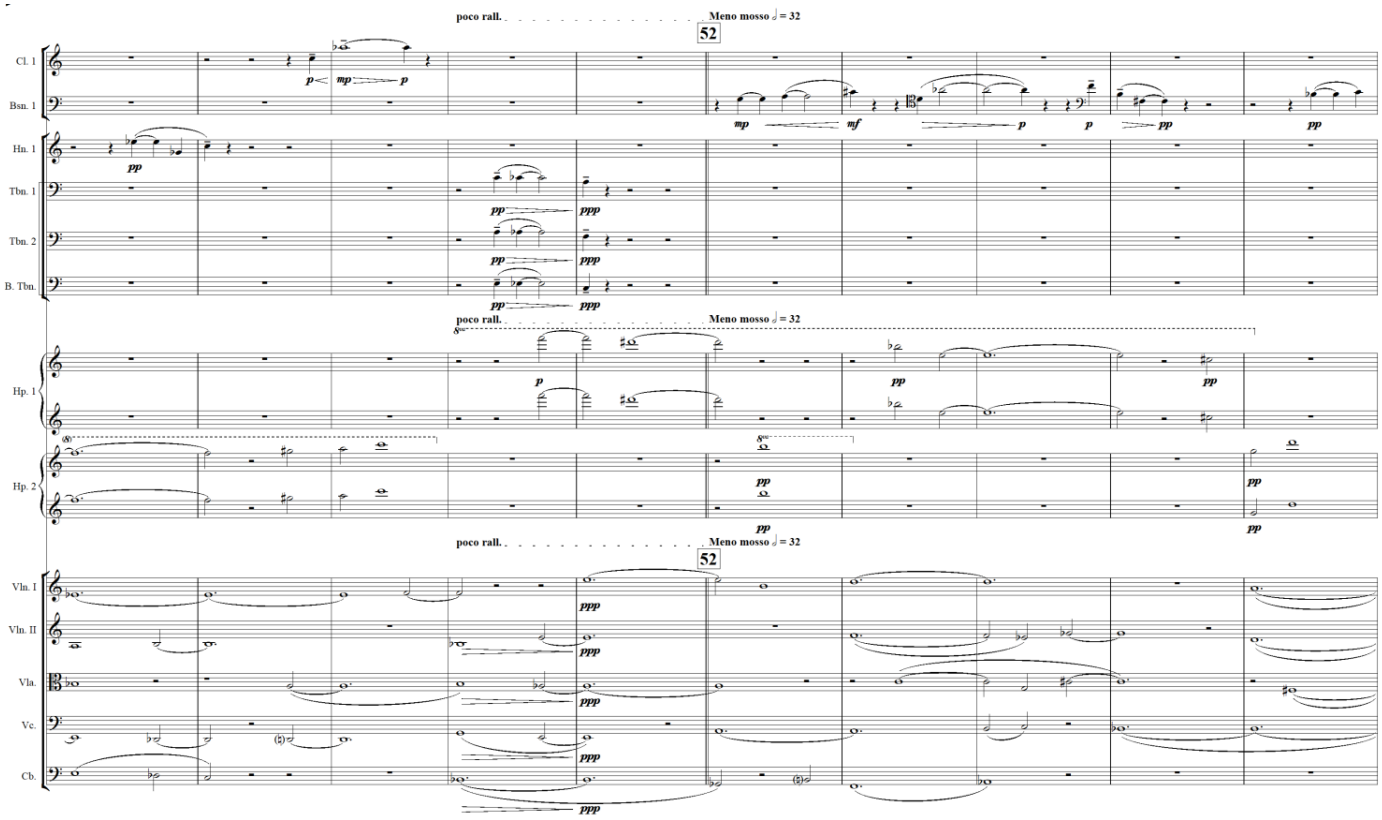


Fig 40: Illustrating the style of orchestration in the 'recapitulation': the string texture has returned, and wind solo elements play in registers which sound easily over the density of the strings. [Note, the music used in Figs 40 and 41 run concurrently in the score.]

In the final bars of the suite I maintained a sufficiently unobtrusive texture to enable the use of a solo bassoon playing quietly in the upper register of the instrument (see *Fig 41)*.

From 53 to the end, the sustained string texture is complemented with harmonics on harps; the texture reduces over the final eight bars, until eventually the violins and harps are left playing as quietly as possible (see *Fig 41)*.

[45] Mursell, James, *The Psychology of Music* (New York: Norton & Co, 1937): 37

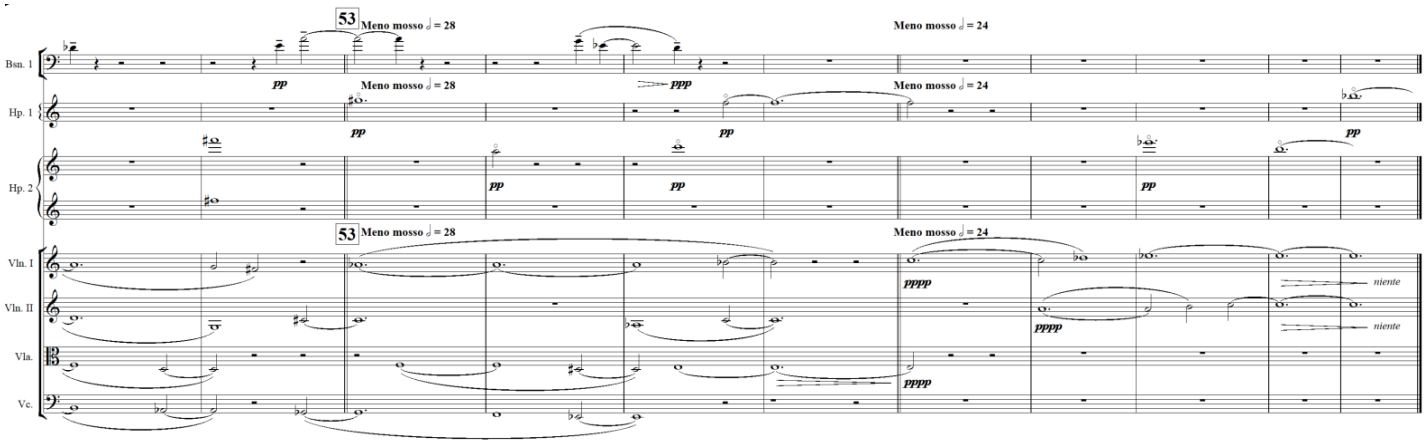


Fig 41: [Continued from Fig 37] The closing bars of Passing Through the Origin*.*

Summary

During the composition of *Passing Through Three Points* I was able to expand upon experimental procedures from previous works. Rhythmic processes as developed in *Dance Suite* and in the *Piano Quintet* were used to define the structure for all three movements of the suite. Regulated pitch restriction (tropes in the first movement) and prescribed pitches (twelve-tone rows in the scherzo, and isorhythms in the final movement) all had their roots in earlier compositions.

Techniques of contrapuntal orchestration, such as layering, and use of a melodic thread surrounded by motivic fragments initially worked out in *Origins*, were important in establishing the structural shape of all three movements. From the outset of conception, there were no limits on the size of instrumentation, and my inclination was to expand small ensembles, thus allowing extensive scope for large-scale creative orchestration.

6. Conclusion

Aesthetic Considerations

Mathematical Structures

It can be deduced from the analyses above that three out of four of the pieces within this portfolio are founded upon mathematical structures. In some areas of the music, the structures define the individual movement, or even the entire piece.

Historically, compositions 'constructed' on a structural basis have been harshly judged. Meyer asserts:

> "Because of the tremendous importance of belief in the response to art, the most devastating criticism that can be levelled against a work is not that it is crude or displeasing but that it is not aesthetically purposeful and meaningful. Statements that compositions in the twelve-tone technique are conceived within an essentially mathematical framework, implying that they are not honestly felt or aesthetically conceived by the composer, have done more to make the music of this school unpopular and hated than all the accusations of cacophony and ugliness put together. It seems probable that audiences object to the dissonance in this music, not because it is unpleasant, but because they believe that it is the product of calculation rather than an aesthetic affective conception. These criticisms have weakened belief in the logic and seriousness of the music, and listeners have consequently abandoned their attempts to understand. The power of most journalistic criticism derives not so much from its ability to influence judgement as from its power to enhance or weaken belief.[46]"

Meyer's comments are certainly applicable to my compositions: the respective first movements of my *Piano Quintet* and of *Passing Through Three Points* are both intentionally 'conceived within an essentially mathematical framework'; in both cases, the mathematical framework was used in order to reinforce the aesthetic experience, and produce a structurally coherent composition.

The composition of *Dance Suite* involved experimentation in the use of limited pitch sets working concurrently with highly active and concentrated rhythmic patterns in some movements; in others I used twelve-tone pitch saturation operating simultaneously with less active rhythmic patterns. My intention was to produce an aesthetic contrast between percussive and lyric piano music; as the piece progressed, manipulation of rhythm and pitch resulted in elements of jazz and blues.

Fig 1 shows the chords informing the pitch set limitation; the structure of each chord consists of two minor 2nd intervals (inverted into major 7th intervals), the potential for jazz or blues implications is extensive; where the potential for blues harmony has arisen, I have allowed it to flourish[47]. Having said this, the percentage of listeners who may or may not recognize the jazz implications may also vary.

During the analyses of *Dance Suite* and of *Passing Through Streets* I referred to the structural use of independent pitch sets; exhaustive use of one pitch set, before emerging into another pitch set creates an obvious change, and it was my intention that the listener recognise the change from one pitch set to another, and comprehend it in the same way as a tonal modulation. There is no hierarchy of pitch, so no tonal implications are inherent; the music is not tonal.

[46] Meyer, Leonard, *Emotion and Meaning in Music* (Chicago: University of Chicago Press, 1961): 76

[47] See rehearsal marks B – D on pages 7-8 in the score of *Dance Suite* (2nd movement) for an example of a jazz style growing out of idiomatic blues intervals.

The challenge for me was to create a series of atonal musical events which can be understood in a gestalt structure by an audience accustomed to hearing tonal music.

Lack of Structural Consideration and Direction

In addition to the composition of new works, I am also interested in the performer's interpretation of the work, as well as how the listener receives, comprehends and appreciates the whole experience. To my mind, an important aspiration is the successful involvement of all three parties in the musical process from conception to performance.

It would be remiss not to mention *quasi Aria* from my *Dance Suite* when discussing the aesthetic considerations of my compositions. In this movement have left all dynamic options open to the performer; the music is marked *dynamics ad lib* for the performer to attempt discover my expressive intentions through the pitches and rhythms provided. There are definite dynamic implications within the music (see the analysis of this movement); however, the option is there for the performer to make informed decisions as to dynamic shape within the movement.

My music does not contain extra-musical elements. *Origins* refers to the origins of the musical argument which develops through the respective growth of the music; it does so in a similar way to the evolution of life on Earth. The piece opens with individual cells of sound that evolve or mutate into larger, more coherently organised musical elements as the piece progresses. *Origins* should not be seen as a programmatic work; the evolution of life on Earth is metaphorically linked to the musical growth and development of the piece, as opposed to being a tone poem charting the process.

When composing *Dance Suite, Piano Quintet* and *Passing Through Three Points,* my tendency was to spend a considerable amount of time and creative energy planning specific structures. When cognitively involved with the planning the early details of a new composition, the areas of consideration tend to be the boundaries of the immanent sections of the piece and not initially the contents of the sections. In this respect, certain factors set *Origins* apart from the other three pieces in the portfolio: the lack of attention I paid to structural issues from the start of the creative process led me to focus more on the notational and phraseological possibilities. Similarly, my approach to the free composition of this piece drew my attention away from twelve-tone rows and pitch restrictions pertinent in the other pieces; consequently I allowed myself greater scope to focus on the idiomatic strengths of the instruments of the wind band, without compromise.

Music's Ability to Express

Igor Stravinsky's view that "…music is, by its very nature, powerless to *express* anything at all, whether a feeling, an attitude of mind, a psychological mood, a phenomenon of nature, etc....If, as is nearly always the case, music appears to express something, this is only an illusion and not a reality...[48]" has been quoted in many instances by commentators who have taken opposing views to each other. The general consensus of opinion is that Stravinsky's statement was made in order to distance himself as far as possible from the romantic ideal.

From an objective point of view, if sounds are merely vibrations, and music is constructed through the organisation of these sounds, then music as an entity is unquestionably incapable of expressing anything. However, whether or not music inspires the imagination of the performer or the listener is another issue. Although this is not the forum for a semantic discussion of music's capabilities to express, it is pertinent for me to state my belief that the three-way relationship of composer-creativity, performer-intellect, and audience-imagination are all required to complete the artistic circle of musical expression.

Comparisons

It is useful to reflect on the four pieces from this portfolio as two distinct pairs, each having some common ground; much of the common ground emanates from the principle of restriction: limitation

[48] Stravinsky, Igor, *Chronicle of my Life* (Michigan: Gollancz, 1936): 92

of one dynamic aspect fosters growth and development in another area, this approach is a very influential aspect of my compositional processes:

Dance Suite and the *Piano Quintet*

- Both pieces are limited in instrumentation; this factor leads inevitably to a focus on areas other than orchestral colouring.
- Each piece was conceived on the basis of robust and detailed structuring with controlled elements of free-composition.
- An approach used especially in the two piano works, is the process of facilitating growth and development of rhythmic elements through restriction of pitch-sets into smaller macro-harmonic areas (typically 4 – 6 notes).
- Processes of rhythmic growth and development within restrictive pitch-sets (outlined above) have turned out to be much more measured and structural in nature rather than growth through free-composition. This has come about simply because I have used pitch-set restriction with the specific intention of creating a robust structure. Therefore, all growth and development will either cease or develop into something new at a new point of structural change. In the very nature of free intuitive composition, phrase lengths, structural changes and rate of growth will be less defined and will reach a natural consequence at a less restrained point in time.

Origins and *Passing Through Three Points*

- The most obvious feature of these two compositions is large-scale instrumentation; this allows the use of orchestral/textural structuring.
- An important point with respect to the size of the ensemble is my interest in using solo lines and small 'chamber' groups formed from within the instrumentations.
- Both pieces enjoy relative amounts of compositional freedom, which is not to say that they are without an underlying structure.
- A structural device I have used in these two pieces makes use of a thematic thread consisting of an extended melodic structure (sometimes twelve-tone rows) played by one instrument (or one blend of instruments consistently) from start to finish, surrounded by fragments of free composition to supplement, reinforce, punctuate or counter the main theme.
- In opposition to the stable thread of melodic structure, the unstable fragmentary material is open to free compositional growth and development.

Final Thoughts

In the introduction to this commentary I stated that my objective, through analysis of my music, was to gain a greater understanding of the priorities and preferences which inform the creative decisions I make, and to show development through various aspects of my musical thinking. To that end, exploring my own music from an objective point of view has helped me to shed retrospective light on various issues, and on levels of success of certain aspects of my work. I have expressed the view that comprehension of my own creative processes and cognitive development are more important to me than the actual works being composed; I see the pieces I have written as being snap-shots of my progress as a musician.

Having written this commentary, I am increasingly convinced of the validity of this statement, and having said that, I consider it relevant to reconsider the quotation by Pierre Boulez used in my introduction to this commentary: 'we need not be preoccupied with the mechanism that has the

work as its goal, but rather the work itself, which, once written – by the very fact that it has been realised – sets all that initial research rocking in the night [fait basculer dans la nuit]' [49].

I am inclined to believe that is that my own role as a creative musician is to understand the progress of my creative processes and to be able to gauge them objectively through the evolution of my compositions. With consideration to Boulez' statement, my aspiration is that players and listeners will value my compositions in their own right.

[49] Boulez, Pierre, *Relevés d'apprenti . . .* :138

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