# DEVELOPING AN URBAN ART MUSIC

## PhD Submission: Commentary and presentation of research & Portfolio of Compositions

by NEIL MARCH

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# Declaration

I declare that, to the best of my knowledge and belief, this thesis does not:

- incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;

- contain any material previously published or written by another person or persons except where due reference is made in the text; or

- contain any defamatory material.

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# ABSTRACT

The focus of my thesis is on the development of an *Urban Art Music*; urban in the sense tl it reflects the character and events emanating from my experience of post-globalization urban society.

The Commentary demonstrates how my approach has evolved and changed substantially from a starting point of deploying very specific and challenging but, to some extent, theoretically-based compositional techniques through to my current approach which is more spectrally-influenced and focuses on the utilization of physically recorded sounds from my urban environment as direct and indirect compositional source materials.

I describe various means by which I have attempted to capture features of this society within the construction of musical works, whether by using contrasting strands of movement and stasis to reflect events and behaviours or by physically recording and manipulating actual urban sounds so that snapshots of my immediate environment play a direct part in shaping the music. Originality has remained important throughout the period of this work too. As such, I have tried to remain consistent in postulating a musical language that is *ethereal* in quality, perhaps reflecting both the vagueness of how events truly play out in current urban society and the sense of detachment and suspended reality I sometimes feel when relating and responding to a complex, unpredictable world; one I sometimes struggle to understand but nonetheless try, in an abstract sense, to comment on through my music.

The contents are divided into three distinct parts. Part One seeks to explain how and why I compose music and elaborates on the socio-political aspects. Part Two focuses on the forms, structures and techniques that are the foundation of my music and highlights those specific pieces which demonstrate important, frequently deployed features. Part Three is a series of commentaries on the individual compositions included in the portfolio.

## CONTENTS



*****Commentary on *Perspectives* is incorporated into Part One, Section 3 (Page 18)

## PART ONE: HOW AND WHY I COMPOSE MUSIC

For me, the primary driver to compose art music is a desire to present a musical language that is distinct, striking and *ethereal*[1] in quality; capable of producing moments of genuine beauty and tranquillity whilst nevertheless having the capacity to encompass a range of contrasting aesthetic states. It is equally important to me that this music is relevant to and has resonance with the urban post-globalization society and environment in which I live and operate. I will expand on these principles in due course.

The composers whose work interests me the most tend to be individuals or partnerships who stand out first and foremost because of striking musical language. This is true not only of composers generally associated with contemporary art music – Messiaen, Lutoslawski, Bartók, Ligeti, Rădulescu, Dutilleux – but also musicians usually associated with Jazz or Popular Music genres such as Miles Davis, Stevie Wonder, Becker & Fagen (Steely Dan), 23 Skidoo, Kraftwerk, Herbie Hancock and many others. What in particular unites this diverse group is the strength and distinctiveness of their individual languages, what Lutoslawski describes as "the composer's personality"[2].

The key aim of this research project has, from the outset, been to explore the development of a language and methodology capable of producing an Urban Art Music. It is important to make a clear distinction between language and systems. I do not compose using a "system" in the Austro-Germanic sense. My language is derived from a variety of sources and has

[1] the conveyance through my musical language of a sense of detachment and otherworldliness (see Page 19, Section 3)

[2] "Lutoslawski on Music" by Zbigniew Skowron (Scarecrow Press) – Chapter 2, lecture about "Mi-Parti" (1975-1976)

emerged over time as the embodiment of my aesthetic preferences. In this respect it has more in common with the music and practices of Messiaen, Lutoslawski and others whose lineage can be traced back to Debussy than with those who, directly or indirectly, are linked to Serialism. Section 3 (Page 18) provides a more detailed analysis of this language.

In my view, music (indeed any art form) also cannot exist in isolation from the social environment in which it is conceived. Given this belief, I have attempted to invent the means to build into my music observations of events and behaviours happening around me in post-globalization society; essentially therefore an "urban" art music, reflective of my experience of contemporary urban culture. These means have been continuously revised throughout the period of my research.

Initially, I approached this by applying constructional techniques and forms at the primary stage of composing each new work which sought either to reflect events and behaviours in a gestural manner - Polyfluidity Types I – IV, Soundbite Form – or which implemented important musical tenets consistent with my socio-political perspective - Democratic Distribution (of Pitch), Cycles of Transformation - however subtly (See Sections 5 – 11, Pages 40 – 52). Over time there has been a marked shift away from what I considered to be an excessive reliance on such abstract ideas and towards the deployment of *found sounds*; usually recordings made on a mobile phone of familiar noises typical of urban society. These audio files are then subjected to alterations in frequency, amplitude and other properties and used either as sound effects or for the creation of harmony, colour and texture. A particularly exciting discovery has been the potential for such sounds to be turned into musical sources that directly influence and shape the harmonic language either instead of or in combination

with notated music. The final five works in the accompanying portfolio (see Sections 16 - 20, Pages 80 – 99) demonstrate this development.

The idea is that, by deploying any or all of these aforementioned elements at the point of construction I can still compose music in a largely abstract (non-programmatic) fashion whilst simultaneously seeking to mirror the complex character of urban society and the many consequences of its culture and influence. While I recognize that the socio-political aspects of my methods may not be apparent to most listeners, they nonetheless represent an important part of my thinking. Part Two (Form, Structure & Technique, Pages 40 - 52) elaborates on this relationship.

At the same time my predilection towards particular harmonic and textural features imposes a degree of clarity just as various elected and non-elected bodies serve rules and seek to maintain a degree of order within the complexities and dysfunction of post-globalization society (or, for that matter, any type of organised society).

Of course, if a key component of musical construction is reflection upon a world in which there is routine corruption, frequent suffering on an unspeakably cruel scale, dysfunction producing manifold categories of volatile, anti-social and unpredictable behaviour and the continuous compromising of the safety and long-term survival of our planet by those whose interests are driven by short-term profiteering, it is clearly quite inappropriate to simply aim for the attainment of perpetual beauty and tranquillity, however one interprets such terms. Such an affirmative state is at odds with the modern world and, though there are many examples of beauty and tranquillity, the world I am reflecting is also ugly, monotonous and sometimes barbaric.

It is, by the same token, important to note that people frequently defy the stereotypes of so-called "human nature" by demonstrating a kindness, generosity of spirit and collectivism markedly at odds with the currently prevailing values in our society. So it would be wrong to convey the notion of *urban* in my music as something negative. The cultural diversity, the influence of progressive ideas and the tolerant atmosphere are just some of the reasons why I continue to embrace city life.

Attempting to consciously "describe" these things with music would lead almost certainly to artificiality and inconsistency. That is why I opted initially to use form, structure and technique as a means of acknowledging events and behaviours whilst seeking to reflect the perpetually transformative condition of any society or group from a Social Democratic[1] (or Democratic Socialist) perspective. It equally explains the growing importance in the use of recorded sounds in determining the overall direction of the music so that the urban environment itself has a key role to play; one that clearly now takes precedence over the kinds of theories and concepts driving my approach when I began my research.

The works presented in this portfolio represent stages of a journey; one that is nothing like complete and is unlikely ever to be completed. To demonstrate the nature of this journey and the evolution of my style and language throughout these past three years, I have tried to provide a representative sample of the works which have most significantly progressed my research even where some have not, in my opinion, been particularly successful. I also occasionally refer, in the context of explaining how particular ideas have developed, to other works composed during the same period that have been omitted from the final portfolio .

[1]I refer to the correct definition of the term *Social Democratic* and not that associated with a now defunct UK political party from the 1980s with whom I would not wish to have any association.

## 2. The influence of other composers on my music

Does the composer always truly know or acknowledge his or her influences? I pose this question not least because of the number of occasions upon which people whose opinions I value have, following performances of my music, heard the influence of one or other composer who I have rarely considered in this way, especially Arnold Schöenberg, a composer for whom I have almost boundless admiration but one who I have never thought of as particularly influential on my writing.

In this respect, I can only offer conscious awareness of specific composers whose music has influenced me; not merely in a spiritual sense but in an actual physical way.

The precise moment when I realized not just my desire to be a composer but what type of composer I wanted to be was when, as a seventeen year old A-Level Music student, I was introduced to the unique sound world of Olivier Messiaen. The potency of that first experience; hearing and reading the score of *Les Anges* from the organ suite *La Nativité du Seigneur: Neuf Méditations* (1935), was immediate, making me realize how I wanted to compose; not, as one might imagine, like Messiaen, at least not in a literal sense, but to achieve a similarly striking and otherworldly language. In retrospect, it seems all the more remarkable that this piece, which is entirely in two-part texture, was able to provide such a clear statement of Messiaen's harmonic language. Over the ensuing weeks, I was introduced to the solo piano cycle *Vingt regards sur l'Enfant-Jesus* (1944), *Oiseaux Exotiques* (1956) with its notation of birdsong and colourful orchestration and *Poèmes pour Mi* (1937) with its ethereal soprano lines and rich textures. The profoundness with which this short period in my young life shaped my musical outlook thereafter is unquantifiable.

Perhaps most important, I was opened up to the notion that there was potentially an infinity of ways in which the composer could invent and hone his or her own language. A few weeks later I heard Bartók's third (1927), fourth (1928) and sixth (1939) String Quartets for the first time and was struck by the rich dissonances and tonal ambiguities, qualities I had not previously associated with Bartók. Further exploration of his mature works led me to conclude that both he and Messiaen were clearly influenced by Debussy, another composer whose powerfully individual harmonic language and exotic textures became an important influence for me.

In his book, *Bela Bartók – An Analysis of his Music*, Ernö Lendvai argues that Bartók used a "tonal axis" system in which tonic and dominant were juxtaposed against their respective tritonal equivalents. Lendvai also sets out his case that Bartók made deliberate use both of the Fibonacci series and the *Golden Section* concept in his works. I cannot claim to have adopted any of these Bartókian traits within my own work although there are moments when one may hear some accidental resemblance to a Golden Section. Perhaps Bartók may also have arrived at this situation unconsciously. We will never know for certain.

Although I have not taken on the compositional methods Lendvai claims for Bartók, my liberal use of the tritone both in a horizontal and vertical fashion owes a great deal to him and there are comparisons between both his use, for example, of the whole-tone scale in the lyrical aspects of the Sixth String Quartet or his tendency to alter the make-up of major or minor chords with "foreign" pitches and my preference for the whole-tone as both a melodic and harmonic feature and my use of "implied tonalities" (see Page 49, Section 10).

Thanks to my sudden decision to turn my back on the 'classical' world in my late teens, it would be many years before I discovered other composers with whom I ought to have become familiar; in particular Lutoslawski, a composer whose music played a key part in my decision to return to the study of music composition in 2005 and whose ideas have continued to impact on my work.

Several elements struck me when I first listened to Lutoslawski's music. Not least his use of close intervallic clusters in dense but fluctuating masses and stark contrasts of texture and colour. Studying the score of *Preludes & Fugue for 13 Solo Strings* (1973) offered me a fresh perspective, notably the textures produced by the interplay between the string parts. The influence of that work and others such as *Livre pour Orchestre* (1969) and *Music Fenebre* (1958) was particularly manifest in my 2008 orchestral work *Fugue & Fantasy (for Orchestra)*[1] with its interweaving glissandi and gradually expanding density of chords made up of semitones and tones.

Jazz and related genres had been an influence on my music since I was very young and Jazz of course has its own language (or languages) which, although possessing much common ground with major-minor tonality, is nevertheless distinct in terms of its harmonic character. The *Blues Third* is a simple example of this being neither major nor minor and arguably both. What classical composers would have considered to be *dissonances* have long constituted a core element of Jazz and Jazz-related music and, in the nineteen seventies, became a staple element of Soul, Funk and Jazz Fusion music.

[1]*Fugue & Fantasia (for Orchestra)* was composed in 2008 and represented my first conscious attempt to adopt soundbite form and to use contrasting strands of movement to convey the multiple fluid events in urban society.

By the early nineteen seventies, the fusion of Jazz with Rock, Blues and other genres had given birth to a language quite distinct from that of tonal or atonal music even though there were clear commonalities between, for example, the keylessness of the lengthy opening track on Miles Davis's *Bitches Brew* (1970) album and the music of post-serial composers despite the obvious contrast between its relatively free composition (largely based on improvisations around one or two themes and ostinati) and the detailed pre-compositional planning and pitch generation processes driving many modern composers' works.

The tendency of the more progressive Jazz-based composers to look around for other diverse influences added to the richness of their language such as on the eponymously titled debut album (1976) by Jaco Pastorius, which embraced Soul, Salsa, Calypso, Indian Raga and Southern African Folk among other genres and the Funk, Latin and Caribbean flavours infusing Herbie Hancock's *Headhunters* (1973). Elements of such language(s) became increasingly common in the Soul, Disco and, to a lesser degree, Rock music of the late twentieth century, informing the highly distinct and brilliantly crafted songs of Steely Dan, Stevie Wonder and others. These artists influenced me as a composer, most notably in my work as a (broadly speaking) Pop musician, and they continue to influence the music I compose today.

Darius Milhaud's combination of beautifully jarring polytonality and South American Jazz, especially evident in the dual piano cycle *Saudades do Brasil* (1921), made a big impact on me both as a teenager and when I returned to study later. Likewise the strident polytonality and ametrical character of Igor Stravinsky's *Le sacre du printemps* (1913). Indeed there are polytonal and polymodal features that surface from time to time in my compositions.

Henri Dutilleux is a composer whose music I have only begun to know in recent years but which has raised some intriguing comparisons with mine. Not least a common reverence for Messiaen (and it is interesting that, like both Messiaen and Lutoslawski, he cites Albert Roussel as an influence[1]). Of particular interest are the comparable structural and harmonic elements of our music. For example, Dutilleux's 1965 orchestral work *Métaboles* explores the notion of metamorphosis, using gradual changes to transform one musical state into another, a process uncannily similar to my Cycles of Transformation (albeit that he approaches this issue by breaking the music into separate parts in which a different section of the orchestra dominates before bringing the main elements together). In terms of process, this also has some commonality with my Soundbite Form.

Dutilleux's 1970 Cello Concerto *Tout un monde lointain*, commissioned by Rostropovich, deploys some similar harmonic features to my music; in particular the whole-tone mode(s), open chords and a strong Jazz influence, all of which lend the music an ethereal quality. Also, like me, Dutilleux shuns formal serial procedures but allows elements of serialist principle to bring discipline to his work (which has some correlation with my use of democratic pitch distribution).

In the latter part of my PhD study, I have increasingly developed a fascination with Spectral composers. The microtonal fluctuations and eventual kaleidoscope of sound in Rădulescu's[2] *Inner Time II* (1993) and the stirring combination of live Viola and pre-recorded (computer-generated) sound in Ana-Maria Avram's *Quinconce II* (2003) have convinced me to pay

[1] *Henri Dutilleux: Music Mystery & Memory* by Claude Glayman (Ashgate Publishing Ltd, 2003)

[2] Rădulescu, though Romanian, spent much of his musical career in France and, in essence, belongs to both schools.

greater attention in particular to the Romanian Spectralists though Gerard Grisey's *Partiels* (1976) directly influenced my 2013 work *Metrospectra*.

My interest in a group of composers whose music is sometimes referred to as *Hyperspectral* (i.e. Ana Maria Avram, Iancu Dumitrescu, Tim Hodgkinson – composers whose music combines intense music with live electronics) has affected my decision to introduce pre-recorded sound into my work, contributing to my Urban Sound Manipulation (USM) concept. This in turn has reawakened my interest in the music of nineteen-eighties Post-Punk acts (i.e. 23 Skidoo, Cabaret Voltaire, Chakk etc.) whose utilization of industrial sounds and objects had a profound effect on my musical outlook.

## 3. Explaining my Musical Language (demonstrated via *Perspectives*)

The most important defining feature of my language is the deployment of certain harmonic modes which interchange in a free, fluid manner and drive both horizontal and vertical elements. If I was to choose one word to describe the aesthetic I aim to capture it would be *ethereal*.

Rhythmically my language centres on the irregular ebb and flow of events (the durations of bars tending to expand and contract fractionally) and a liking for polyrhythmic counterpoint. Differing types and layers of movement and stasis provide metaphors for the complex simultaneously occurring events and behaviours I observe and seek to reflect (albeit in an abstract fashion) in my writing. Because of the fluid, contrapuntal nature of some of my music, chords can at times appear unstable but they exist nonetheless and have increased in importance in my more recent works.

I mentioned earlier the distinction between language and technical or structural elements. For example, concepts like Soundbites (Page 40, Section 5), Cycles of Transformation (Page 42, Section 6) and Polyfluidity (Page 44, Section 7) may offer ways of attempting to reflect and resonate with events in the physical world. They are not, however, elements of my "language". Urban Sound Manipulation (Page 47, Section 9) reinforces the language but, in this section, it is the specifics of that language that I wish to focus on.

I have decided to demonstrate this through the solo piano piece *Perspectives*. Being a solo piece, polyfluidity plays no part and it is only semi-transformational[1].

[1]Like many of my works, *Perspectives* uses short transitional passages to link soundbites but these are not Cycles of Transformation which would constitute much more gradual change from one musical state to another.

It does follow soundbite form but reference to this is included here in order to give completeness to the commentary. When I composed this piece, I was especially mindful of my desire to use unifying elements such as repetition and imitation and to achieve the kind of aural cohesiveness that had arguably been lacking in some works, an issue for which I had received justified criticism.

*Perspectives* opens with a series of six-note Compound Whole-Tone chords. To be clear, what I mean by Compound Whole-Tone is three notes in the upper part taken from one configuration of the whole-tone scale (or mode) and three notes in the lower part taken from the alternative configuration. In Example A (Page 20), we see how the first two bars present this series of chords (in which all the chromatic pitches appear twice each). The bass note of each chord descends by a semi-tone and there is a form of contrary motion here. From Bar 3, a lyrical, contrapuntal passage ensues in which the chords that appear are Compound Whole-Tone, Whole-Tone, Quintal/Quartal and Major Seventh (which hints at Jazz and related genres).

The choice of individual pitches here is no accident. The left hand takes up the melody and immediately reflects my harmonic language, the opening four intervals all belonging to the same whole-tone scale as do the two harmonizing notes that follow as the right hand presents a combination of minor seconds and tritones, both of which feature prominently as vertical and horizontal features in my music. In Bar 4, the upper part opens with a contrasting staccato figure, intervallically consisting of major seventh, tritone and augmented fifth followed by minor third, tritone and minor second before resolving on another six-note compound whole-tone chord. The chords that appear in Bar 4 are reduced compound whole-tone. Bars 5 and 6 then present an altered version of the opening figure, retaining the precise

rhythmic character and the use of four compound whole-tone chords in which all chromatic pitches appear twice each. Democratic principles also play a leading role in determining the pitches used in this opening passage, thus affecting their order.

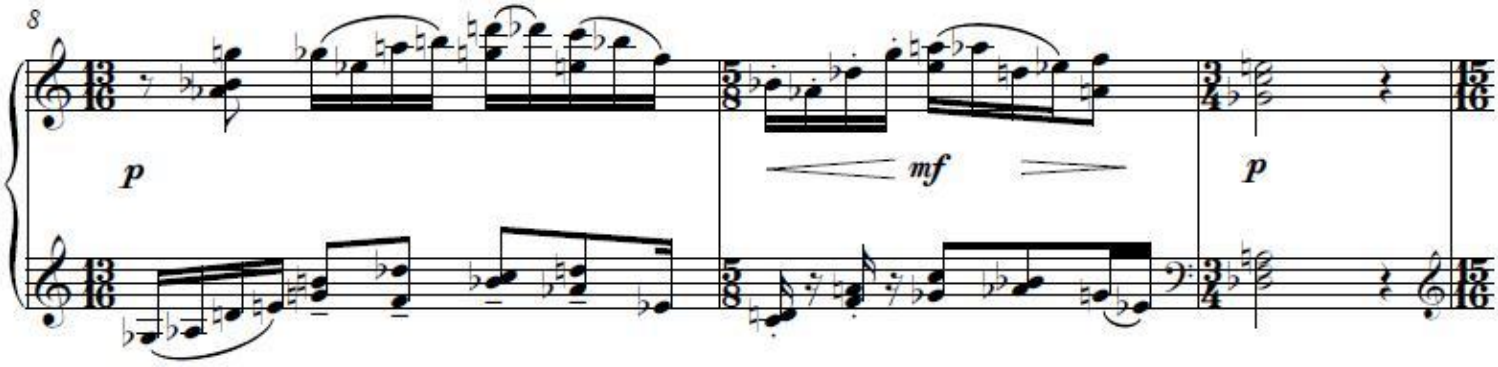
**Example A *Perspectives* Bars 1 – 7: Clear statement of my harmonic language.**


What follows from Bar 8 is an altered and extended version of the figure presented from Bar 3. Again the melody begins in the left hand and the first four pitches are all taken from the same configuration of the whole-tone scale. The first chord that appears in the right hand is a major ninth chord, a chord commonly used in Jazz and related genres (Soul, Funk etc.) and the appearance of a Gb (also therefore an F#), as the melody moves into the right hand, against G and B natural in the left, means the Ab major 9 chord is followed by a G major seven which, in turn, is followed by a chord of F major with a diminished sixth (also therefore an augmented fifth) so, although it may not be obvious given the context of the surrounding harmonic features, there is a conscious use of Jazz as an element of my language

in this bar. Even the chord that follows (which could be deemed a Bb major 6) suggests a Jazz influence before the final two chords return to the whole-tone. Meanwhile, the ensuing individual notes of the melody line again produce intervals of tritone and minor second.

So now, in the first nine bars of the piece, we have had a clear statement of aesthetic preference for whole-tone, compound whole-tone, Jazz-related and Quintal/Quartal harmony. At the same time, the horizontal language of the piece has reinforced these features and made liberal use of the tritone (which is, in any case, present in the whole-tone scale) and minor seconds which are deployed vertically too in some of my works (if less so in solo piano works compared to ensemble works where close intervallic clusters are used for textural effect). Bar 10 sees the phrase end with another six-note compound chord. See Example B (below).

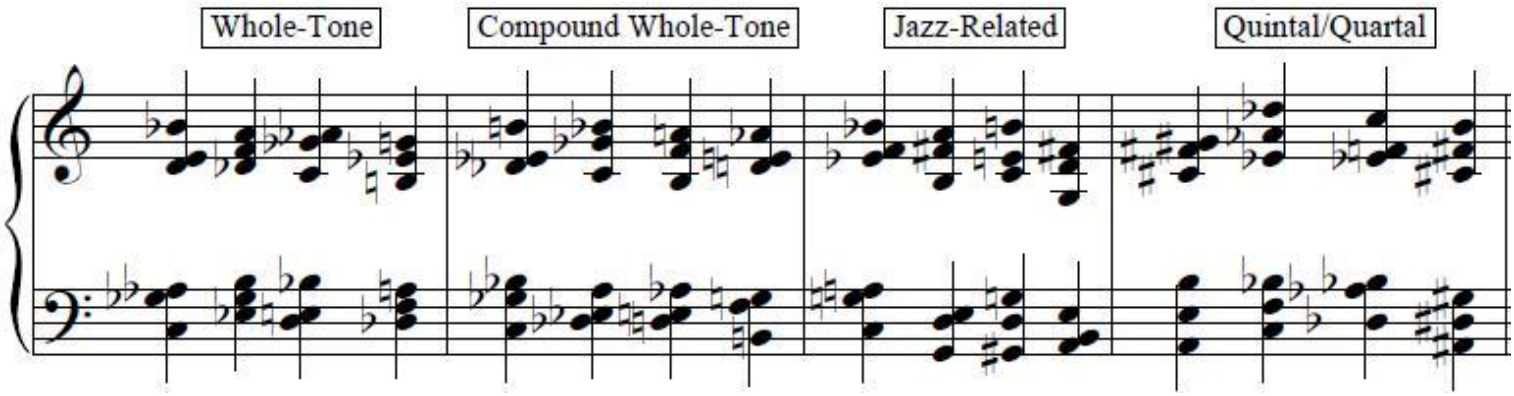
**Example B *Perspectives* Bars 8 – 10: Repetition and extension of previous figures using above-described horizontal and vertical features.**




So, having established these four features of my harmonic language, Example C (Page 22) provides random chord samples demonstrating each of them individually. These are not taken from any specific piece of music but are simply a means of demonstrating what I mean by

each of these terms. It is worth noting that the Quintal/Quartal chords could all arguably be considered Jazz chords too.

**Example C: Demonstration of harmonic features using six-note chords.**




In the Introduction, I have sought to clarify my harmonic language both in the form of block chords and in the form of more fluid, lyrical material. A short transition follows and leads into Soundbite A. This section introduces further aspects of my musical language, most particularly fluid movement punctuated by repeated short silences. The music here is semi-chordal and semi-contrapuntal, bass pedal deployed in Bars 17 and 25, contrapuntal linear parts playing above and below fluid chords. The harmonic language fluctuates between aforementioned features and others such as *Implied Tonalities* (see Page 49, Section 10) which are chords that might appear triadic were it not for the presence of "foreign" pitches (such as in Bar 17 where the right hand part juxtaposes Eb major and E7 chords against a D and C respectively in the left). The lyrical content continues to be heavily chromatic and the tritone continues to feature prominently. So although the style and texture of the music differs greatly from the Introduction, Soundbite A builds on and continues to reinforce the same language. Example D (Page 24) shows the consistency of horizontal and vertical language.

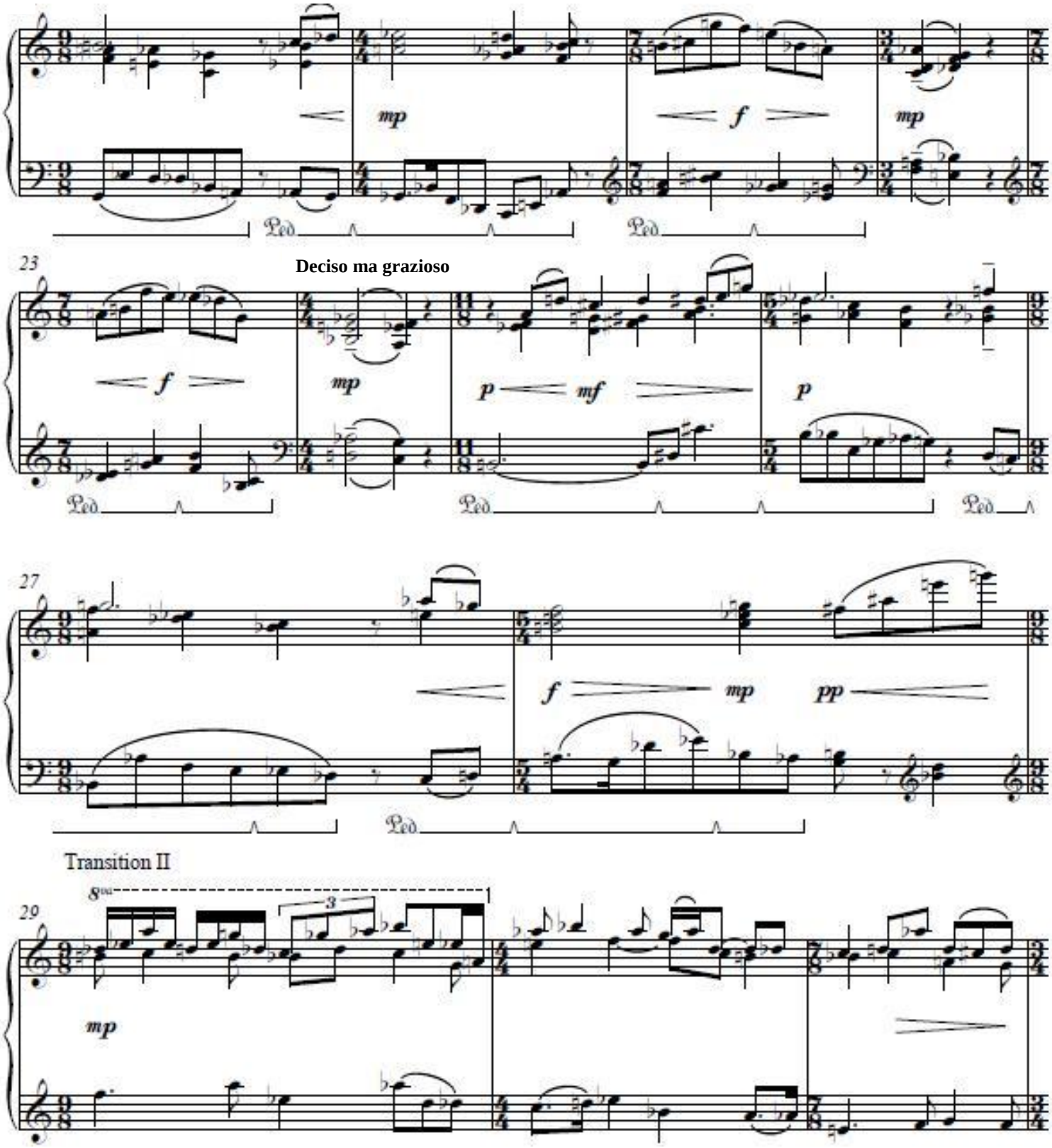
To pinpoint a few examples, Bar 21 uses harmony deriving entirely from one configuration of the whole-tone while, intervallically, the melody contains two tritones and two minor seconds (also two major seconds consistent with the whole-tone mode) before the phrase culminates in two compound whole-tone chords in Bar 22. In Bar 19, we see a ninth chord, a quintal/quartal chord, a whole-tone chord, an implied tonality and a seventh in the space of a few seconds. Even in the rapidly changing atmosphere of Transition II, adherence to these harmonic principles remains consistent.

At Soundbite B, I have introduced a gestural figure which makes use of contrary motion. So there is a sense of chords opening out and closing up again. See Example E (Page 25).

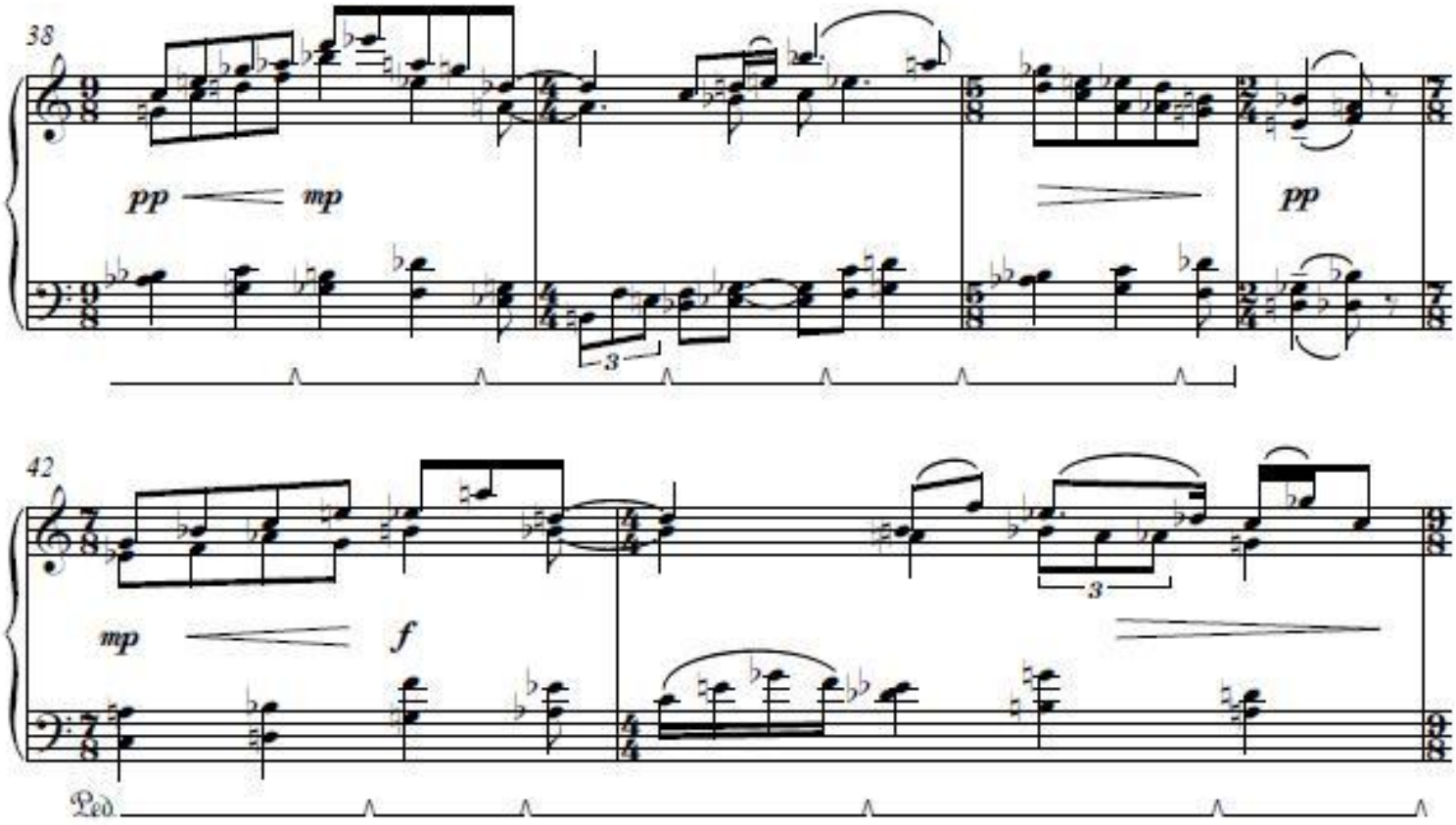
In that example we see a major ninth (Jazz-related), two 12-tone chords and two whole-tone chords (Bar 38), fluid chords in Bar 39, then whole-tone, implied tonality, fourths and then whole-tone again (Bar 40) and two fluid bars culminating on a quintal/quartal chord at the end of Bar 43. Lyrically, despite the demands of both the contrary motion figure and democratic distribution of pitch, Bars 38 and 39 are dominated by whole-tone intervals including tritones while minor seconds appear several times in Bar 40. The whole-tone and tritones reassert their prominence in Bars 42 and 43.

Rhythmically, although the contrary motion figure is mainly based on quavers, the fluctuating bar lengths and time signatures and movement of the linear melody between different hands Bar 45 introduces a two-part texture, thus removing the capacity for chords to be formed. With Messiaen's *Les Anges* in mind, I was interested to see whether the language would retain its distinctiveness in this passage. See Example F (Page 26).

**Example D** ***Perspectives*** **Bars 19 – 31: Consistency of vertical and horizontal language**



**Example E** ***Perspectives*** **Bars 38 – 43: Application of language to gestural figure**

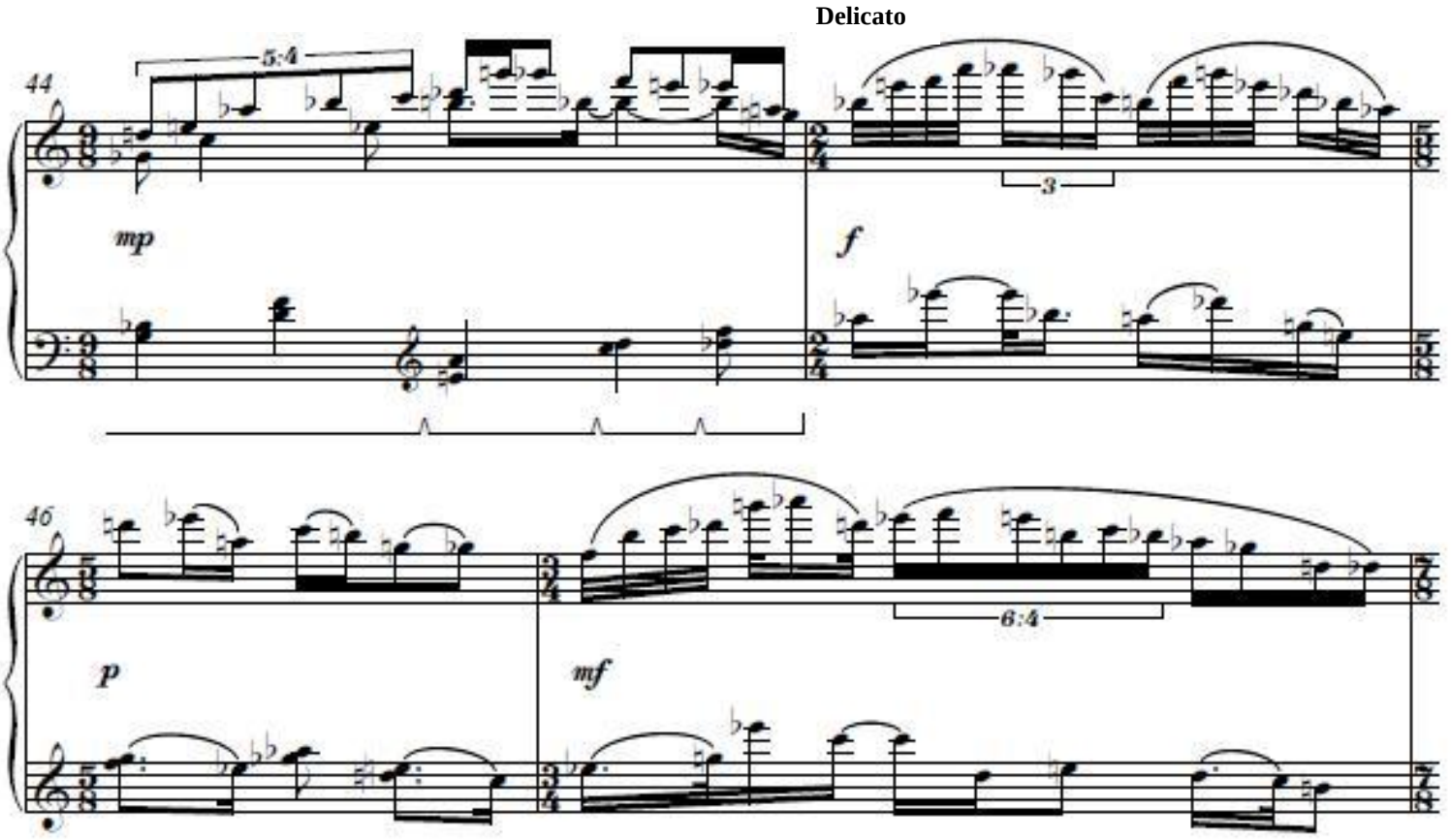



In the right hand part, the consistency of the language is achieved by continuing to set out the individual notes in intervals that reflect the whole-tone and chromatic scales while the left hand plays a contrapuntal rhythm using notes that, in a highly fluid manner, continue to suggest familiar harmonic principles (mainly whole-tone and tritone). This switching between two and three part texture continues until Bar 49 whereupon the contrary motion figure returns and once again the same chordal elements are prominent.

In Example G (Page 27), we see how the opening six bars of Soundbite C adhere to these same fundamental principles of my musical language. In Bar 58, the interval of the tritone appears twice in the left hand part while the right hand in Bar 60 follows all whole-tone intervals until introducing a minor second at the end of the bar. Bar 61 sees this pattern

broken in the second half of the bar in which the chords lean towards Jazz but the whole-tone reinstates its prominence in Bar 62 while minor seconds lend the left hand a highly chromatic character. In Bar 64, the penultimate chord implies quintal/quartal and becomes a chord in perfect fourths as the left hand plays a G.

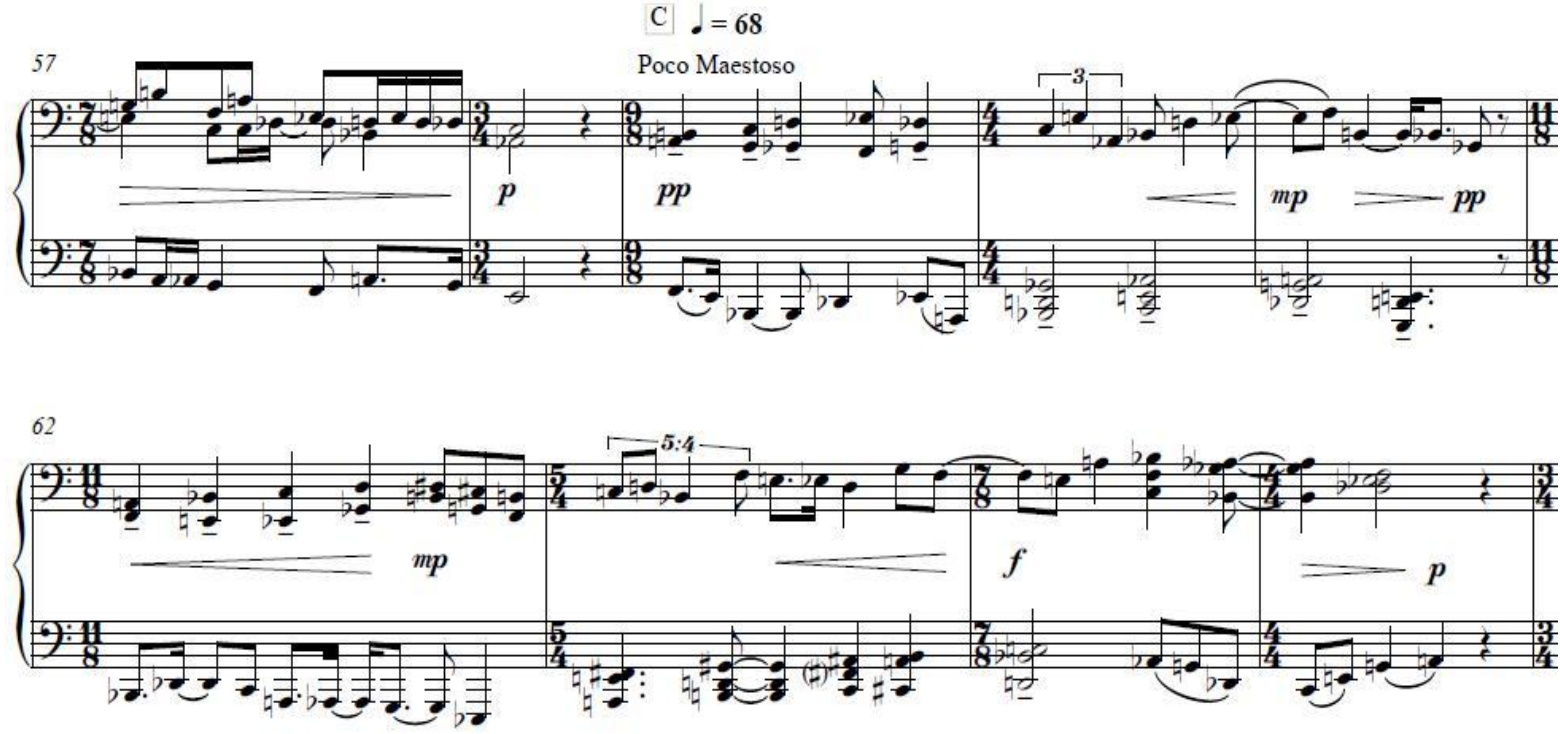
**Example F** ***Perspectives*** **Bars 44 – 47: Retaining language in 2-part texture from Bar 45**



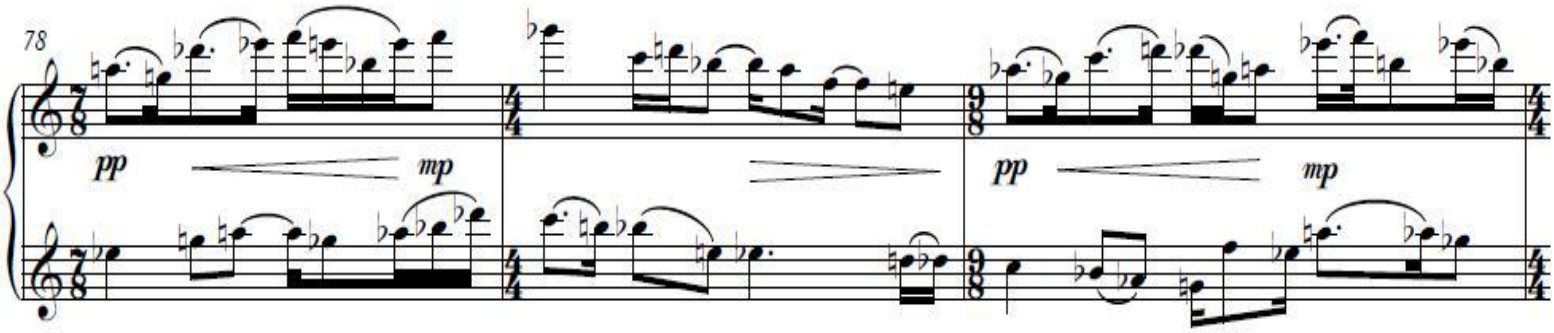

Transition IV performs a rapid movement up the registers and prepares us for Soundbite D. Here two-part texture assumes a greater prominence than in B. See Example H (Page 27).

Once again, harmonically, the whole-tone mode dominates despite the contrapuntal nature of the parts while, lyrically, the note patterns are largely based on intervals consistent with either

**Example G *Perspectives* Bars 57 – 65: Change in texture; same principles of language**




**Example H *Perspectives* Bars 78 – 80: Two-part texture, still adhering to key principles**



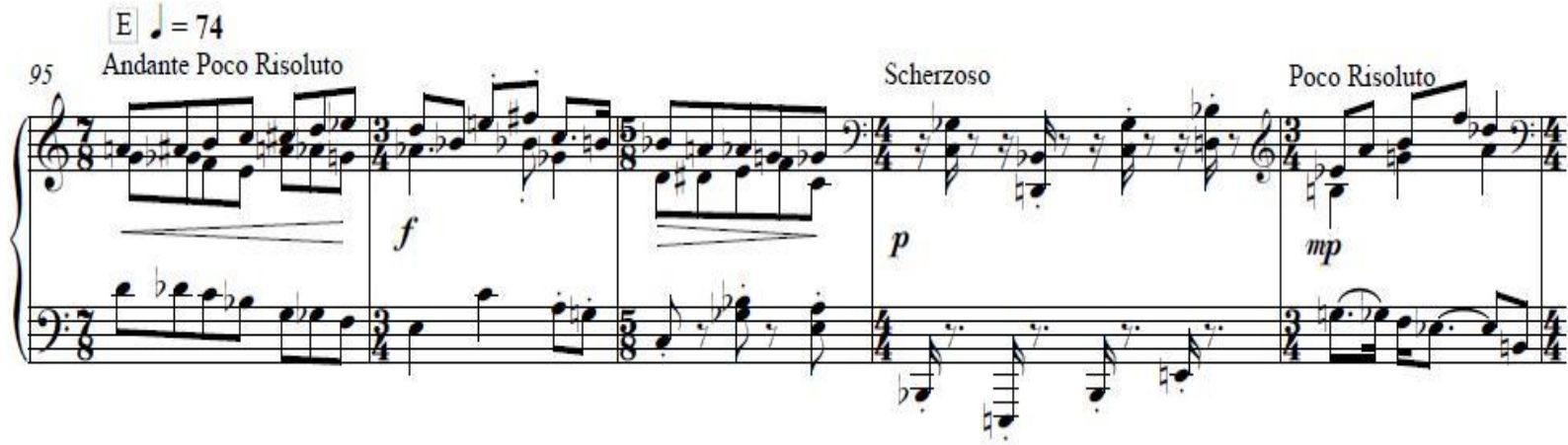

the whole-tone scale or chromatic scale. The light texture, brought about by the high register and quiet dynamics contrasts greatly with the previous soundbite. As usual, bar lengths and time signatures fluctuate by small degrees and the rhythms of both parts are fluid and irregular.

In Soundbite D, gestural features are again deployed including Imperfect Symmetry (Page 48, Section 10) and other gestures with their roots in (but not imitative of) actual events. Though

not significant in explaining my musical language, this does necessitate more fluid movement between chord-types. In Example I (below), we see how, when Imperfect Symmetry arrives at Bar 95, while the outlying parts are almost entirely in minor seconds, the harmonic element passes rapidly through quintal/quartal, implied tonality, quintal/quartal, seventh, whole-tone and Jazz-related chords in the first bar alone whilst Bar 100, in which a new gestural feature is announced, returns entirely to the whole-tone.

The final and most important reinforcement of the principles stated in the Introduction comes in the Codetta. It opens with the same six chords as Bars 1 and 2 before but, though the response in the third bar follows the same intervallic principles as before, it is elaborate and interspersed by glissandi. In Example J (Page 29), we see how the beginning of the Codetta elaborates on the introductory passage and ends the phrase using a feature found Soundbite D, two compound whole-tone chords followed by a short rest.

**Example I** ***Perspectives*** **Bars 95 – 99: Imperfect Symmetry & rapid chordal changes**



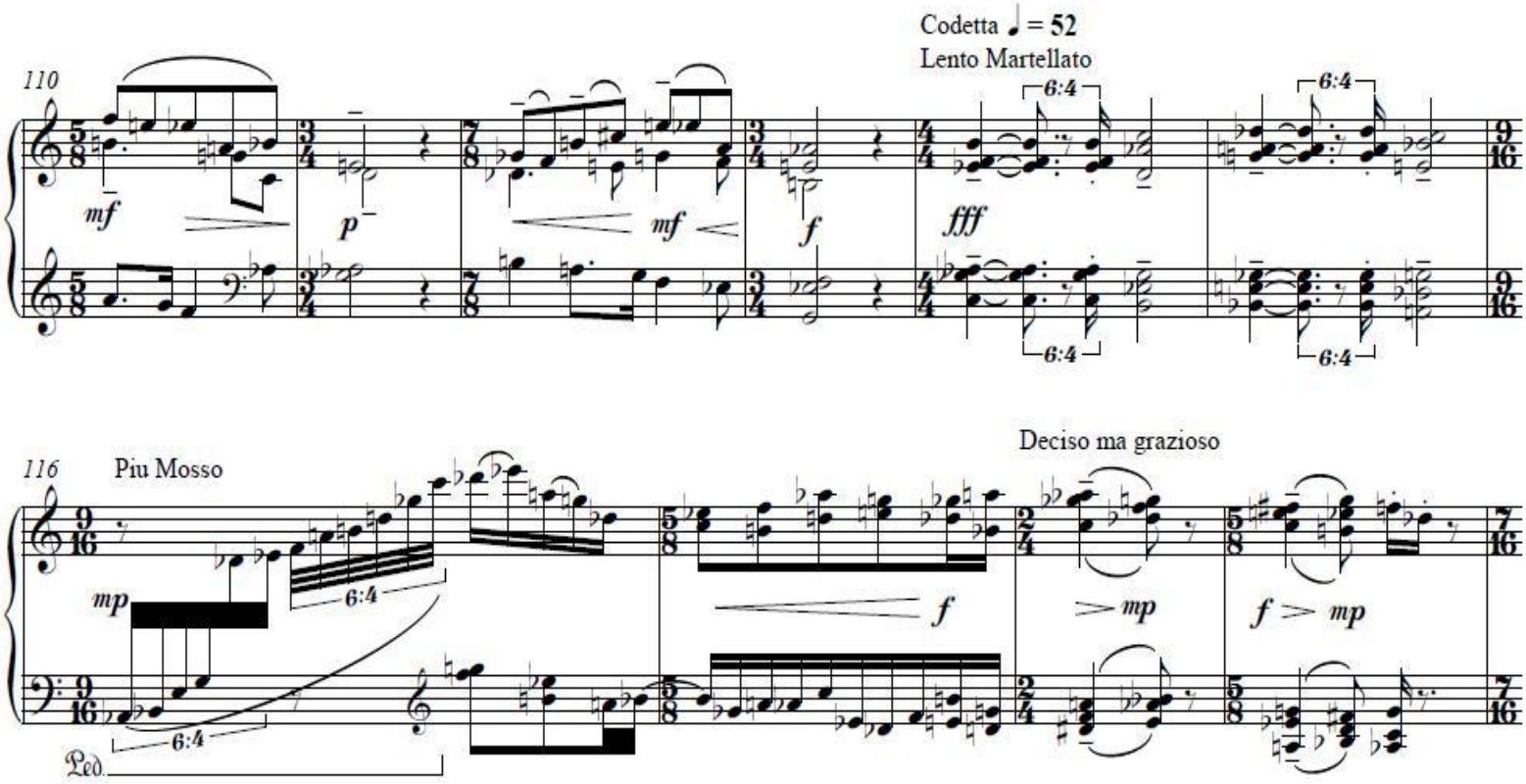

The three bar passage that follows (Bars 119 – 121) uses compound whole-tone chords (119), a lyrical figure accompanied by whole-tone harmony (120) and a four-note whole-tone chord

(121) before the six chords in Bars 122 and 123 again imitate the Introduction. (See Example K, Page 30)

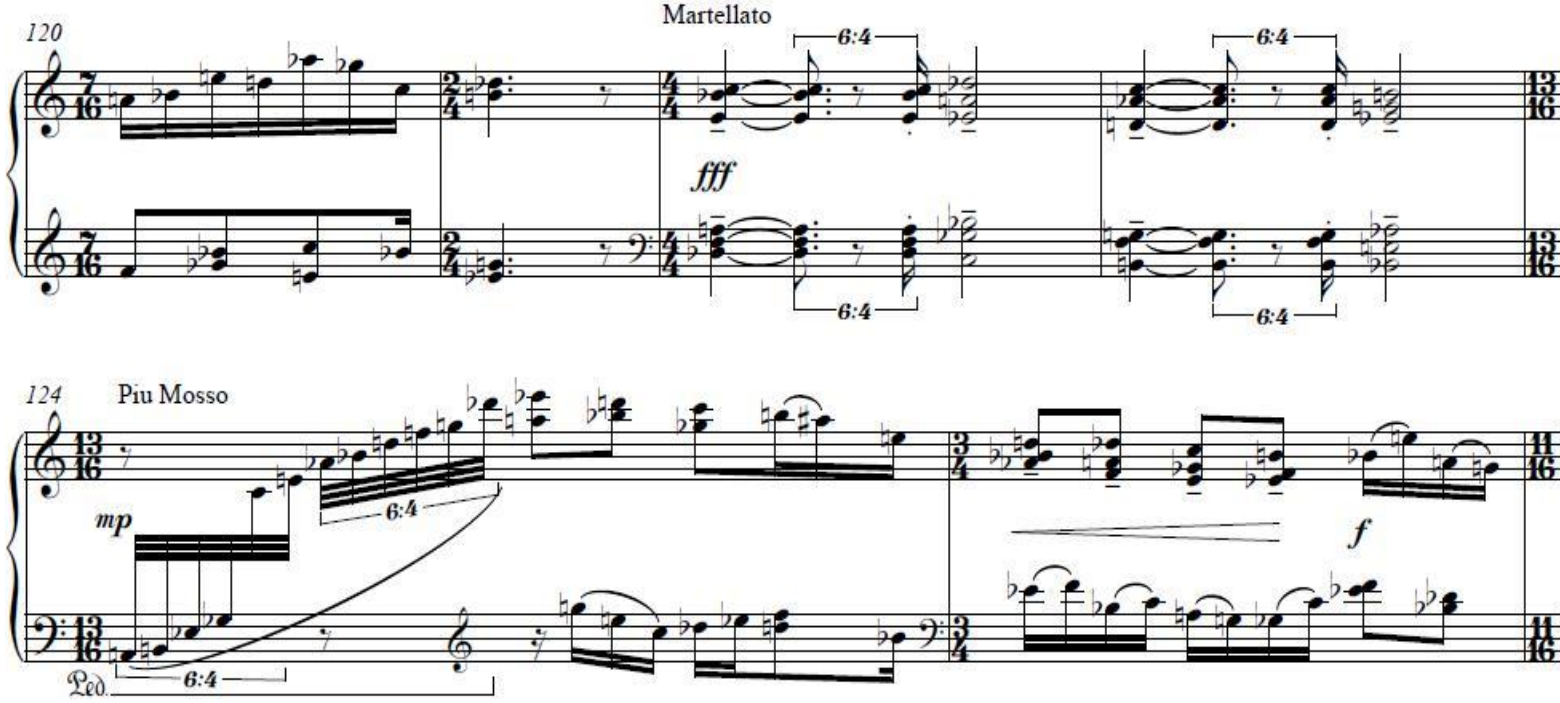
The final stretch of the Codetta recalls features from various points in the piece in a short unifying gesture (including examples of Imperfect Symmetry in Bars 126 and 129) before the six chord figure appears for one final time and the piece ends on a chord that is quintal/quartal in the right hand, whole-tone in the left and also suggests a Jazz derivation. Example L (Page 30) demonstrates the inclusion of the above-mentioned features.

The final two chords reinforce the role of Implied Tonalities (Page 49, Section 10) whilst hinting at a V – I cadence. Although the physical make-up of the chords is far removed from diatonic harmony, there is a subliminal aural impact, arguably reinforcing a sense of finality.

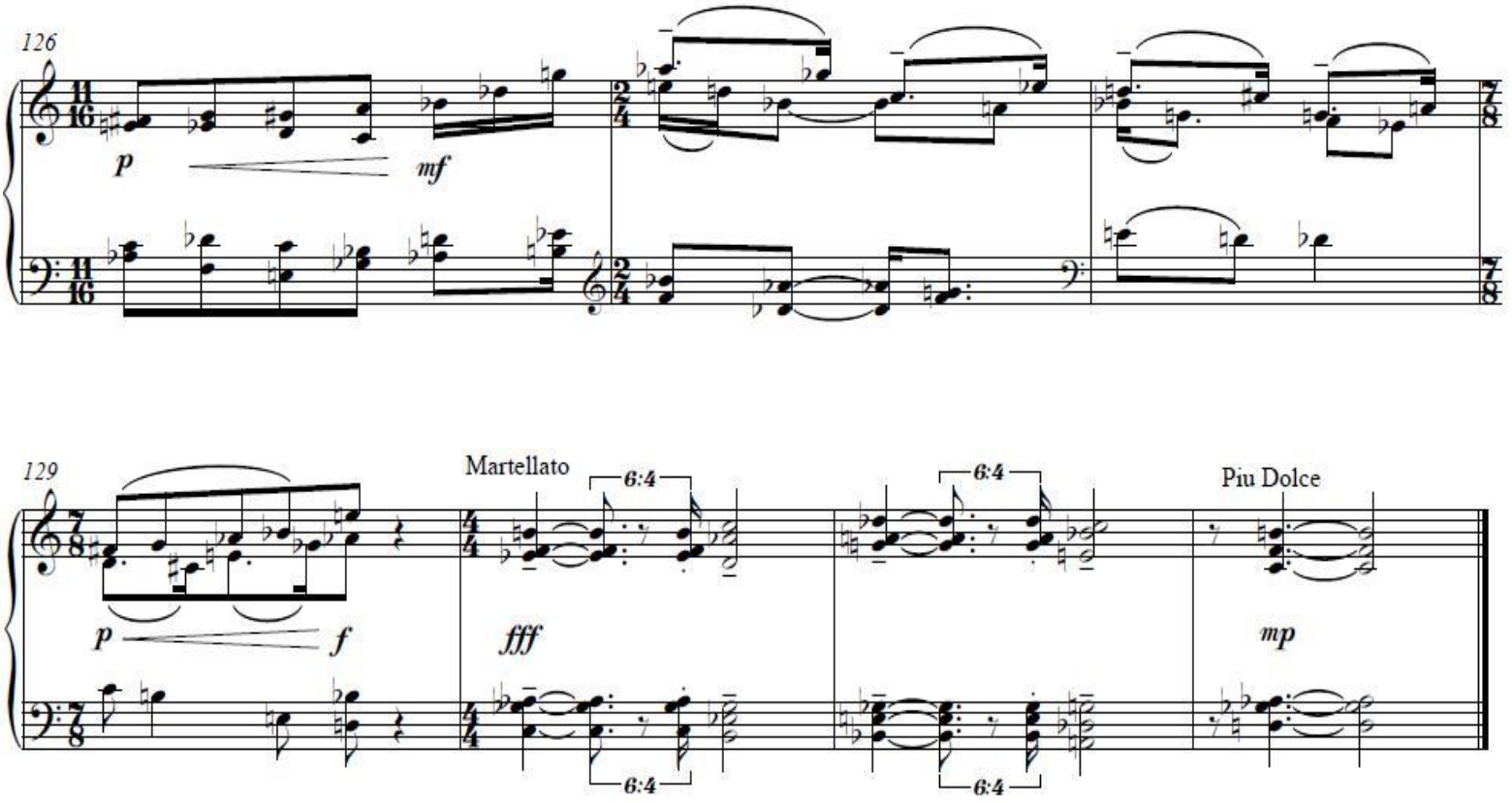
**Example J** ***Perspectives*** **Bars 110 – 119: Codetta – elaboration on introductory passage**



**Example K** ***Perspectives*** **Bars 119 – 123: Lyrical figures and repetition of opening figure**




**Example L** ***Perspectives*** **Bars 124 – 132: Unifying features, Imperfect Symmetry and repeat of main chord sequence**



## 4. Politics in my music: a comparison with other "politically-motivated" composers

This section has been included with the intention of providing a context for the role of socio-political concerns in my music. It is not intended as an in-depth analysis but more a canter through a series of comparisons between how some other composers and I have reflected socio-political interests.

If art is a reflection of both the environment in which the artist operates and how the artist responds to that environment, then it is inevitable that socio-political matters play some part in my work. When my focus was on Rock and Popular Music genres, this could be addressed through the lyrical content of my songs but, when I returned to composing art music, I spent a great deal of time considering how to construct instrumental music that could carry some representation of ideological matters.

Keen to avoid accusations of contrivedness or cliché, I attempted to build into the construction of my works a means by which my response to observations of events and behaviours in post-globalization urban society may be applied as compositional devices, enabling me to write in a largely abstract manner whilst still providing a commentary on my living and working environment. Initially this was attempted by using contrasting types and rates of movement (and stasis). By 2009, it had developed into polyfluidity (see Page 44, Section 7). Since then, I have approached this area in other ways too, most notably (and most recently) through the recording and manipulation of actual urban sounds which are turned into compositional sources.

Of course, the setting out of a relationship between music and socio-political concerns is not a new concept. As far back as music historians can go, songs and pieces were written as

celebrations of political leaders and of great military victories. Less reactionary sentiments have also been long existent in European art music. One need only consider Beethoven's tribute to the revolutionary activities of Napoleon Bonaparte in the original transcript for his third ("Eroica") Symphony (1804), subsequently withdrawn upon Napoleon's declaration that he was "Emperor of Europe", or the less overtly political Chopin responding with subtle sentiment to the occupation of his beloved Poland in his *Etudes* (1833 – 37).

In the post-war period, the projection of left politics increased in profile, led by figures such as Luigi Nono, a leading member of the Italian Communist Party and Hans Werner Henze, the German composer who had been motivated originally by his disdain for the Nazis (and shame at his father's acquiescence to them) and had become highly politicized as a young student.

Nono's approach to politics has one immediate commonality with mine. Namely his desire to avoid artificial sentiment in his reflection of and response to events. This is evident in the work *Il Canto Sospeso* (1956) in which Nono deploys excerpts from letters written by prisoners facing imminent execution by the Nazis. Nono sets these words whilst applying serial techniques to all aspects of the music. This is similar to my use of statements made by random individuals relating to the death of young people to construct the lyrical content of a 2011 work called *Lament* albeit my approach is nothing like as complex or systematic as his.

Henze also chose to represent his political ideas through the lyrical content of his works such as *The Bassarids: Symphony in One Act* (1964) in which a libretto is deployed to demonstrate "... the conflict between social repression and sexual liberation: the liberation of the

individual ..."[1] or the song cycle *El Cimarrón* (1971) based on the autobiography of a black slave.

Nono, it seems, also looked to actual words as the principal means of expressing political ideas. Although there is an argument that places his desire to compose objectively by adhering to strict systematic musical construction in broadly similar territory to my use of abstract techniques and actual recorded sound, there is no evidence that he regarded any specific part of this process nor of the technical elements of construction as being representative of particular events and behaviours. So, whilst there are common features in Nono's and my attitude to the matter of politics and music, they are not the same.

One composer who did make a connection between the constructional elements of his music and the expression of socio-political ideas was the Russian, Alfred Schnittke. Indeed, in his book *Alfred Schnittke*[2], Alexandr Ivashkin tells of how, when a visiting delegation from the PCI (Italian Communist Party) came to Moscow in 1963, Nono was allowed to use his status as a party member to make an unusual excursion to meet with some of the young composers centred around the Moscow Conservatory. Schnittke was one of those whose work he looked at and he criticised the young Russian for representing optimistic ideas via conventional, tonal music and pessimistic ones through atonality and dissonance, an approach Schnittke duly abandoned.

In his final student years, Schnittke presented an oratorio entitled *Nagasaki* (1958) in which he took the lyrical content from a poem about the American atom bomb attack on Japan at the

[1]Music and Politics: Collected Writings 1953 – 81 *Hans Werner Henze* Cornell University Press 1982

[2]Alfred Schnittke *Alexandr Ivashkin* London: Phaidon Press 1996

end of World War II. Again he attempted to represent the dramatic events through the deployment of wailing trombones, crashing percussion, clustered voices and atonal harmony. However this was an essentially programmatic approach and not one in which the ideas were built into the constructional techniques.

Schnittke spent most of his career seeking ways in which he could achieve a genuine correspondence between his musical and his political and religious ideas such as his concept of *polystylism* in which he drew from numerous musical influences and traditions in an attempt to create a radical alternative style. At one point he concluded that he could only reflect the insanity of the world around him by abandoning reason and logic in the structure of music, so pursuing an "irrational" approach in which there was no development of themes and ideas and each section of a piece was presented as a separate entity. This is demonstrated both in his third Symphony (1981) and fourth Violin Concerto (1984) in which he presented expositions and then refused to develop or recapitulate them. Arguably this might suggest a similarity between his approach and my use of soundbite form; also a correlation with my tendency, in some past works, to deliberately avoid familiarity and repetition .

However, Schnittke's methods were not the same as mine. Not least, his approach was frequently driven by a strongly emotional reaction to the frustration he felt in attempting to find a way through the difficulties he faced both as a composer whose progressive tendencies persistently pitted him against the might of the Russian State machinery and one who was dissatisfied with his inability to settle on a means of bringing his musical and intellectual ideas together successfully.

For Schnittke, the driving force for his "irrational" music was the sense that the world was an irrational place and the "senseless" acts and contradictions it produced should be reflected in art. But the world is not really a senseless place and most of the events we brand 'senseless' are either calculated acts carried out in the interests of particular political and economic forces or they are the by-product of the chaotic influences which the relationship between ideology and economics exerts over societies.

Cornelius Cardew put politics at the forefront of his agenda. The formation of the Scratch Orchestra with Howard Skempton directly resulted from a desire to bring ideological interests together with a radical approach to performance such as in *The Great Learning* (1964), his setting of Ezra Pound's work *Confucius* (1965) in seven "paragraphs", a concept that suggests an uncanny similarity to my use of soundbites. However, whilst Cardew clearly foresaw the potential to use composition itself and playing techniques as a means of representing the political, he also preferred a liberal degree of free improvisation and the use of alternative notations, areas I have tended, in the main, to shy away from.

Interestingly, although Cardew's political commitments intensified during the nineteen-seventies, he moved completely away from the musical radicalism of his younger years..

Michael Finnissy is one of the most overtly political of today's composers. His music is forthright in both its uncompromisingly radical style and its expression of ideology. There is evidence too that he builds into his compositional methods the means of highlighting such ideas. The satirically titled *English Country Tunes* (1977, revised 1982 – 85), for example, juxtaposes radically contrasting registral, textural and structural ideas. Finnissy has also used

his music to attack homophobia such as in *Shameful Vice* (1994) and *Seventeen Immortal Homosexual Poets* (1997).

Certainly there are commonalities between, say, Finnissy's use of contrasting, perhaps conflicting, compositional elements and my earlier use of polyfluidity. There are similarities too between our preferences for ametricality and textural contrasts. But there is little that unites USM or my harmonic language with Finnissy's structural or technical preferences and, other than both dealing with political subject matter, the commonalities between us are largely superficial. Not least his music is more complex and atonal than mine and harmony does not always play a leading role in his thinking whereas it sits atop my musical hierarchy.

John Adams has been called a "political composer" (a label he told the New York Times he was "... frequently puzzled and a little miffed by ..."). Adams is generally seen as a Minimalist and therefore, on surface level, might be considered unlikely to share much common ground with me. Nevertheless I was interested to explore the possibility that there are aspects linking my methods to his, not least my fascination with transformational material which is a key tenet of most Minimalist music. However, Adams appears to limit the role of political matters to the lyrics of his works as in his opera *The Death of Klinghoffer* (1991) which depicts the killing of an American Jew by Palestinian terrorists from a balanced, effectively neutral standpoint.

In terms of his use of transformational material, Adams presents chordal patterns that are, in essence, diatonic and which are altered over time. My idea of transformation is to present a particular musical "state", then use transitional passages to introduce the features that will

ultimately replace the existing state in the ensuing musical soundbite; in short, little correlation with Adams and his methods.

Louis Andriessen, another composer associated with Minimalism but also with Jazz and atonal music, certainly does see himself as a political figure as demonstrated in works such as *Workers Union* (1975) which uses indeterminacy not just in pure musical terms but also in terms of the instrumental line-up (described as "for any loud sounding group of instruments"). He does not, however, deploy specific techniques to feed events and ideas into the construction process. So once again there is little genuine commonality between our different approaches.

Frederic Rzewski makes imaginative use of political themes in his music, a good example being *Coming Together* (1971) in which the coming together of the instrumental parts provides a metaphor for the uniting of working people. This, though, is a largely symbolic approach to the matter, quite unlike my attempt to convey events through abstract technical means. Rzewski also makes liberal use of improvisatory elements and has been proactive in using electronic whereas, though there are broad similarities between electronic music and USM, I rarely use improvisation and my notation is generally quite proscriptive despite some freedom of expression.

Two current composers for whom socio-political concerns are of significance are Helmut Lachenmann and Mathias Spahlinger. Of particular interest in relation to my own work is that these two composers have attempted to use more abstract means through which to express their ideas. Both have turned, for example, to the ideas of Adorno for inspiration and have developed musical vocabulary that exploits extended instrumental techniques in order to put

across ideas that sit outside the symphonic tradition. In theory at least, this positions them closer to some of my thinking in the sense that ideas are reflected using specific techniques that may then be applied in an abstract fashion.

In the work *Mouvement (vor der Erstarrung)* (1984), Lachenmann uses individual instrumental techniques to challenge populist perceptions of how music should sound. Spahlinger deploys a similar approach in *Phono Phobia* (1972), extended techniques offering a means by which aural perceptions are subverted. Whilst I have not specifically deployed compositional techniques in order to challenge conventions of what is "pleasant to the ear", others have commented that my past reliance on polyfluidity has resulted in music that can be difficult to follow.

These similarities are intriguing but one must look at the aims of the composers and decide whether they are fundamentally the same as mine. Both Lachenmann and Spahlinger have chosen to use unusual instrumental techniques to create an alternative soundscape. Moreover they have done so in order to challenge the cynicism and commercialism that they believe is overly influential within the contemporary music mainstream. My approach, by contrast, is not to skew the sounds of the instruments (although I do significantly alter the recorded urban sounds) but to compose music in a manner that reflects events and behaviours I believe are representative of post-globalization society. This is actually quite distinct from both the musical and the socio-political aims of the other composers.

Of course, all of the methods used by these other composers are perfectly legitimate and my claim not to follow similar procedures in no way indicates any criticism of any of them.

There are two additional points that it is necessary to make. Firstly I am not attempting to "change the world". My reflection of events and behaviours stems from a desire to compose music that resonates with the modern world. It is not particularly my ambition to affect the listener's socio-political outlook and it would be wrong to overstate the notion of music as a "vehicle for political comment".

The second is that none of these other composers has declared himself to be a Social Democrat whose belief, in simple terms, is in gradual and progressive (often legislative) change as opposed to a Marxist belief in revolutionary activity. Why is this important? Because this too affects the methods I have chosen to apply, not just the representation of urban society through a combination of devices but transformation as a fundamental principle of social democracy.

How effective my ideas are is for others to judge but I continue to strive to postulate a unique and original approach to the reflection of socio-political ideas in my music.

## PART TWO: FORM, STRUCTURE AND TECHNIQUE

In this section I hope to explain both the basis of my compositional style and techniques and their relevance to my work.

### 5. Soundbite Form

"Soundbite Form" evolved out of my 2008 orchestral work *Fugue & Fantasia (for Orchestra)* (see footnote on Page 14, Section 2) and was, until recently, a constant in my compositions since then.

It arose when I concluded that the "soundbite" had replaced the traditional means by which news and ideas were disseminated. This was underlined by the increasing reliance, even at the highest level of media and politics, on Text Messaging, Email, Twitter, Facebook, Blogs, Youtube, Skype, Myspace, MSN, Yahoo, Instagram etc. Recently it was symbolised by the decision of a senior Government member in Syria, at the height of a bloody Civil War, to announce his defection to rebel forces not by issuing a statement through national or international media but by posting a video on Youtube.

My contention was that, for my music to reflect and resonate with my observations of how modern society functions, it was necessary to present it in the form of soundbites, offering any number of concise, contrasting sections of material in "bite-size" pieces reflective of a fast-moving urban culture. In order to distinguish between "soundbites" and "sections", I decided upon a principle that each soundbite should be as short and concise as possible even if that meant not developing material as much as I might ideally wish. Certainly it should be no longer than two minutes even in a larger work.

After spending time developing this soundbite model, I became frustrated that the pressure to restrict each soundbite in duration sometimes militated against my being able to fully develop the material. My remedy was to invent a two-movement soundbite form for use in larger works.

The opening movement would be a succinct, rapidly shifting piece in which soundbites were concise and fluid, sufficient to demonstrate the breadth of contrasting materials without expecting the audience to process too much information in one sitting. This movement would be called the *Summary*. The second movement would then enable me to extend each individual soundbite and the intervening transitional material. This movement would be known as the *Elaboration*.

This has an obvious parallel with Lutoslawski's use of "Hesitant" and "Direct"[1] in his Second Symphony. However, whereas his opening movement consists of incomplete and separate strands that are given greater direction in the second, my two-movement form is more akin to a (somewhat lengthy) trailer which, continuing with the movie analogy, is followed by a "Director's Cut". I decided that, whilst it would be logical, perhaps inevitable, that some artists or ensembles may prefer to limit performance to just the Summary, subject to an assessment of their audience's patience threshold, I would not wish the Elaboration to be performed as a stand-alone work since I feel that the Elaboration should always be preceded by the explanatory Summary. This means the audience is able to first hear the foundations of the piece and then how I have built upon them.

[1]Lutoslawski's two-movement form, used in his second, third and fourth Symphonies consisted of an opening movement made up of fragments of contrasting material (Hesitant) followed by a second (Direct) which worked the material into a lengthier, more cohesive whole.

Although conceived in 2008, it was July 2010 before I was able to finish composing my first work in this two-movement form, an orchestral piece entitled *Construction*. I have since used it again in the 2013 piece *Sinfonietta* (Page 61, Section 14) although I have recently become less convinced both of its importance in defining compositional structure and its success in providing an aurally cohesive distinction between a *soundbite* and a short section of music.

**6. Cycles of Transformation**

The origin of my *Cycles of Transformation* dates back to my childhood years when I first developed a fascination with processes of change that took place before my eyes and yet which I could not truly "see".

It began when I realized that, although the hours hand on the clock in my bedroom would continually progress around the entire face of the clock, I would never physically "see" it move. Sometimes I would focus solely on watching the hours hand over a period of, say, fifteen minutes at a time in an attempt to see it move. Yet, even though it would progress by a quarter of the circumference of the clock in this period, I would still never see even the tiniest movement as this process unfolded. This fact both frustrated and fascinated me. It also taught me that, due to the continuous focusing and refocusing of the human eye by the minutest of fluctuations, it was not physically possible to observe movement at such a gradual level.

Years later I experienced a similar though much more spectacular event when I observed my first sunrise. I was amazed by the completely matt red circular sun that first appeared, resembling a child's drawing. I watched in awe as gradually an orange glow engulfed more and more of this matt red sun as it rose slowly in the sky and finally sat above me in full glow. What fascinated me even more though was how, when I had left my home at 5AM that

Spring morning, it had still been dark. Yet, by the time the sun had finished rising, there was broad daylight. At some point between those two extremes, darkness had given way to light. I, however, had not "seen" this transformation occur. By the time I was aware that daylight had arrived, I had missed the moment of change.

These are two of the most striking examples of daily Cycles of Transformation taking place in our lives. Perhaps, though, what is even more fascinating is the existence of longer and much more enigmatic cycles of a kind that go beyond the merely visual. For example the transformation of attitudes across a whole society, the transformation of society's prevalent cultures due to technological change, the transformation of societies due to political change and reform and so on.

These cycles are different from those first described for several important reasons. Most obviously they are not simply to do with visual change. Secondly they are not predominantly brought about by natural phenomena but by the specific actions and ideas of human beings. Thirdly they occur only once in any exact form (although they may have great similarities with past and future cycles) as opposed to repeating in regular patterns (daily, annually etc.). Fourthly the changes they bring about take far longer to occur. Finally there is a question mark over whether these cycles truly have a beginning and end or whether they are simply sub-cycles within one permanent cycle of transformation. This last question could be debated ad infinitum.

Whatever the answer, I wanted to acknowledge the existence of these cycles (and, perhaps, sub-cycles) and the way in which one state (in this case *musical* state) first overlaps with and then replaces its predecessor Sometimes change is temporary and, over a further cycle, old

ideas re-emerge (though always in a significantly altered form). Equally attitudes often shift irreversibly in a new direction. To drag out a tired but appropriate cliché, time never stands still.

## 7. Polyfluidity

Polyfluidity, a technique which was important in the earlier period of my research, evolved from my desire to represent events and behaviours through contrasting strands of movement and stasis. The first reference to polyfluidity appeared in my programme notes for the chamber work *As the facts emerge* (composed for the Nomos Project in 2010). Since that time, it has developed considerably and there are now four categories of polyfluidity although the fourth has never been satisfactorily explored in a completed work. Given my subsequent move away from polyfluidity as a key element, it quite probably never will be.

### Conceptual basis of polyfluidity

The driver for polyfluidity was my determination to invent an abstract way in which to represent complex, sometimes dysfunctional behaviours both of individuals and various groups within post-globalization society, building on the metaphorical application of contrasting activity and inactivity mentioned in Section 11 (Page 50).

Initially there were two distinct types of polyfluidity. Type I consisted of each individual vocal or instrumental part pursuing its own path in apparent isolation from other voices but with each part displaying distinct and relatively consistent characteristics of its own. The aim was for there to be minimal interaction between the different performers, subverting the intimacy and imitativeness of counterpoint, other than when the parts converged either by

chance or briefly by choice (just as individuals are forced to interact on a "needs must" basis in various day to day situations.).

Type II followed the same concept of non-interaction and isolationism but, where Type I would see each part take on a distinct and audible character, Type II would be unstable and nebulous in quality with no one part retaining the same character for very long; more akin to the way in which change sometimes takes place in a chaotic and irregular fashion, accelerating and decelerating according to events and trends.

Type III polyfluidity first appeared in a 2011 piece entitled *Shifting Sands* (for Flute and Fender Rhodes Electric Piano). It was partly inspired by a comment made by the conductor of Elliot Carter's *Concerto for Oboe & Orchestra* at the 2008 Proms who had talked of Carter's music "... representing how we think in real time ...", a comment I had initially thought was slightly pretentious only to change my mind when I realized how the interruptive and unstable character of Carter's material was indeed similar to how the human mind functions, attempting to focus on a specific idea but interrupted constantly by other thoughts, some related to the central subject matter and some entirely unrelated.

Type III sees one (or possibly, in some cases, two) main theme(s) or type(s) of material, usually played by one specific voice. Others then interrupt the flow of this main material either with *related* material (i.e. material with rhythmic or other similarities to the main material; likely to be repeated in some form within the same section) or *unrelated* material (i.e. usually one-off appearances of material emitting few or no characteristics in common with the main material).

Type IV polyfluidity can only work in large scale works such as for Orchestra. This is where different groups of voices and/or instruments within an ensemble operate their own polyfluidic developments on an "internal" basis whilst, at the same time, presenting an "external polyfluidity" in relation to the other groups of instruments. It can also mean different groups of instruments (and/or voices) playing non-polyfluidically groups but polyfluidically in relation to other groups. My only attempt to deploy this category was in a choral and orchestral work entitled *The Deification of the Anti-Hero* which I eventually discarded as I felt it had become too problematic to justify further attention.

For a detailed study of polyfluidity as the driver for an entire work, please see the commentary on *Devolution* (Pages 53 - 61, Section 13).

**8. Democratic Distribution (of Pitch)**

The notion of "Democratic" Distribution of pitch takes the serialist principle that all the notes of the chromatic scale are of equal value and translates this into a simpler method in which the notes of the chromatic scale are repeatedly exhausted (sometimes within individual parts, sometimes across multiple parts, sometimes over longer configurations of notes etc.) and, where there is potential to produce quarter-tones, the intervening quarter-tones are repeatedly exhausted over a longer, slower process. It does not, however, involve the existence of "tone rows".

As my research has shifted in direction away from more theoretical compositional devices and towards the influence of real recorded sounds, the "principle" of democratic distribution has been applied less stringently at first and, in subsequent works, has been all but abandoned altogether.

## 9. Urban Sound Manipulation (USM)

In the final year of my PHD study, my composing has undergone a significant shift; away from a more theoretical approach to Urban Art Music and towards the use of actual, physically recorded sounds from my everyday environment. These sounds are subjected to alterations in frequency, amplitude and duration and enhanced using specific effects (i.e. delay, phaser etc.) so that the urban environment itself directly supplies source material with which to compose. For the sake of ease, when referring to this process, I have called it Urban Sound Manipulation (USM).

Usually my approach is to combine USM with notated music so that these two elements blend and compete, creating their own textures and colours. *Tranquillity: Trepidation:Trauma* (for Synthesized Strings & USM) deploys this method while also making some use of soundbites, polyfluidity and other familiar features of my music. (See Page 80, Section 16)

However, when composing *Metal Cutter* (See Page 85, Section 17), I have actually used a short (less than two seconds) snippet of a recording, made on a Blackberry phone, of an electric metal saw in use on a building site, as the sole source for a fluid sequence of harmonies, colours and textures, demonstrating the potential for mundane elements of urban culture to be transformed into unique, original musical material. From *Submerge* onwards, I have used USM both in a non-pitched "sound effect" role and in a melodic and harmonic one, combined with notated music, affecting the harmonic and textural elements.

In order to underline the notion of USM relating to modern urban culture, my current method usually begins with using my Blackberry phone (itself a symbol of post-globalization society) to make short recordings of sounds I hear as I travel around London and other urban areas. I

then record these directly onto my laptop computer (another symbol of the modern world) using the programme Audacity. In Audacity, I am able to master and manipulate the sounds, removing background noise, altering pitch frequencies and amplitude, adding sound effects, boosting bass levels, applying high and low sound filters, compression and so on. I then copy and paste blocks of sound onto separate audio tracks to be applied as appropriate throughout the composition with which they are used. I would suggest that this patient, pragmatic approach to progressive change provides a subtle metaphor for my faith in Social Democracy as a vehicle for substantive, sustainable change. I would also suggest that, whereas polyfluidity seemed to focus most obviously on the negative, dysfunctional elements of urban culture, the combination of USM with notated music presents the aura of the city soundscape and atmosphere in a more balanced, objective way. For example, *Metal Cutter* takes the recording of a mundane sound (an electric saw on a building site) and transforms it into quite exquisite, some might say beautiful, textures.

The last five commentaries in this thesis explain how specific sounds are manipulated and deployed, concluding with *Metrospectra III* (Page 94, Section 20) in which pitched USM dominates with notated music in a supporting and responsive role. (See Pages 80 – 99, Sections 16 – 20

**10. Other techniques**

Other techniques I use from time to time include the following:

- Imperfect Symmetry – the use of notes in contrary motion but with intervallic variations that produce an "imperfect symmetry". A useful analogy could be the effect of tossing a

heavy stone into a pond or river and observing how the resulting ripples are not perfectly symmetric due to the variations in wind, depth, undergrowth etc. Examples of this can be seen in Section 3 – Explaining my Musical Language (demonstrated via *Perspectives*) - on Pages 25 – 28 (Example E, Bars 38 – 43, Example G, Bars 59 – 64 and Example I, Bars 95 – 99) with the caveat that Imperfect Symmetry is not deployed throughout any of these passages. Another example can be found in *Metrospectra III* (Page 96, Example B).

I have also brought the concept of Imperfect Symmetry into other contexts such as in the score of the piece *Metal Cutter* (Example A, Page 86, Section 16) where visually there is an imperfect symmetry across the page which reflects a similarly imperfect symmetry in the way the music appears to deconstruct as it descends into the lower register and then reconstruct as it climbs towards the final (fluid) chord pattern.

Of course, imperfect symmetry is not a specifically *urban* feature but it is an intriguing gestural idea that has resonance both with the natural and man-made worlds.

- Implied Tonalities – this is the use of chords that bear some relation to recognized tonal ones except for the presence of "foreign" pitches. It also sometimes refers to phrase ends that bear some relation to tonal cadences such as in the final bar of the piano piece *Perspectives*. (See Page 30, Section 3)

- Polyrhythmic Counterpoint – as noted earlier, there is a clear distinction between polyfluidity, which is non-interactive, non-intimate and non-imitative and counterpoint which is the opposite. Counterpoint appears frequently in my music.

● Accord/Discord – Originally inspired by a conversation with a performer about an earlier commission work, I sometimes compose passages of music which, harmonically, switch between clearly audible harmonic devices (whole-tone etc.) and less clear combinations of chromatic pitches (and sometimes microtones) so that the impact is like an aural equivalent of a picture moving in and out of focus.

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● Notation – it is unusual for me to use alternative forms of notation, largely as I have had little reason to do so but I have used circular structures, polytemporal scoring and other forms of alternative notation in past works (i.e. *12*, *The Next Town* etc.). However the inclusion of USM charts in the scores of my more recent works has been a notable change and, for the foreseeable future, is likely to be a permanent feature of my compositions.

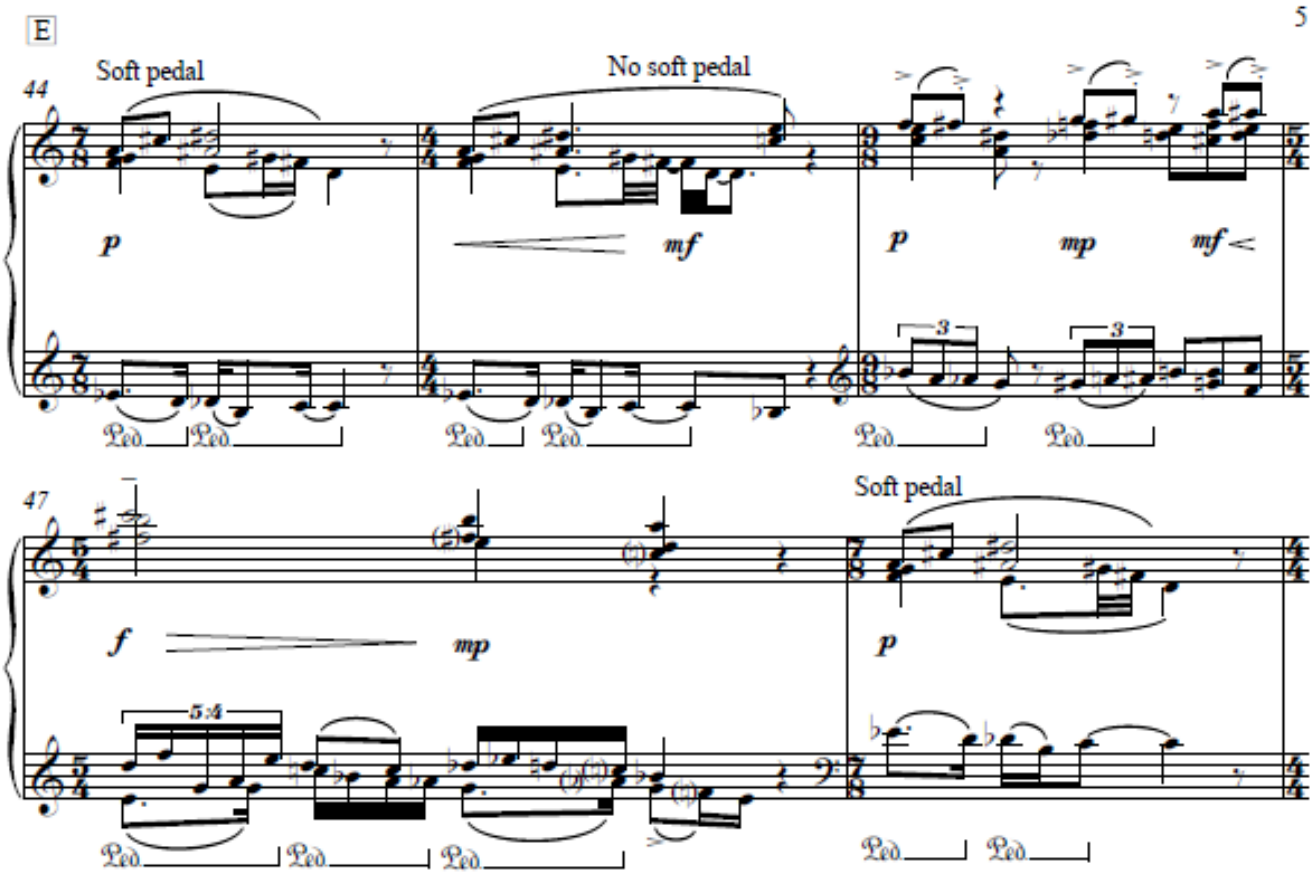
## 11. The Influence of Movement in my music

Even before I had invented Polyfluidity as a means of attempting to feed a representation of events and behaviours in post-globalization society into the compositional process, I had begun focusing on the importance of building material around separate strands of movement and stasis. Indeed polyfluidity emerged from this process which was certainly a consideration several years ago when I was composing solo piano works such as *Momenta* and *Diversions* in which the use of three-part and four-part counterpoint became less about the interactive, intimate relationship that the word "counterpoint" implies and more about attempting, within the limits of what it is possible to expect the individual pianist to play, to juxtapose contrasting strands of activity and relative inactivity (including the use of quite deliberate "silences") in a manner designed to mirror the complex layers of activity and inactivity that reflect day to day events in my own (urban post-globalization) environment.

he first ever performance of “Diversions” was given by Marilyn Wyers, leading to a collaborative relationship brought about by my interest in the role of movement in shaping music and her specific research into “Sound-Related Movement” which has seen us give a series of joint presentations of our work.

I often use the analogy of natural phenomena such as a river or stream which ebbs and flows according to the continual variations in depth, direction, width, presence of other life forms and so on. One could equally point to events brought about by human behaviour and movement which are irregular and asymmetrical. Example A (Page 52) demonstrates some of these contrasting strands and flows of movement and stasis and shows how short silences used to punctuate them.

**Example A** ***Diversions*** **Bars 44 – 48: Contrasting strands of movement within the parts.**



## PART THREE: COMMENTARIES

### 12. PERSPECTIVES (for Solo Piano)

A full commentary and analysis of this piece is provided in Part One, Section 3 (Page 18).

### 13. DEVOLUTION (for String Quartet)

*Devolution* was composed for a workshop (November 2011) involving the Allegri Quartet. It is divided into seven distinct soundbites, separated by transitional passages. Each of the first five soundbites contrasts with its predecessor in terms both of the type of overall material and in terms of the roles of the individual instrumentalists. The sixth and penultimate soundbite attempts a multi-sectional recapitulation in which elements from all the previous five movements are superimposed so that they occur simultaneously. However this process proves unwieldy and is duly aborted. The seventh and final soundbite provides new material which draws upon elements from elsewhere in the piece.

Polyfluidity is deployed throughout the piece with each of the first five movements characterized by one or other category (i.e. Type I in Soundbites A & E, Type II in B & D and Type III in C, thus forming a symmetrical pattern although imperfect because the soundbites are not of identical duration). Soundbite F attempts to fuse elements from all three types and Soundbite G presents new material derived from elements of the previous six soundbites.

The following grid (Page 54) demonstrates the division of roles for the instrumentalists in each Soundbite:

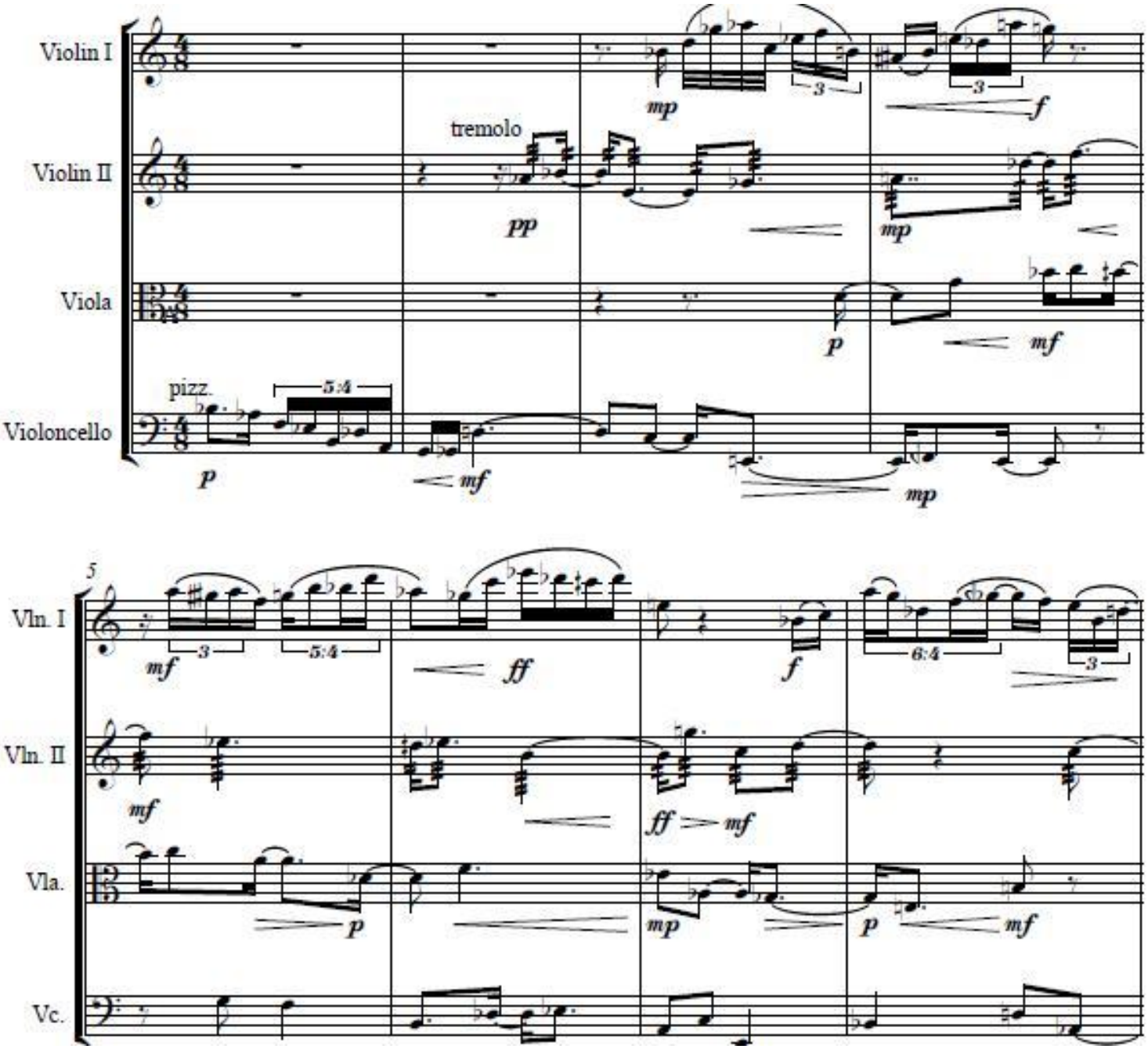
| Instrument | **A**<br>**Bars 1 - 18** | **B**<br>**Bars 19 - 37** | **C**<br>**Bars 38 - 51** | **D**<br>**Bars 52 - 64** | **E**<br>**Bars 65 - 80** | **F**<br>**Bars 81 - 96** | **G**<br>**Bars 97 - 120** |
|---|---|---|---|---|---|---|---|
| Violin I | Mainly rapid notes of shorter duration | Glissandi & gesture | Interruptive but related material to Violin II | Gestural figures | Lyrical, rapid notes | Mixture of previously used features | Various |
| Violin II | Tremolo | Col. Legno, short notes & pizzicato | Lyrical | Various gestural contrasts | Slow lyrical lines | Mixture of previously used features | Various |
| Viola | Slower lyrical lines | Pizzicato, Staccato & Other Bowed | Interruptive short bursts of notes (unrelated) | Double Stops & Glissandi | Pizzicato, Chords & Tremelo | Mixture of previously used features | Various |
| Violoncello | Pizzicato | Legato | Interruptive & exploits upper register (unrelated) | Rapid bursts of notes followed by longer ones | Pizzicato, Staccato & Harmonics | Mixture of previously used features | Various |

We can see that, in terms of remaining within their individual silos, the instrumental parts are distinct not only in the sense that they alter with the advent of each soundbite but distinct from one instrument to the next, each operating independently of the other three; consistent with the underlying metaphysics behind polyfluidity.

In Example A (Page 55), we see how, in the opening of *Devolution*, the four instruments are clearly each playing material of a distinct character (Violin I: rapid short-duration notes,

Violin II: tremolo, Viola: slow lyricism, Cello: pizzicato) and there is no apparent connection or interaction between the individual paths they pursue - Type I Polyfluidity.

**Example A *Devolution*: Bars 1 – 8: Firm example of Type I Polyfluidity**



features in the individual parts and they continue to be non-interactive, it is less obvious that they are following specific individual characteristics and the overall picture is more nebulous and unstable; in other words Type II Polyfluidity.

Soundbite C introduces Type III Polyfluidity, the second violin taking up the lead role. The first violin adopts the role of playing *related* material (similar features to main figure). The Viola and Cello play *unrelated* material (little or no relation to the main material). Example B (Page 58) demonstrates this process.

Example C (Page 59), demonstrates an attempt, in Soundbite F, to fuse some of the stronger elements of material from the previous sections. Here the instrumental parts' references to earlier material are divided thus:

- Violin I: Soundbites B (Bars 81 – 84) and E (Bars 85 – 88)
- Violin II: Soundbites C (Bars 81 – 84) and D (Bars 85 – 88)
- Viola: Transition III (Bars 81 – 84) and Soundbite B (Bars 85 – 88)
- Cello: Soundbites A (Bars 81 – 84) and C (Bars 85 – 88)

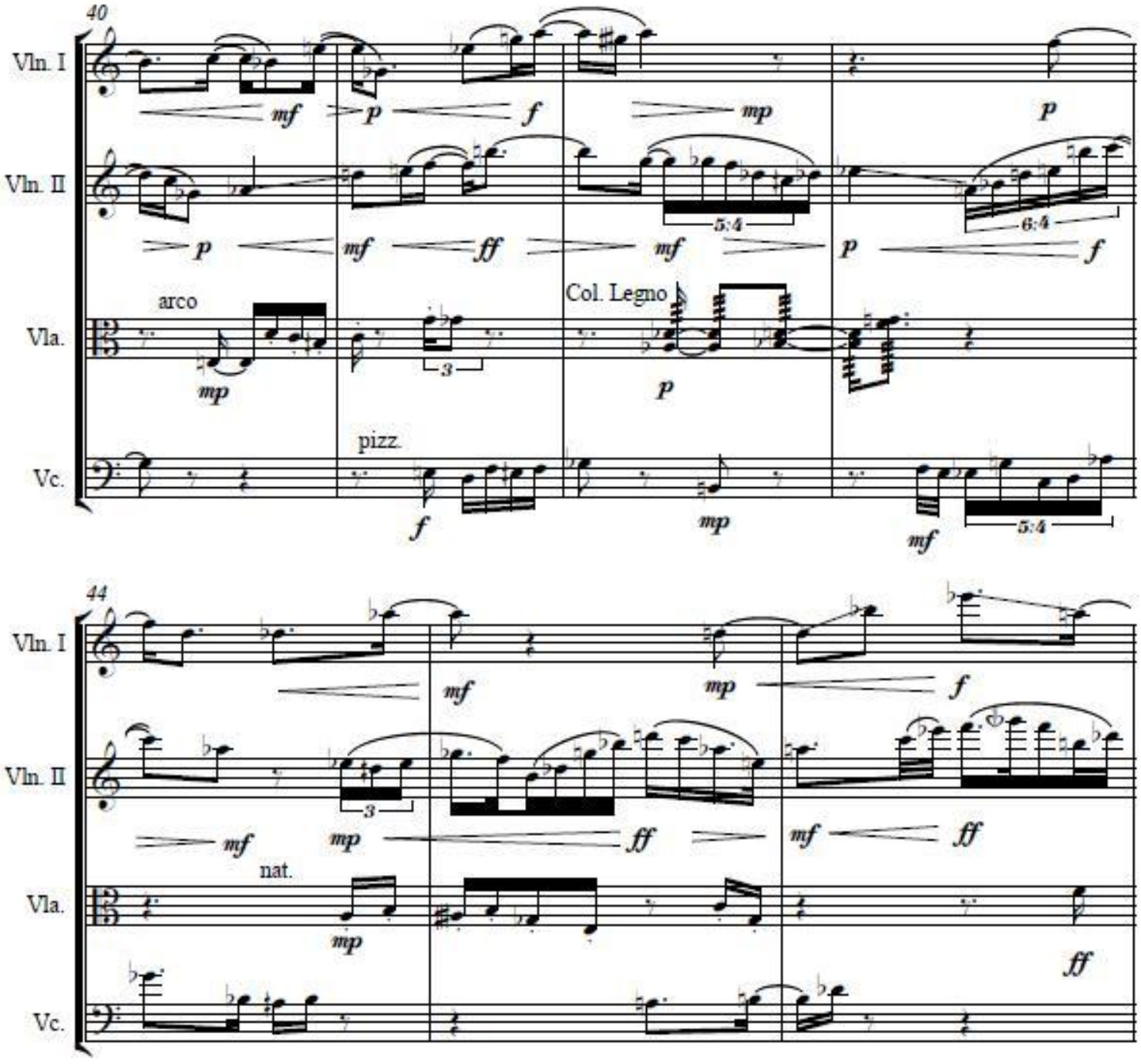
Although, for performers' ease, the entire piece is scored in 4/8 time, the music is ametrical and ebbs and flows at irregular rates. Therefore bar lines are not always be an indication of emphasis or "beat".

From Bar 97 (Soundbite G), the attempted multi-sectional recapitulation is aborted (although its deconstruction begins at Bar 92, Transition VI). The material thereafter is composed more freely, drawing inspiration from previous events and switching between different types of

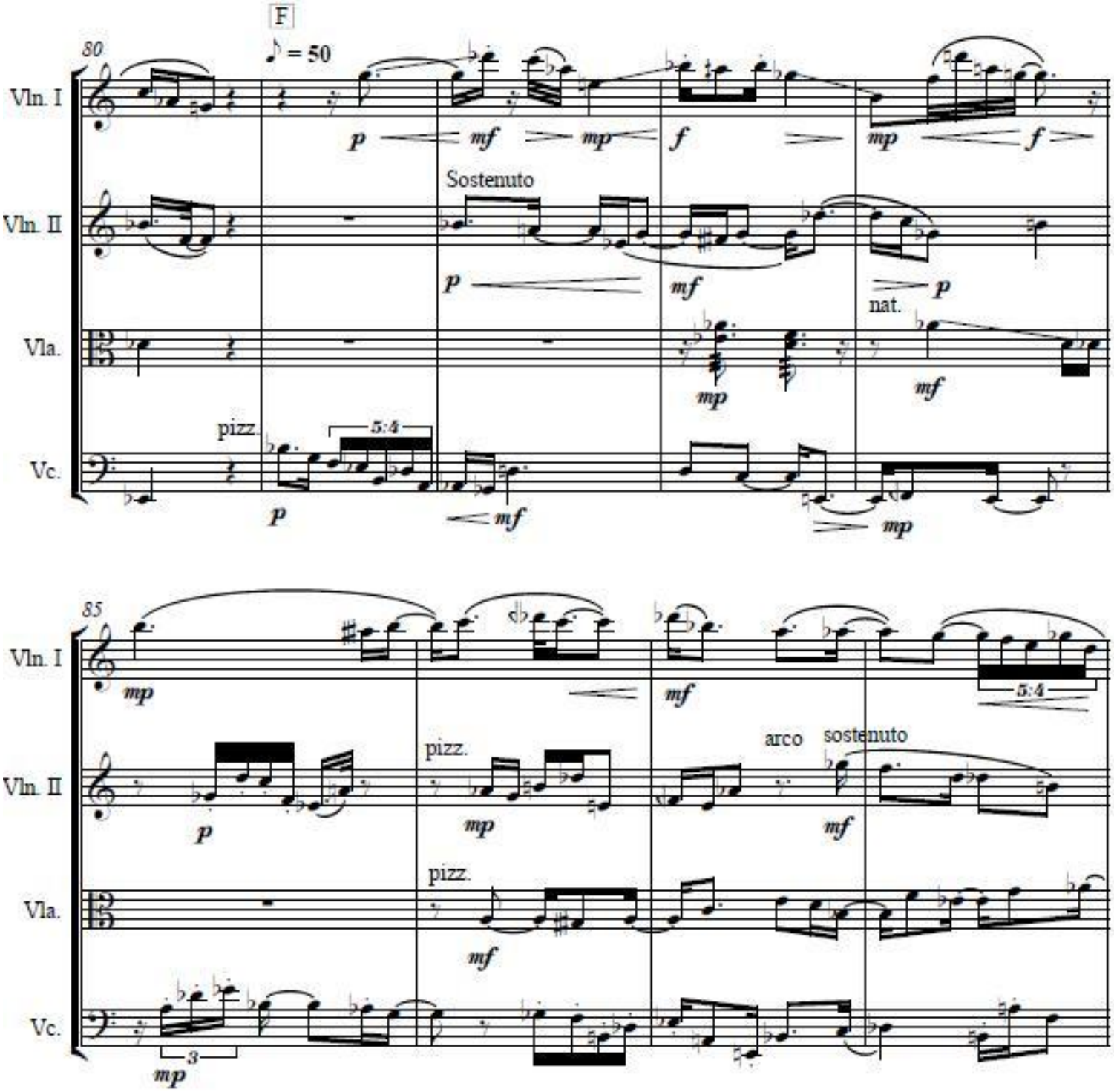
polyfluidity, initially Type I (Bars 97 – 105), moving into Type II (Bars 106 – 115) and, in the Codetta (Bars 116 – 120), beginning like Type III but becoming unified for the only time in the penultimate bar before finishing on a whole-tone chord. See Example D (Page 60)

In conclusion *Devolution* falls short in two key areas. Firstly it is questionable whether the different types of polyfluidity are sufficiently audible to provide the degree of contrast between soundbites that I intended (or that the "soundbites" themselves come across as anything more than short sections) and it is in the less stringent atmosphere of the final section that the music arguably works most satisfactorily. Secondly I am left feeling that the music lacks cohesiveness, the aesthetic aims undermined by adherence to principle; essentially an experiment which informs more so than represents my research.

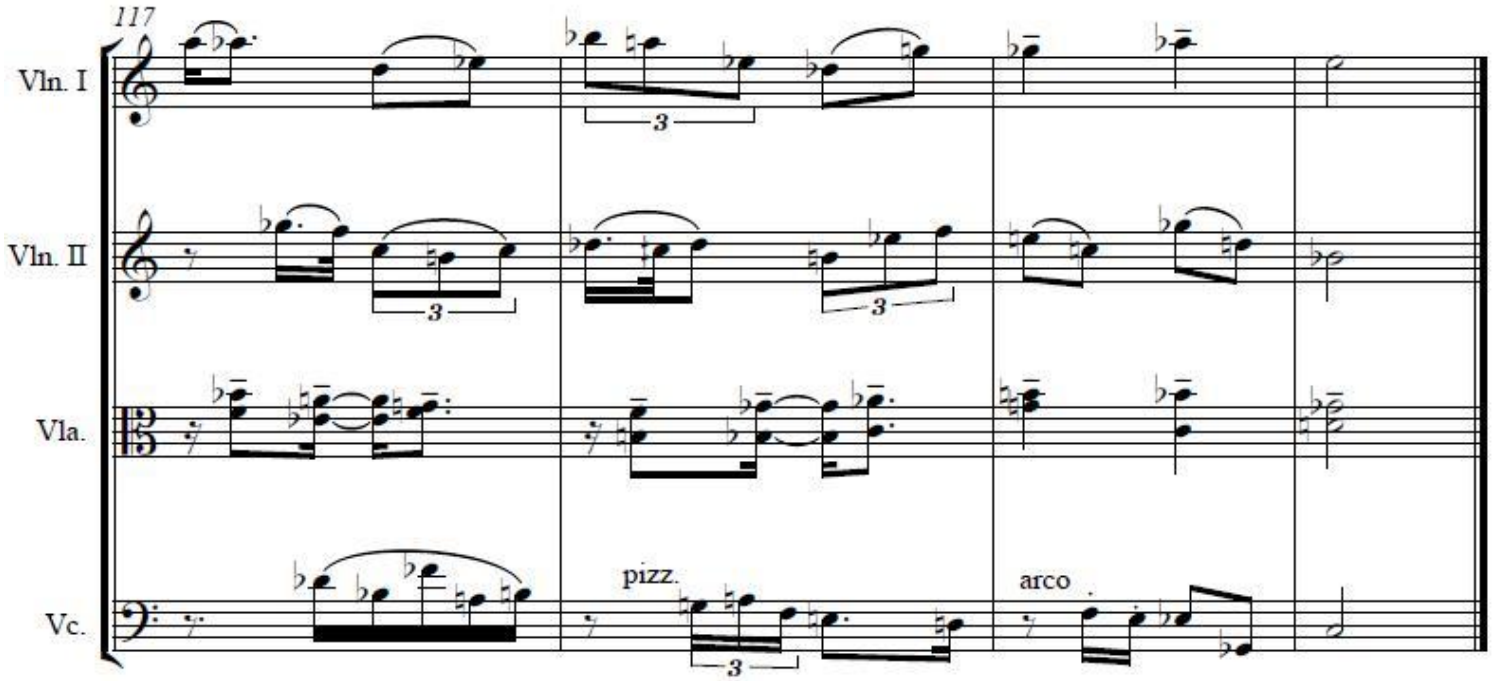
**Example B** ***Devolution*** **Bars 40 – 46: Type III Polyfluidity – lyricism in Violin II, related material in Violin I and unrelated material in Viola and Cello.**



**Example C** ***Devolution*** **Bars 80 – 88: Attempt to fuse material from all previous sections**



**Example D *Devolution* Bars 117 – 120: Greater unity briefly appearing in final bars.**



## 14. SINFONIETTA (for Orchestra)

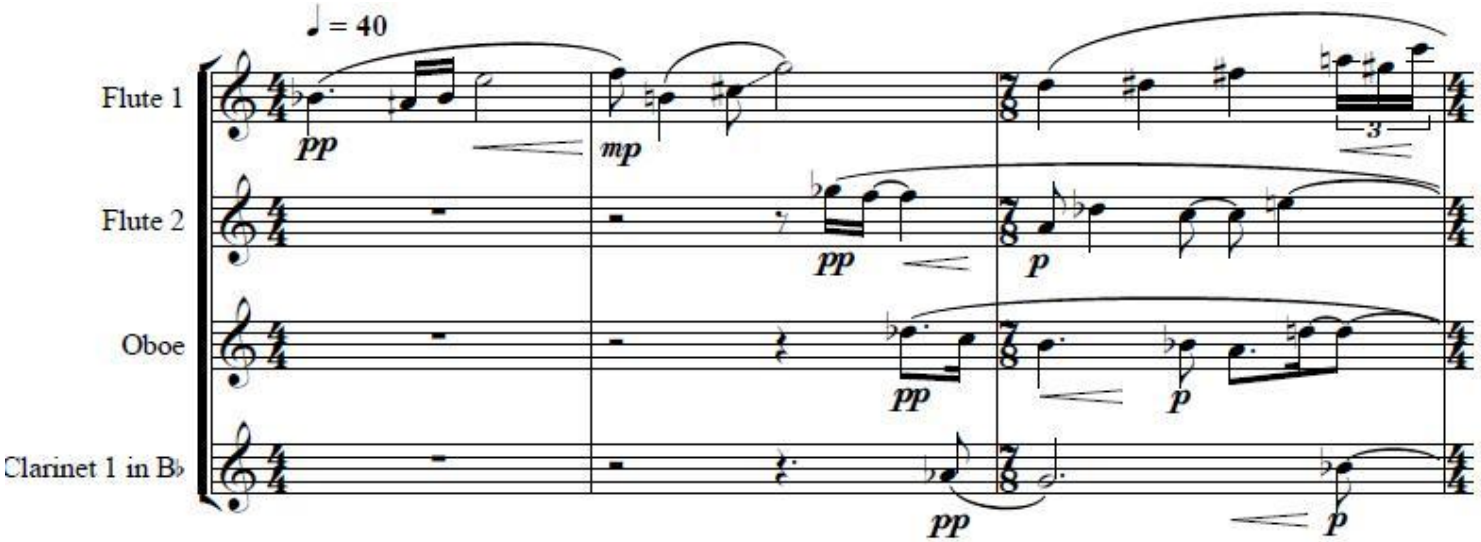
*Sinfonietta* (2012-13) is composed for a small orchestra (2 Flutes, Oboe, Cor Anglais, 2 Clarinets, 2 Bassoons, 2 Horns, Trumpet, Trombone, Timpani, Pianoforte and a medium-sized string section). It is divided into eleven sections. I have called the first and las t of these the "Preface" and "Conclusion" as the former introduces material but is not specifically transformational and the latter develops material from elsewhere and presents it in a new form. The nine sections in between are labelled Soundbites A to I. In contrast to previous works, one short "principal theme" continually resurfaces in various forms throughout.

The eleven-minute *Summary* is a precis of all these sections (soundbites), introducing the principal elements of material that are developed more fully in the Elaboration (which lasts just over twenty-three minutes). Both movements open with a statement of the main theme and introduces the use of both quarter-tones and tritones. The ensuing counterpoint then brings (compound and non-compound) whole-tone and Jazz-related harmony into play, stressing ever-present elements of my harmonic language (See Example A, Page 62). These features appear continually thereafter.

The function of the Preface is to present certain elements that are important to the whole piece. They include:

- the principal theme;
- key features of my harmonic language (see Page 19, Section 3);
- the contrasting timbres of the orchestra;
- the bridging role of the piano with its emphasis on chordal features.

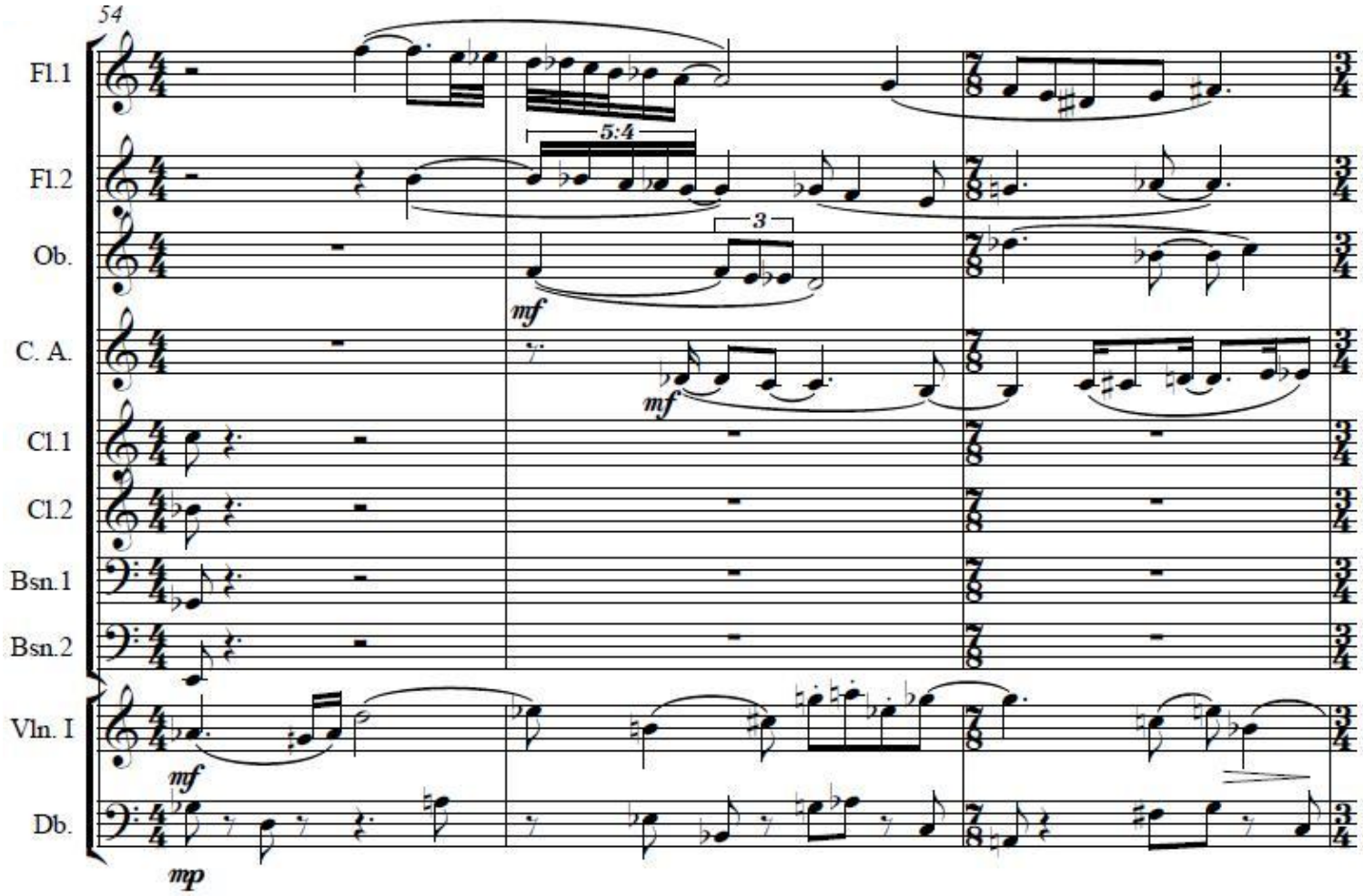
**Example A *Sinfonietta* (Elaboration) Bars 1 – 3: Main theme and harmonic features**




The Preface concludes with an eight-note chord which fuses whole-tone harmony (Gb, Ab, Bb, C & D) between a low G in the Timpani part and a high Eb played by the first violins; somewhere between Compound Whole-Tone and Jazz-Related.

In Soundbite A, the principal theme switches from one instrumental part to another, always commencing on a different pitch. At first, the response to each statement varies between separate groups of instruments, usually in a broadly staccato style but, from Bar 36 in the Elaboration (Bar 21 in the Summary), the woodwinds begin to develop a descending contrapuntal and overlapping figure which gradually increases in volume and duration as the statements of the principal theme become quieter. This process is seen in Example B (Page 63) as the first violins hold onto the principal theme but are overwhelmed by the woodwinds.

**Example B** ***Sinfonietta (Elaboration)*** **Bars 54 – 56: Woodwind's overlapping descending figure begins to overwhelm the principal theme played by the first violins.**




The new counter to this material, first appearing at Bar 71, now emanates from the small Brass Section whose response makes reference to the principal theme, albeit in a shorter form. As the power struggle between woodwinds and brass develops, statements of the principal theme become more substantial and more obvious to the listener until the Trumpet announces Soundbite C, presenting a variation on the principal theme greeted by a glissando descent into a five-note chord in the strings and a one-bar bridging figure in the piano, a similar response greeting another variation of the main theme played by the first Horn.

As Soundbite D begins to loom, the appearance of a more lyrical (contrapuntal) figure in the strings now comes to the fore. Again the piano acts as a bridge between the contrasting figures. Just as previously the opening themes of each soundbite were gradually overwhelmed by new material as transformation took place, Soundbite C sees the lyrical, contrapuntal strings eventually dominating as the brass instruments play sparser and dynamically reducing material.

It is notable that, in each of these changing states, the tendency is for time signatures to expand and contract by small durations (usually one eighth note such as 4/4, 9/8, 4/4, 7/8 etc.); a metaphor for the irregular ebb and flow of everyday events.

Soundbite D opens with the strings delivering a lengthier development of their lyrical, contrapuntal material, the rhythmic independence of all five parts suggesting Type I or II Polyfluidity. This is subsequently challenged by a similarly lyrical theme in the first Bassoon part which, upon close inspection, is actually another variation on the principal theme, accompanied by a piano part that is part-chordal, part-contrapuntal.

This soundbite does not end as the previous three with new material overwhelming the old but by the latter melting into a transitional section deploying all woodwinds instruments, beginning to hint at a triplet figure.

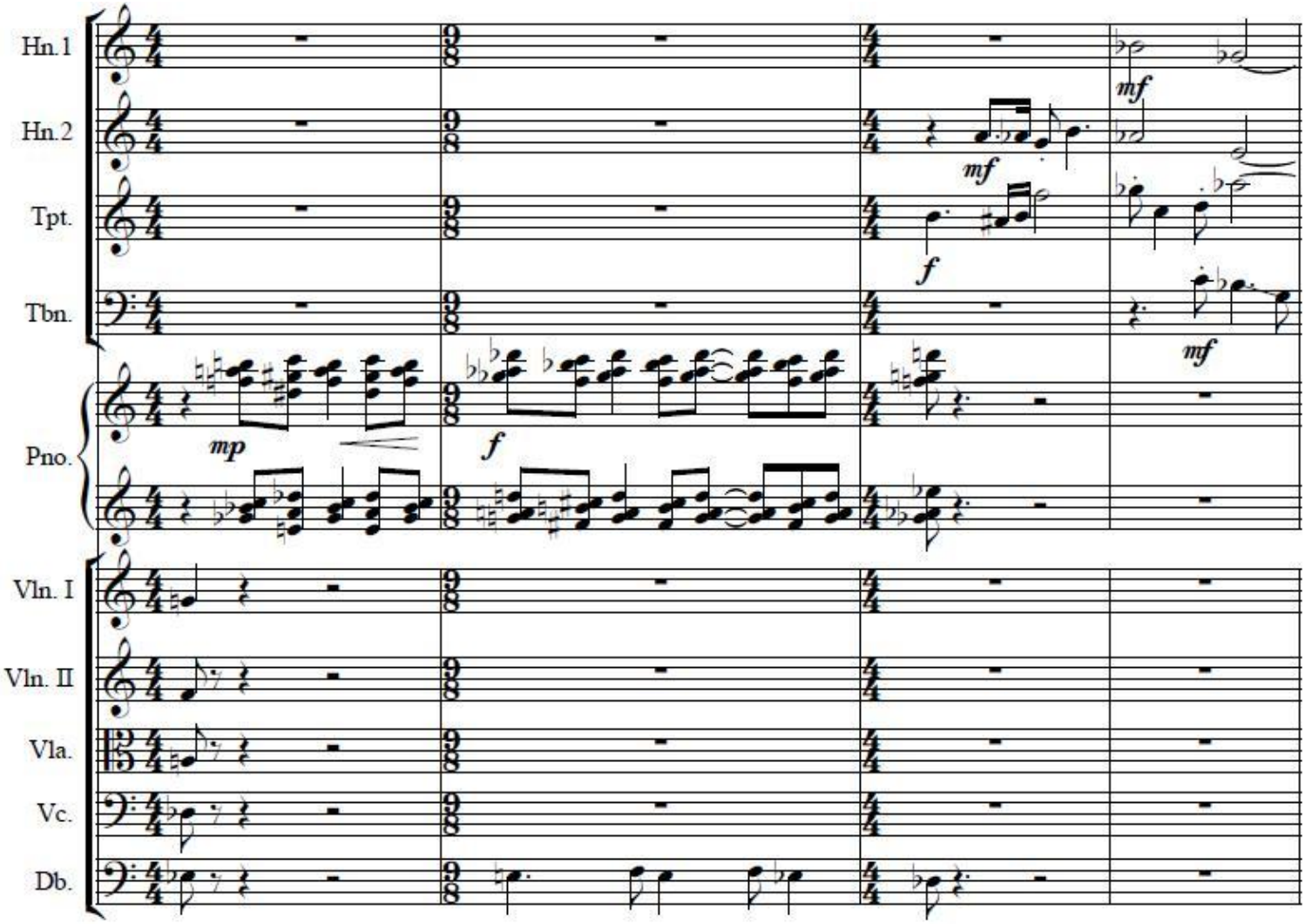
Soundbite E begins with the triplet figure fully confirmed by a 6/8 time signature. What follows is a rapid triplet-time version of the original theme, countered by short dramatic contrasts, particularly deploying Piano and Timpani, while individual bars expand and contract, adding a rhythmic intensity. Polyfluidic features also return in the middle section of

the soundbite, first in the brass and then the woodwinds. As this section reaches its climax, the tempo markings continually switch between triplet and non-triplet time as the piano (swapping between compound whole-tone chords and lighter-textured counterpoint) battles first with the woodwinds, then with the strings, setting the scene for Soundbite F.

Soundbite F is dominated by a polytonal (or perhaps more accurately polymodal) figure in the piano in which the left hand literally plays the same three-note chords as the right an octave down plus one semi-tone (i.e. F, Eb & B in the right, F#, E & C in the left), offset by a pedal bass, initially in the Cellos. This figure is followed by more fluid material but, as the soundbite develops, the polytonal chords become more dominant before giving way to contrapuntal and lighter-textured passages in which the piano remains in the ascendancy, challenged by the brass section which encompasses variations on the opening principal theme within a sparse counterpoint.

Example C (Page 66) sees the piano's polytonal (polymodal) figure expanding and countered by the brass whose short, sparse response contains a variation of the opening principal theme. As Soundbite F continues, the piano is increasingly countered by short bursts of material from groups of instruments across the whole orchestra, culminating in a dramatic transitional passage in which the first flute takes up the latest configuration of the principal theme, offset by tremolo string chords that fluctuate in quarter- and semi-tones. Then, as the other woodwind instruments resurface, the soundbite ends with the first violin elaborating on the original theme while the flutes, Oboe and Cor Anglais

**Example C** ***Sinfonietta (Elaboration)*** **Bars 215 – 218: Polytonal piano, mildly fluctuating**



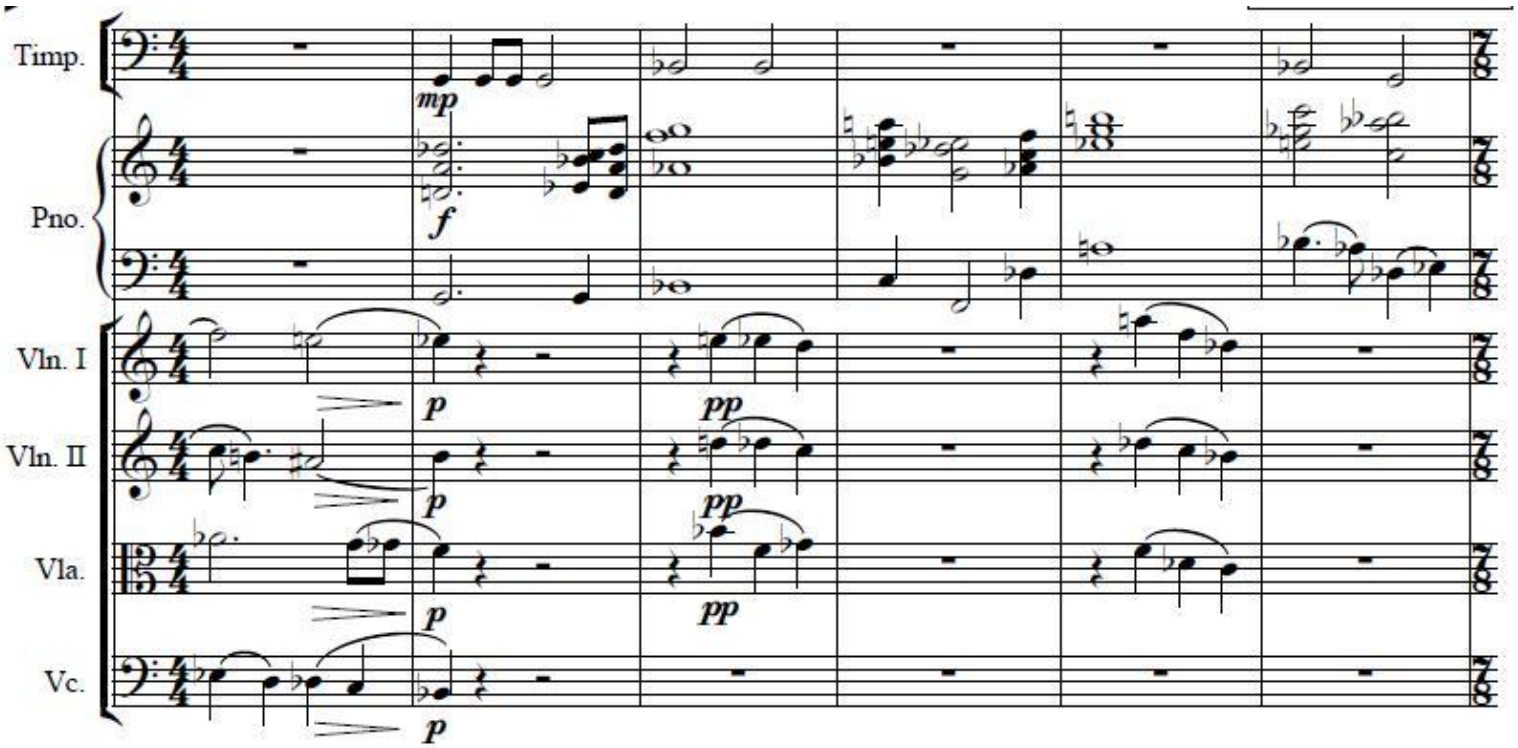

mostly play chords. As with the Preface, the conclusion is a sustained chord, this time consisting of seven pitches played by all the woodwinds except the second Bassoon.

Cellos and woodwinds announce Soundbite G, their staggered entries gradually forming a whole-tone chord. This develops into a mildly contrapuntal but essentially chordal figure. Gradually the texture becomes denser as more woodwinds become involved, producing six, seven and eight-note chords, nine when the whole section combines with the Timpani. As the music takes on a slightly more contrapuntal character, its flow is briefly interrupted by an overlapping figure in the brass parts. However, when the figure again interrupts, it is more

forceful and the counter figure lasts considerably longer, consisting of a contrapuntal variation on the work's original theme.

Despite this, when the woodwind makes one last attempt to regain the ascendancy, it is not the brass instruments but the strings that interrupt, the first Violins providing a new variation on the main theme while the second Violins, Violas and Cellos respond with essentially (Type I) polyfluidic material. This too is shortlived though as the piano, so often the bridge between passages of music, takes up the principal theme for the first time and in the form of striking chords, part accompanied by the Timpani while the upper strings respond with groups of three harmonised notes in rhythmic unison (see Example D, below). This continues, culminating in a four-note whole-tone chord (marked mezzo-piano), subsequently added to by a plucked note in the Double Bass part, signifying the conclusion of Soundbite G and setting the scene for the multi-sectional recapitulation that is attempted in Soundbite H.

**Example D** ***Sinfonietta (Elaboration)*** **Bars 301 – 306: Beginning of concluding passage of Soundbite G, piano playing main theme in chords, upper strings replying.**



Soundbite H begins with the Cellos repeating the opening of Soundbite A, albeit a minor sixth higher than previously. When the Piano responds with a figure resembling passages from Soundbite C and the woodwinds reply with a descending, overlapping figure echoing the main material from Soundbite B, we begin to see that this is an attempt to fit together key elements from all the previous seven soundbites in a multi-sectional recapitulation. The next statement of the principal theme sees the Trumpet repeat the configuration that announces Soundbite C along with the strings' glissando descent. Following the intervention of the bridging piano, the strings then resurrect their lyrical four-part texture from Soundbite D. This process continues with the first Bassoon taking up a variant of the main theme, echoing its role in the latter half of Soundbite D, offset by the overlapping winds and joined by the polymodal Piano that dominates Soundbite F. The winds then take up the chordal features from Soundbite G.

Eventually the notion of multiple features running simultaneously fails to materialize and proves too cumbersome. Instead, Soundbite H begins to take on its own character, increasing in overall density as instrumental parts begin to double (and treble) up until, for the first time in the piece, the entire ensemble plays in Tutti (Bars 336 – 339 Elaboration, Bars 135 - 139 Summary). Soundbite H ends quite quickly thereafter, the huge tutti chords fading into a quiet descending figure opened by the Flutes and Oboe and completed by the lower strings and middle woodwinds, concluding with a deep pianissimo chord, whole-tone at first until the E in the Bass part drops to E flat.

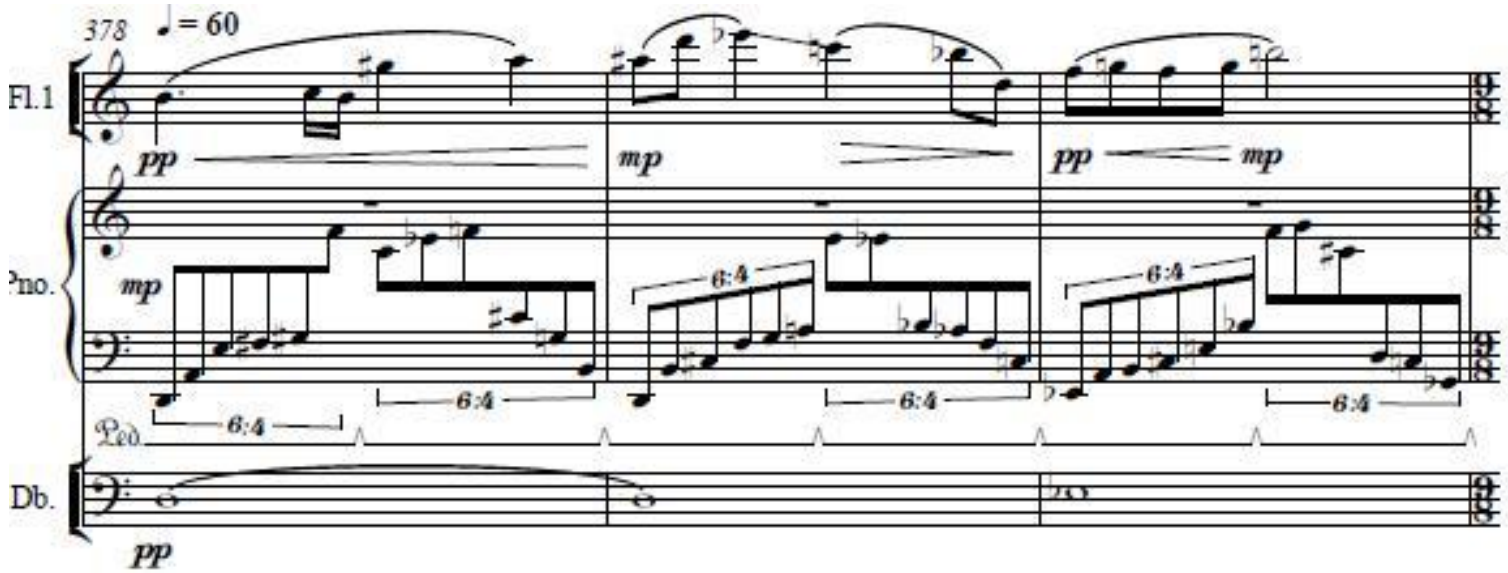
Soundbite I adopts a different strategy from that in H. Instead of attempting to merge features from previous sections, new material is presented, shaped by but distinct from that which has taken place previously. Accordingly greater and more frequent use of timbral contrasts

become possible as responsibility for leading this fresh invention of material switches from instrument to instrument.

However, if this section begins like a potential finale, it proves to be more of a transition before ending somewhat dramatically with the Piano, unaccompanied, playing the main theme in the form of six-note chords, in essence the last time this theme appears in anything resembling its original configuration.

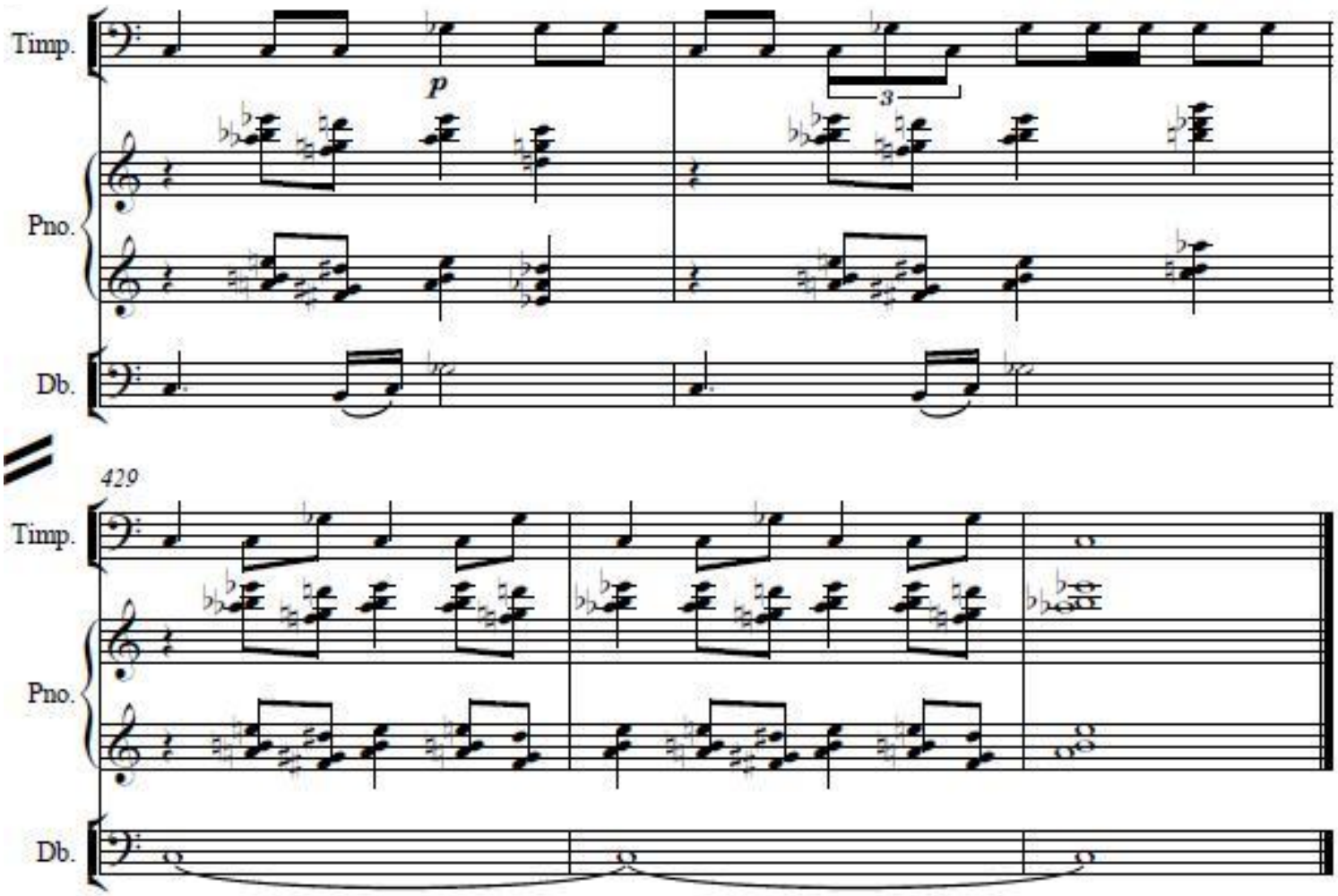
The "Conclusion" is not, as one might expect, a short elaborate Coda. On the contrary, this lengthy final section signals the clearest statement of intent in relation to musical language. It kicks off with a new, lyrical variant of the main theme, accompanied by glissando piano and Double Bass pedal. (See Example E, below). This opening develops, contrasted by piano chords and short counter figures in other parts of the orchestra, building towards a second brief tutti in Bar 407 after which the original theme returns, albeit altered once again, in the first flute and oboe while the Timpani part beats out a continuous pedal accompaniment.

**Example E** ***Sinfonietta (Elaboration)*** **Bars 378 – 380: Opening of conclusion, new variant of original opening theme with glissandic piano & pedal bass.**



Events thereafter essentially constitute a gradual deconstruction as instrumental parts disappear and dynamics reduce until the final passage sees the piano playing a quiet repetitive variant of its polymodal figure offset by the Timpani and Double Basses playing a much-reduced configuration of the opening theme. (See Example F, below)

**Example F** ***Sinfonietta (Elaboration)*** **Bars 427 – 431: See above paragraph**

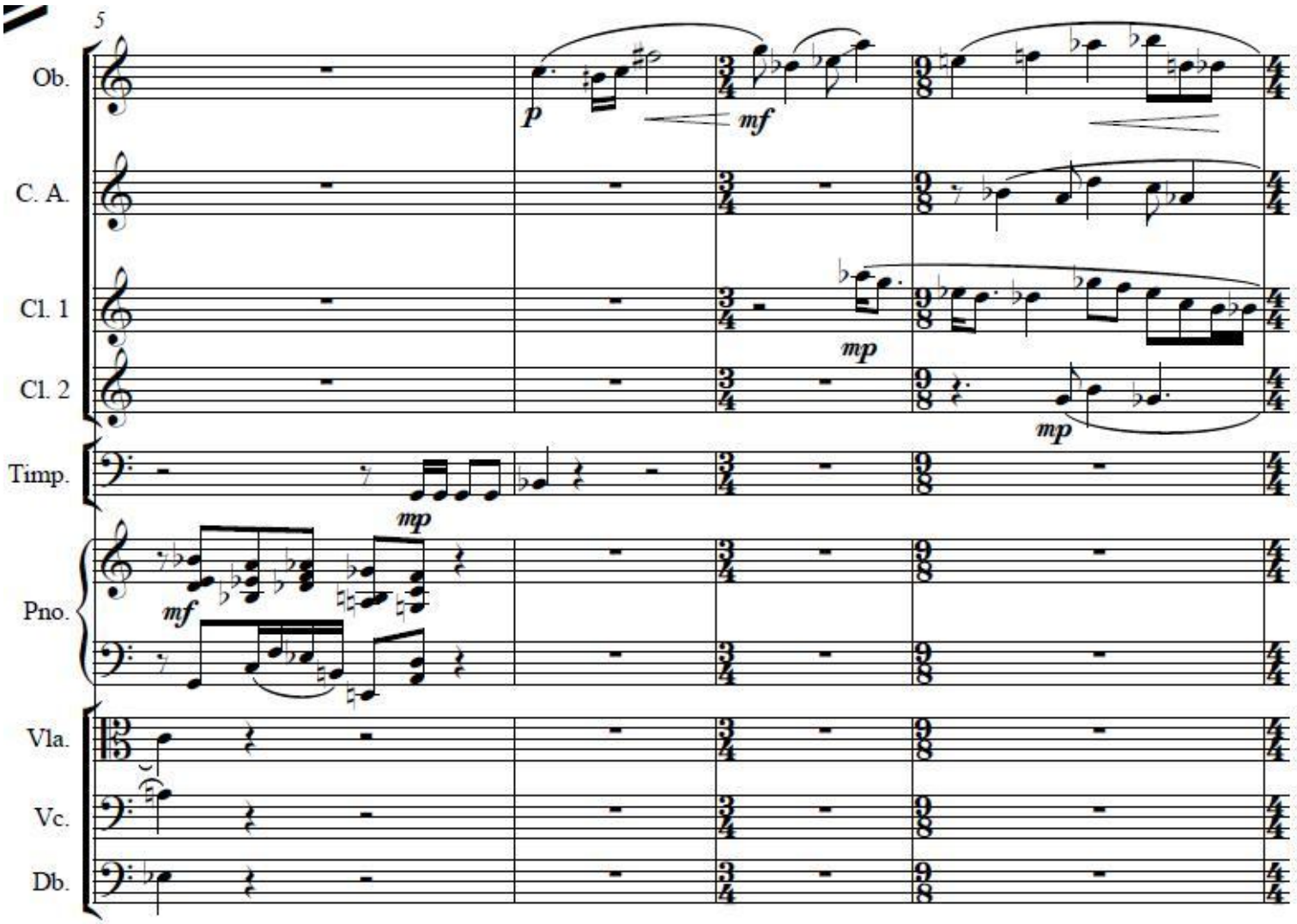



**<u>Comparison between Summary & Analysis</u>**

In simple terms, the Summary is a shorter, edited version of the Elaboration. Nevertheless some pitches, chords, rhythms, timbral combinations and other features have been altered in parts of the piece to create a Summary that is representative but cohesive. Accordingly there

is material in the Summary that does not exist at all in the Elaboration but is used to prevent disjointedness. An example appears as early as Bars 6 – 10 of the Summary where a second statement of the principal theme is presented with the second bar shortened and followed by a version of the overlapping woodwind figure that features in Soundbite B which combines with events from the opening of the Elaboration (in the Horns initially) and moves its summary of the Preface on so that Soundbite A is reached at Bar 14 (as opposed to Bar 23 in the Elaboraton). Part of this new material is demonstrated in Example G (below).

**Example G** ***Sinfonietta (Summary)*** **Bars 5 – 8: New material linking features contained**



This process continues throughout, each soundbite condensed and, where necessary, altered or appended in order to link events found in the Elaboration in an aurally cohesive manner, representing the key features from each soundbite in fairly rapid motion.

Even in the context of the aforementioned "trailer" concept, it proves challenging to adequately represent the coming events (of the Elaboration) in such little time. So ideas arrive and are replaced continually giving only a snapshot of the more gradual transformations that characterize the Elaboration. The desire not to devalue the piece by failing to present a worthwhile summary probably explains why, even as far along as when the Summary reaches Soundbite F (Bar 111), it has required more than half the duration used by the Elaboration to reach the same point (Bar 204). Despite the sense that events arrive and disappear with overt rapidity, the Summary nevertheless lasts 11 minutes, 41 seconds; more than half the total duration of the Elaboration and several minutes longer than I had planned when composing it.

Both as an example of large Soundbite Form (see Pages 40 - 41, Section 5) and of Cycles of Transformation (see Pages 42 - 43, Section 6), *Sinfonietta* provides a useful reference point in my research. At the same time, perhaps over-reacting to my reservations about *Devolution*, it relies too heavily on variants of one main theme and the success of the individual transformations from one musical state to another vary greatly. Its primary purpose here is to document a significant step in my research but one which subsequently triggered a much-needed re-evaluation of my approach.

**15. METROSPECTRA (for Percussion, 2 Keyboards & String Quintet)**

*Metrospectra* (2013) represents a transitional point in the development of my style. Composed in such a way that it can be represented as a digitally sequenced piece but can also be performed live by eight musicians, it provides a bridge from my earlier approach to that which has emerged following the introduction of Urban Sound Manipulation (USM). To summarise it:

- is both 'ethereal' and urban in character and influence;
- is demonstrably influenced by Spectral music and deploys features drawn from spectral concepts although it is *not* a spectral work;
- is consistent in its application of my harmonic language;
- is loosely in soundbite form but only in terms of contrasting material;
- has a transformational element in the way features appear as links between sections;
- makes only limited use of democratic pitch distribution.

The title acknowledges both the strong urban backdrop and the influence of spectral ideas, in particular the limited use of the overtone series and that of strong concepts of sound (i.e. glissando strings, overtones emerging from behind the cymbal, the ethereal qualities of the Fender Rhodes Piano, textural and registral contrasts etc.).

The piece opens with a gradually expanding chord beginning with a low C in the Double Bass and both Keyboards doubled an octave higher by loud Timpani. Unusually, for me, the Cello enters next also doubling the Double Bass an octave up. It is rare for me to allow the same pitch to appear simultaneously in two separate octaves but this is allowed here both to stress the C *fundamental* from which the ensuing chord is derived and in the brief overlap as

the Fender Rhodes quietly harmonizes the strings . However, as a chord arrives from behind the loud shimmering cymbal, its components are not, as one might expect in a genuinely spectral work, constituent parts of the overtone series but of one configuration of the whole-tone mode. The harmony that immediately follows has a polytonal element that also hints at Jazz while the sliding Cello descent signals what is to come.

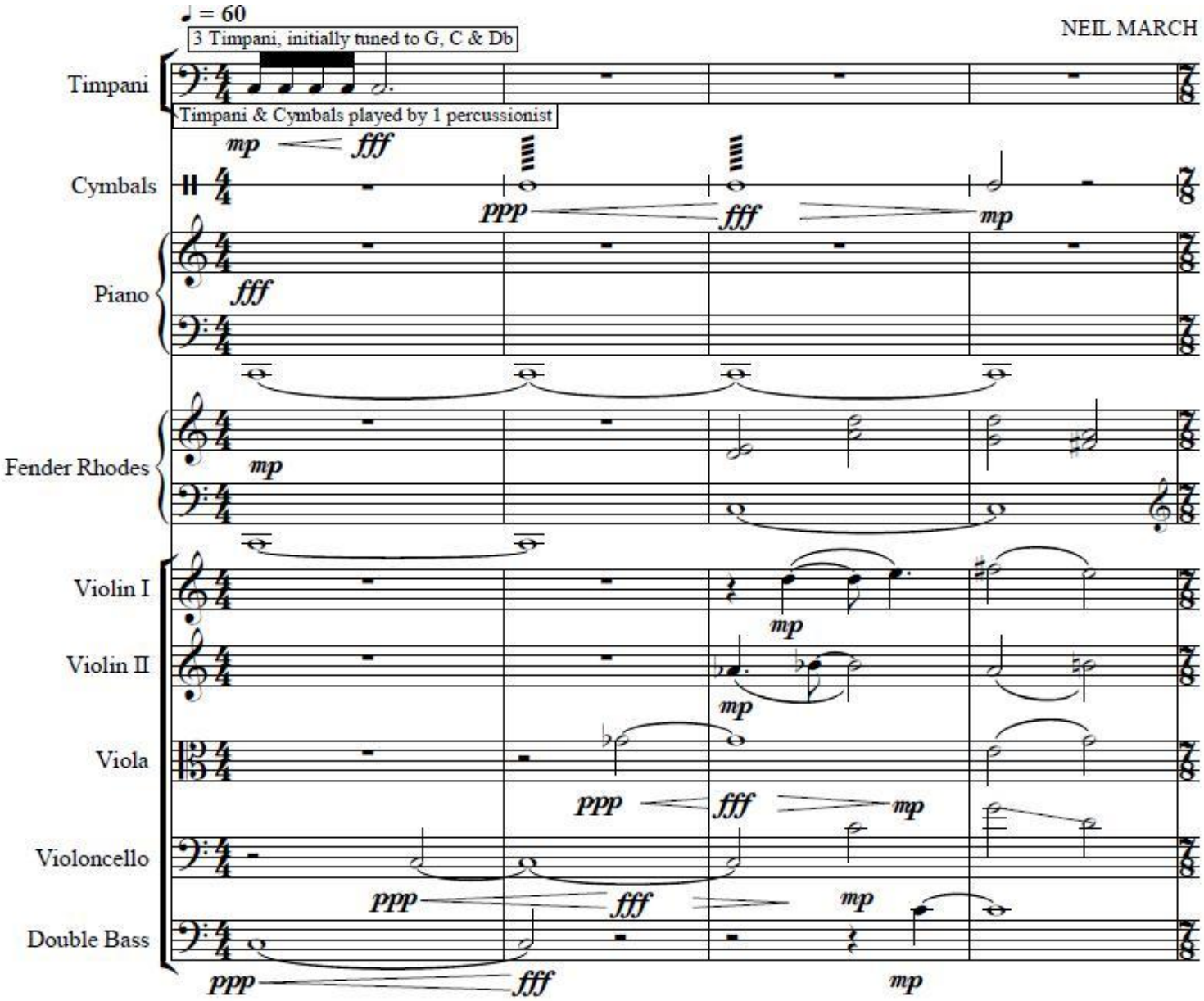
Four bars into the piece, this strong chordal material is countered by the fluid counterpoint and lighter texture of the Fender Rhodes and the less fluid, more chordal Piano.

Example A (Page 75) demonstrates the opening four bars with the chord expanding from a C fundamental. Example B (Page 76) demonstrates the immediate counter-material in the two keyboards which is characteristic of my ethereal harmonic language and polymetricality.

We see also, in Example B how the counter-material in the two keyboard parts is contrasted by single notes in the Timpani part, two pizzicato notes in the strings, a two-note glissando feature in the Double Bass and a cymbal, ensuring that elements of the overall soundscape continue to be in evidence despite the dominance of the quieter, contrapuntal keyboards.

In this counter-material, the choices of pitch are not accidental and make liberal use of tritones, chromatic (minor) seconds and whole-tones in the horizontal parts while the harmony is dominated by the usual common features of my work.

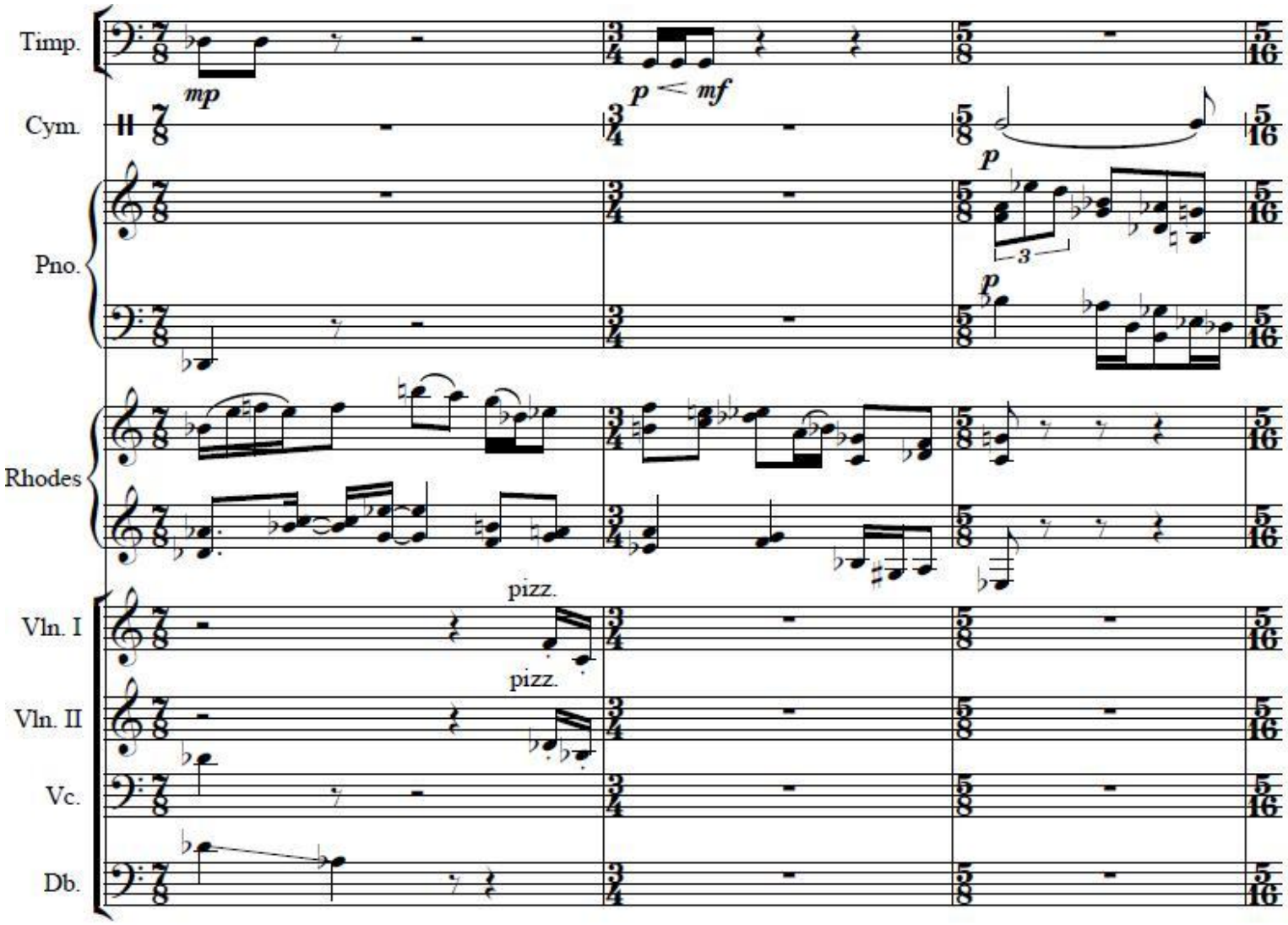
**Example A *Metrospectra* Bars 1 – 4: Expanding chord from low C Fundamental.**




The remainder of Soundbite A develops from this opening material and counter-material but there is a notable change as the piece reaches Transition I at Bar 30. This time, with a chord emerging from an A flat bass, as the cymbal shimmer subsides, we hear the lingering sound of some of the harmonic overtones, underlining the spectral influence and that of Gerard Grisey's *Partiels* (1976) in particular. The response in the Timpani, Keyboards and lower Strings provides a new counter, the ensuing sustained chords acting as a bridge to another emerging chord (this time from a D flat bass), the implied overtones rising high into the

upper registers of the Rhodes and Piano before an extended version of the counter theme leads into three striking chords which announce the advent of Soundbite B.

**Example B** ***Metrospectra*** **Bars 5 – 7: First appearance of counter-material in keyboards**




Soundbite B opens with contrary motion glissando strings producing a multiple siren-like effect. The over-riding sense is that sound and texture are more prominent than pitch and harmony though close scrutiny of the score reveals that harmonic features and principles nonetheless remain consistent. The counter is provided once again by the keyboards with

both horizontal and vertical pitches adhering closely to the same harmonic principles while the durations of bars expand and contract by minor fractions.

As the strings ease off (Bars 56 – 60), the percussive keyboards seize the momentum and, in Soundbite C, what begins as a triplet figure in the bass parts, juxtaposed against striking chords, is pulled and pushed again by minor fractions (6/8, 7/8, 6/8, 5/8) before being twice suddenly interrupted by quiet, high register, glissandic strings.

From Bar 89, a short transition sees a series of chords lead into Soundbite D in which the upper register strings now take centre stage but the glissandic feature is replaced by a chromatic figure that fluctuates, mainly deploying close intervals between the two Violins and Viola while the Cello also uses its upper register but sits around an octave below the other three strings. The Double Bass does not appear at all. Initially the counter material is provided by the Fender Rhodes but, from Bar 102, the Piano begins to challenge the dominance of the strings with a pedalled figure subtly hinting at but not adhering to the overtone series. By Bar 107, this Piano figure has taken the lead and Soundbite D begins.

It is a short section in which the piano presents its pedalled figure contrasted by chords mainly of a quintal/quartal character. The strings begin to resurface, now switching between short glissandic chords and pizzicato. At Bar 117, there is a notable change in the character of the piano chords, the first mainly based on the whole-tone scale, the second polytonal. The ensuing transition reintroduces the emerging chord from a low bass figure, established in Soundbite A, contrasted by less stable chords and counterpoint. At Bar 125, this gives way to Soundbite F which opens like a recapitulation of Soundbite A. However, within four bars, the

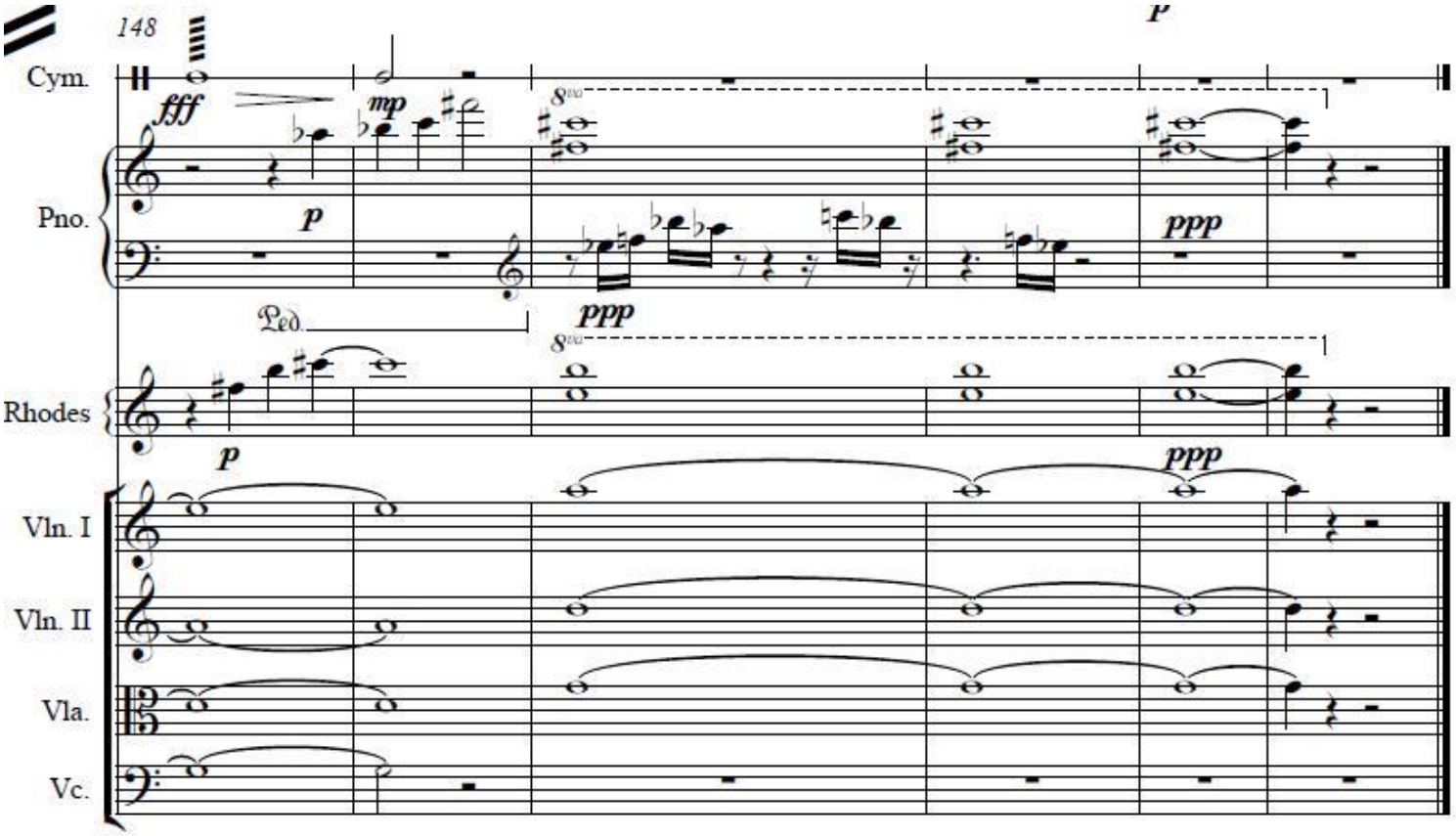
emerging chords are expanded and contrary motion glissandi, as heard more prominently in Soundbite B, reappear in the strings.

The chromatic figure from Soundbite D also resurfaces albeit briefly before a series of descending chords involving the whole ensemble lead back to the emerging chord idea.

The final stretch of the piece is derived from one section of Soundbite A (in which the chord emerging from the cymbal roll has elements of the overtone series) along with chords derived from Soundbite E, the piece ending with a quiet held chord adorned by sporadic single notes in the Rhodes.

Although the final chord is not genuinely Compound Whole-Tone (in as much as it does not separate pitches into two distinct halves with one whole-tone chord in the lower register and the other in the upper), it is made up of three pitches from each whole-tone scale. It also derives partly from the harmonic overtones of a G fundamental, reinforcing the influence of spectral music on this work. (See Example C, Page 79).

**Example C** ***Metrospectra*** **Bars 148 – 153: Final chord and sporadic notes in Rhodes**



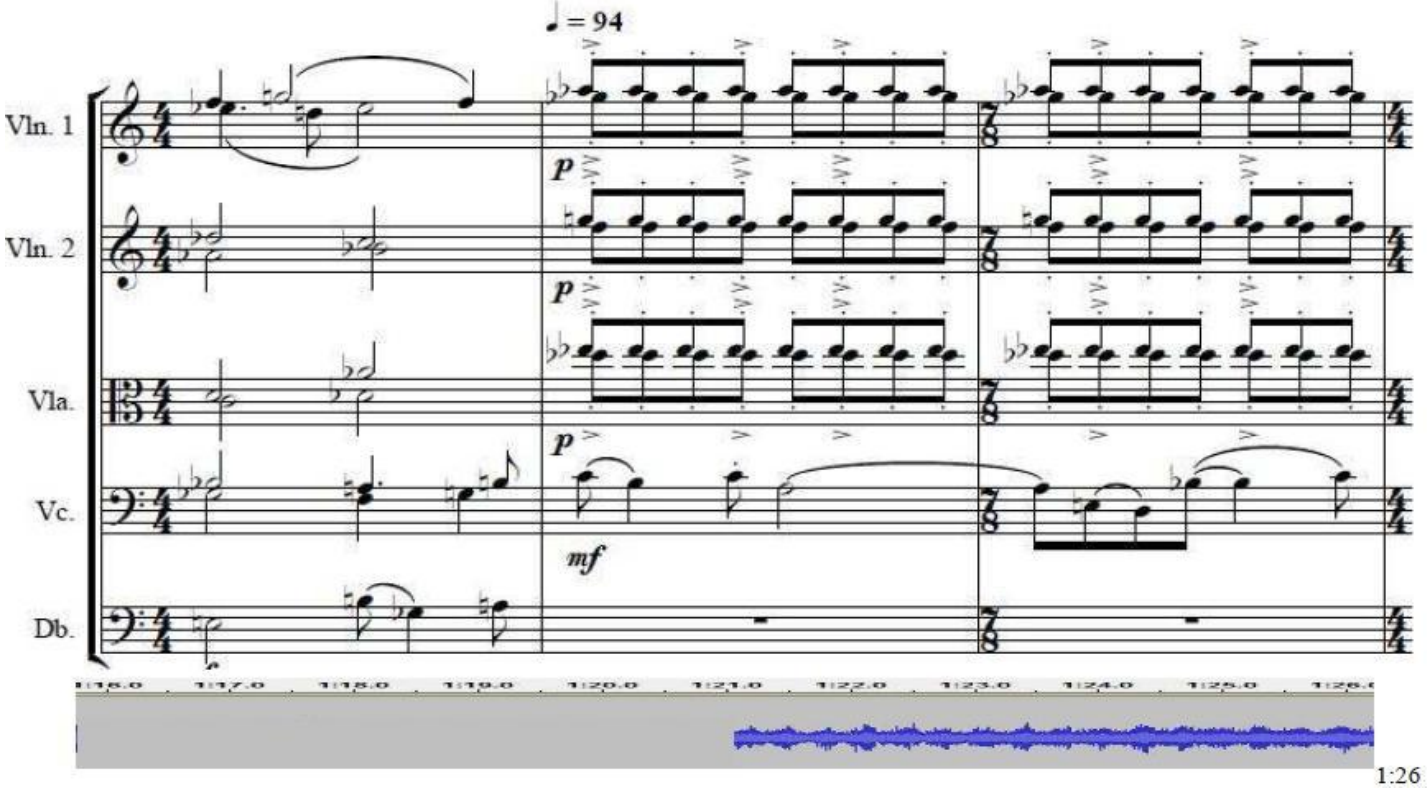
**16. Tranquillity:Trepidation:Trauma (for Synthesized Strings & USM)**

*Tranquillity:Trepidation:Trauma* (2013-14) represents a breakthrough moment in my research. It takes the idea of urban art music away from the highly theoretical approach of earlier pieces and places actual, physical urban sounds at the heart of the music itself, bringing the sounds of the City (at times imitated in *Metrospectra*) together with notated music, making both important within the overall soundscape. It also announces my first deployment of Urban Sound Manipulation (USM) (See Pages 47 - 48, Section 9).

The piece operates something akin to "Symmetrical Soundbite Form". The first six sections follow a loose A – B – C – C – B – A format although the fourth, fifth and sixth soundbites include similar features to the opening three but do not repeat any actual material from them. Soundbite G acknowledges earlier sections but presents new material, reaching a dynamic climax before immediately going through a deconstructive final passage. It is scored for String Section (Violins I & II, Viola, Cello, Double Bass) but uses synthesized strings combined with the USM. It is certainly possible for it to be performed by live string ensemble and laptop (with conductor responding to a click track in headphones).

Soundbite A opens with the sounds of voices in an anonymous city or town centre. The synthesized strings then appear playing a gradually evolving, expanding texture made up of sustained upper register pitches in close intervallic groups which make liberal use of quarter-tones. At the same time, the pre-recorded sound fades slowly away. As the different individual parts enter (and, with the exception of the Double Basses, each split into two), so the texture becomes denser and the overall sound builds and intensifies until it spills over into a marked tempo change with chords played in staccato quavers set against the lyrical flow of the Double Basses. This is the advent of Soundbite B. See Example A (Page 81).

**Example A *Tranquillity:Trepidation:Trauma*: Change of tempo into Soundbite B and**




This change also announces the next entry of pre-recorded urban sounds, drawn from several recordings of car and motorcycle engines copied onto separate audio tracks with frequencies and other properties altered, creating a range of pitches (albeit pitches that are almost impossible to identify). These sounds are enhanced using elements from Audacity (phaser, bass boost, high and low sound filters, noise removal etc.). The result is an intense power struggle between notated strings and relentless multi-tracked engine sounds, culminating in a frenetic last passage before giving way to a sound akin to distant explosions but which is actually that of church bells with their frequencies lowered to a point where the sound source is unrecognizable.

The synthesized strings now resurface from behind the fading low frequency bells, ushering in Soundbite C. On surface level, the contrasting paths of the different string parts appear

similar to the latter half of Soundbite A but, as they develop, the polyfluidic (non-interactive, non-referential) direction of the music becomes clearer, initially Type II as no one part settles on a specific character but eventually transforming into Type I as each part becomes more individually defined – Violin I (frequent short duration notes), Violin II (tremolo), Viola (more sustained notes, cross rhythms), Cello (crotchets and triplets), Double Bass (fragmented Pizzicato).

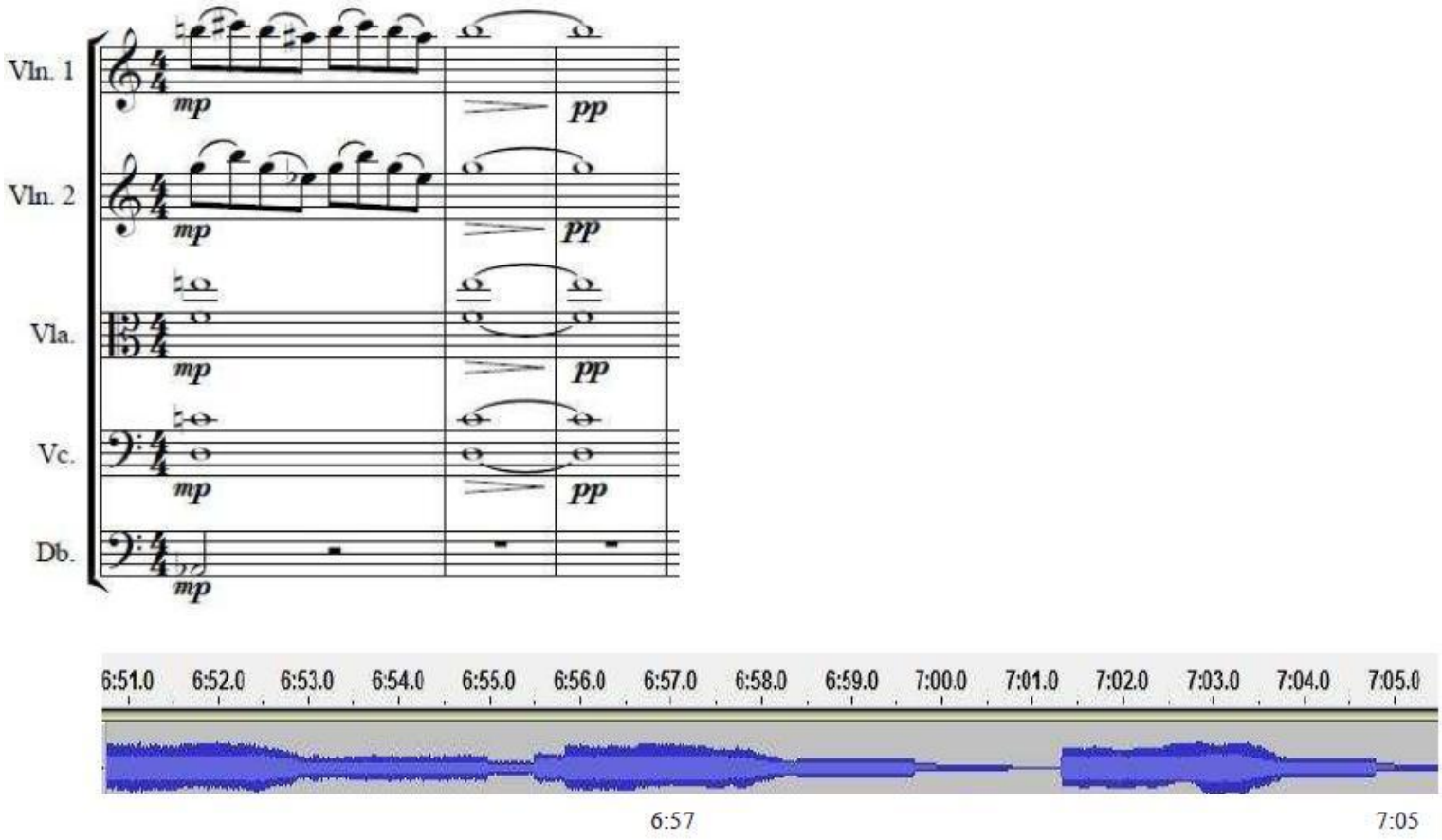
As this section of notated music reaches its final stretch, another wave of USM begins growing in volume and density, strange sounds actually made by multi-tracked human voices treated and presented as something difficult to identify (like sounds heard on the night wind) but challenging the dominance of the notated strings. A dynamic climax in the string section is reached at approximately the three-quarter point after which the notated music quickly deconstructs, the violins dropping out altogether as all parts reduce in volume, concluding with two sustained whole-tone chords played by the Violas (split into two parts) and Cellos set against pizzicato Double Bass. By this time the latest wave of USM has all but overwhelmed the strings and continues into Soundbite D as the synthesized strings return, building in layers slowly and quietly from the Double Basses upwards, all parts dividing to eventually produce ten-part counterpoint. The last wave of USM now begins to fade as another one arrives, based on recordings of machinery which churn in a repetitive manner, juxtaposed against the more lyrical strings.

Eleven bars into this section, the strings reach fortissimo again as all ten parts are in play. This situation is fleeting though and they deconstruct in an almost mirror image of their construction while the USM takes centre stage. As the final three quiet chords of Soundbite D play out, just as with the changeover from A to B, more assertive staccato strings announce

the opening of Soundbite E, the Violas now playing a contrasting lyrical figure. As this process unfolds, the machinery sounds give way to yet another wave of USM, a combination of sounds recorded at a railway station. The staccato violins now engage in a sort of call and response idea with the contrapuntal lower strings before the Double Basses take up the lyrical theme and the rest play tremolo chords, each part divided in a contrary motion figure. It ends with a two-bar figure in which violins play a short theme against chords elsewhere and the whole section unites on a sustained (arguably polytonal) chord that essentially places an E minor triad on a widely spaced D minor 7 chord (although one might alternatively describe it as a chord of D minor 13).

At this point, the USM presents a very sudden and extremely loud series of building and clock alarms, the former multi-tracked with pitches altered to produce a strange harmonic effect. This continues for some time while the synthesized strings quietly introduce Soundbite F, violins beginning with another round of contrapuntal, close intervallic harmonies, gradually becoming denser as each part enters and divides into two (with the exception of the bowed Cellos and pizzicato Double Basses). At the end of this section, all instruments arrive at a rhythmic unison (no longer divided) finishing on another sustained chord, initially whole-tone until the Double Bass drops by a semi-tone and transforms the entire sound of the chord (essentially now a Jazz chord possibly in its second inversion). For the first and only time in this piece (at 6 minutes, 38 seconds), the USM combines in a directly harmonic relationship with the notated music. Throughout, the same USM has relentlessly battled with the notated music and, as the strings fade out, it continues for some half a minute before it too fades out and is replaced by another wave of USM (trains and other modes of transport). See Example B (Page 84).

**Example B *Tranquillity:Trepidation:Trauma*: Notated music fades out. USM continues**




Soundbite G now kicks in with the return of the strings, assertive and contrapuntal as they pick out ideas from the previous soundbites, presented in new forms. A call and reponse figure of loud staccato notes in rhythmic unison and quieter, semi-contrapuntal harmonies builds in the middle part of this soundbite while a final wave of USM sweeps into the foreground and the overall sound intensifies. The final twenty bars see another deconstruction of both notated music and USM as instrumental parts and USM tracks fade and drop out, culminating in quiet sustained chords in the lower strings and a very quiet final six bars in which the Cellos divide in two playing a held major second harmony while the Double Basses play a slow pizzicato figure. The USM reduces to silence so the conclusion of the piece is more akin to a fading away than to a firm finale.

**17. Metal Cutter (USM)**

*Metal Cutter* (2014) represents a radical departure from previous compositions and offers a fresh perspective on the development of a genuinely *urban* art music. It is the first composition to be based exclusively on USM. The whole three and a half minute piece derives from a 1.4 seconds-long snippet of a recording made on my Blackberry mobile phone (itself an iconic symbol of urban society) of an electric metal cutter (an industrial urban feature) being used on a construction site opposite my home in Lewisham.

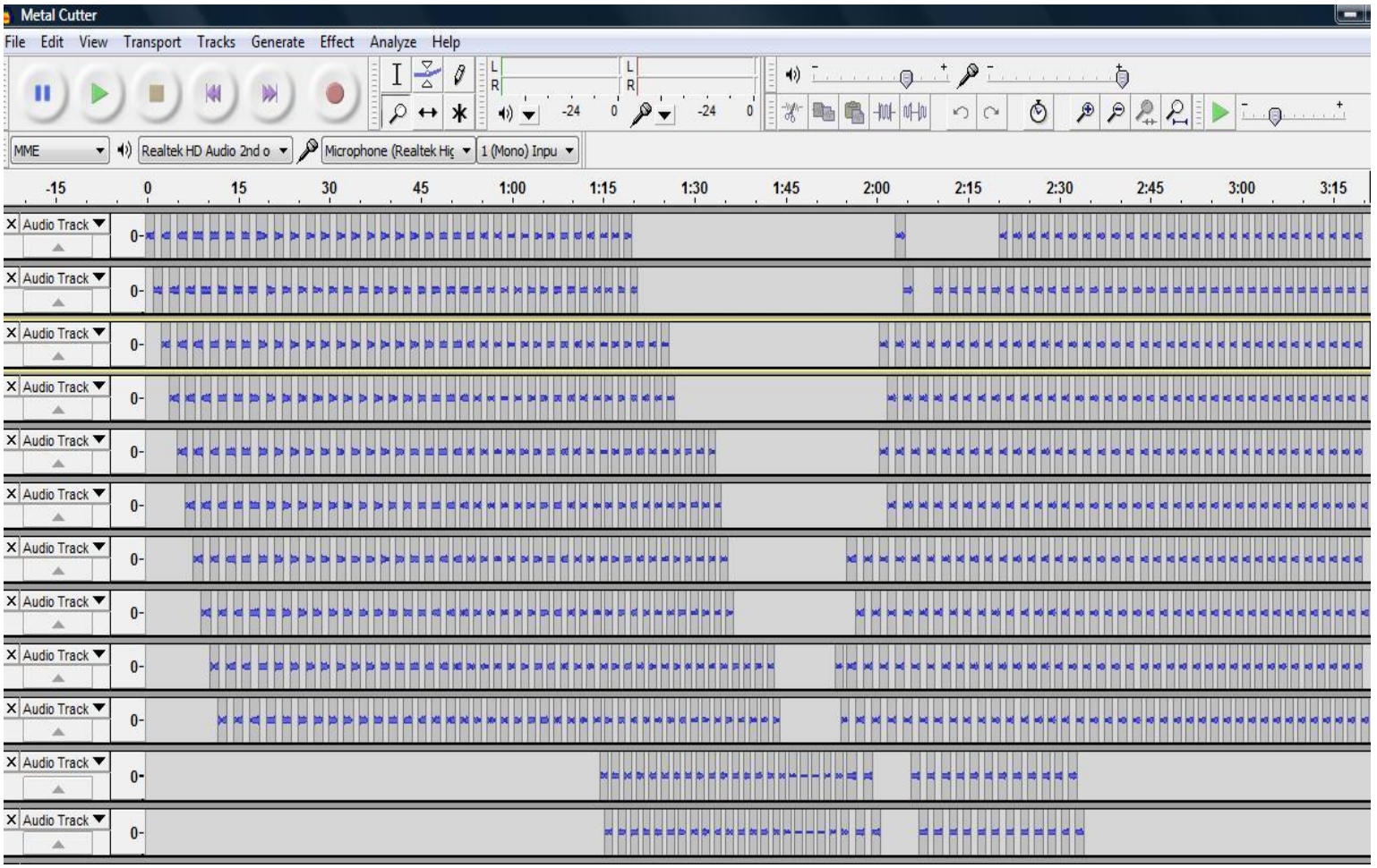
From this tiny fragment comes a series of harmonies, colours and textures, expanding and contracting, moving up and down pitch registers and producing a unique soundscape, aided by detailed application of sound manipulation devices (cutting and pasting, using fade-ins and fade-outs to cut out glitches, adding phaser, bass boost, sound filters, alterations in amplitude and duration, stereo effects etc.) as my composing tools. At its approximate mid-point, as the frequencies become audibly lower and harder to distinguish, layers are stripped away until there is virtual silence. From this, the harmony and colour gradually expands again, culminating in a repeating figure that fades into silence.

In one sense, the results may appear less radical in the harmonic sense given that, despite the use of microtones and dissonances, I have relied upon what might be considered *softer* harmonic features (i.e. whole-tone, Jazz-related). Yet, in what I would suggest is a more important sense, it is probably my most radical work to date because never before has an entire musical piece been constructed in this manner, utilizing such unique sounds.

*Metal Cutter* has a dream-like quality and, despite its unequivocally urban nature, it fits the notion of *ethereal* music as well as, if not better than, any other piece in this portfolio. Its

successful construction took the research idea I started out with in 2011 beyond where I had imagined it would lead me and set me the consequently inevitable task of composing music that utilizes USM not just for sound effect (as in *Tranquility:Trepidation:Trauma*) but as a directly musical element, combining with notated music enabling both aspects to drive the harmonic language (see *Submerge*, Page 87). Below, for information, is a resized image of the USM charts for the entire piece (Example A).

**Example A *Metal Cutter*: USM Charts: each block represents a specific pitch.**



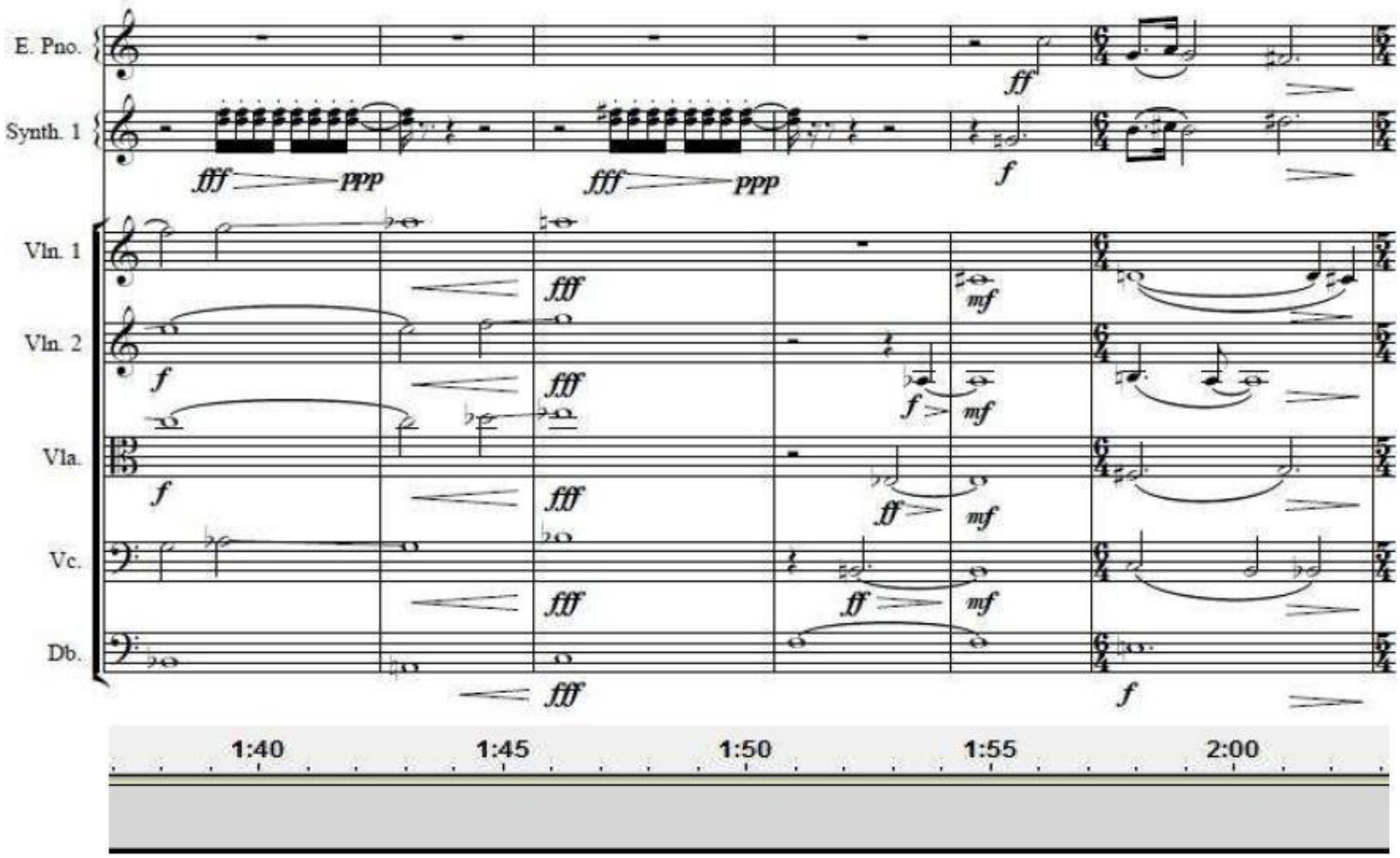
**18. Submerge (Fender Rhodes, Synthesizer, Strings & USM)**

*Submerge* (2014) is the first piece that utilizes USM both as a composing tool, influencing and combining with notated music to drive the harmonic language and texture whilst bringing a variety of aural effects to bear.

The first two sections rely entirely on notated music. 'A' is dominated by overlapping and gradually expanding glissando strings (See Example A, Page 88), punctuated by large staggered chords involving the whole ensemble. 'B' is dominated by fluid, contrapuntal Fender Rhodes (a sound that becomes more prominent towards the end of 'A') contrasted by lighter glissando violins. Section C brings a dramatic shift away from the relatively soft texture of the keyboards and strings as a series of broken chords are delivered exclusively via USM, in this case a harsh, trebly mesh of sound originating from recordings of police sirens. As this idea develops, the broken chords are mirrored by their alternatives a quarter-tone below in pitch, creating a growing wall of sound that culminates in a combination of whole-tone chords a microtone apart.

'D' sees the strings back in the ascendancy, climbing from a low register, quiet start before opening out into more expansive counterpoint, then Type II polyfluidity. At the same time, machine-like USM appears alongside the notated music. As the combination of sounds grows in intensity, the synthesizer suddenly appears, its broken chords reminiscent of the USM in 'C'. We are now at 'E' and it is here that, for the first time, notated music and pitched USM combine harmonically, the treated police sirens reappearing and responding to the synthesizer entirely in microtones.

**Example A *Submerge*: Gradually expanding glissando strings increasing both in width and velocity towards the second staggered chord (appearing at around 1 min 50).**

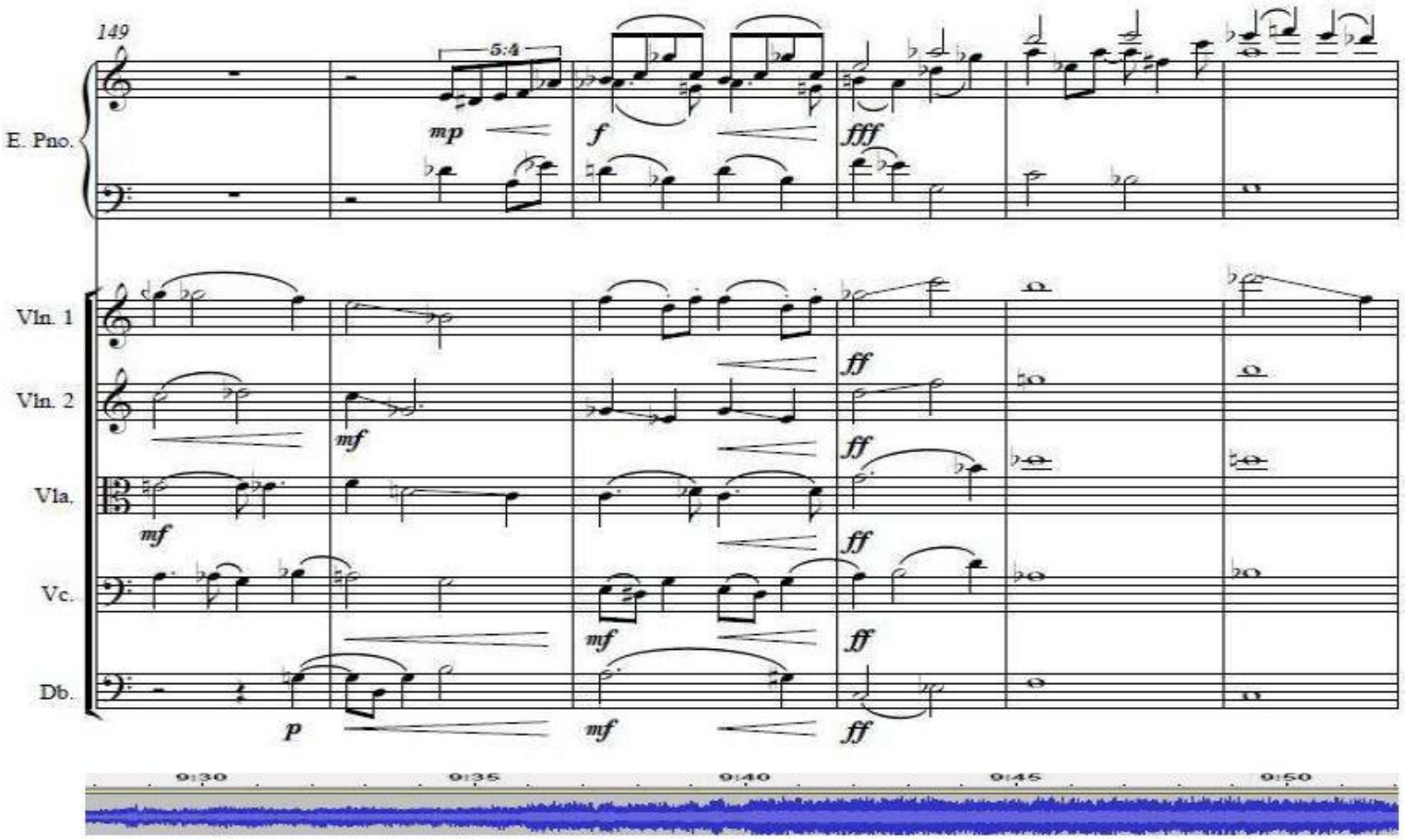



The next change arrives less dramatically, the Fender Rhodes beginning to play a theme that offsets the fading synthesizer until it gives way to a new wave of USM. The switch from Fender Rhodes to USM announces Section F.

As the strings return to prominence, ‘G’ brings a marked slowing of the tempo and the development of a call and response figure involving glissando and pizzicato strings and contrapuntal Electric Piano. The tempo is restored, however, as ‘H’ takes over and, while glissando, overlapping and harmonizing strings play off against the Fender Rhodes, layers of both pitched and non-pitched USM return; the combination of tones and microtones

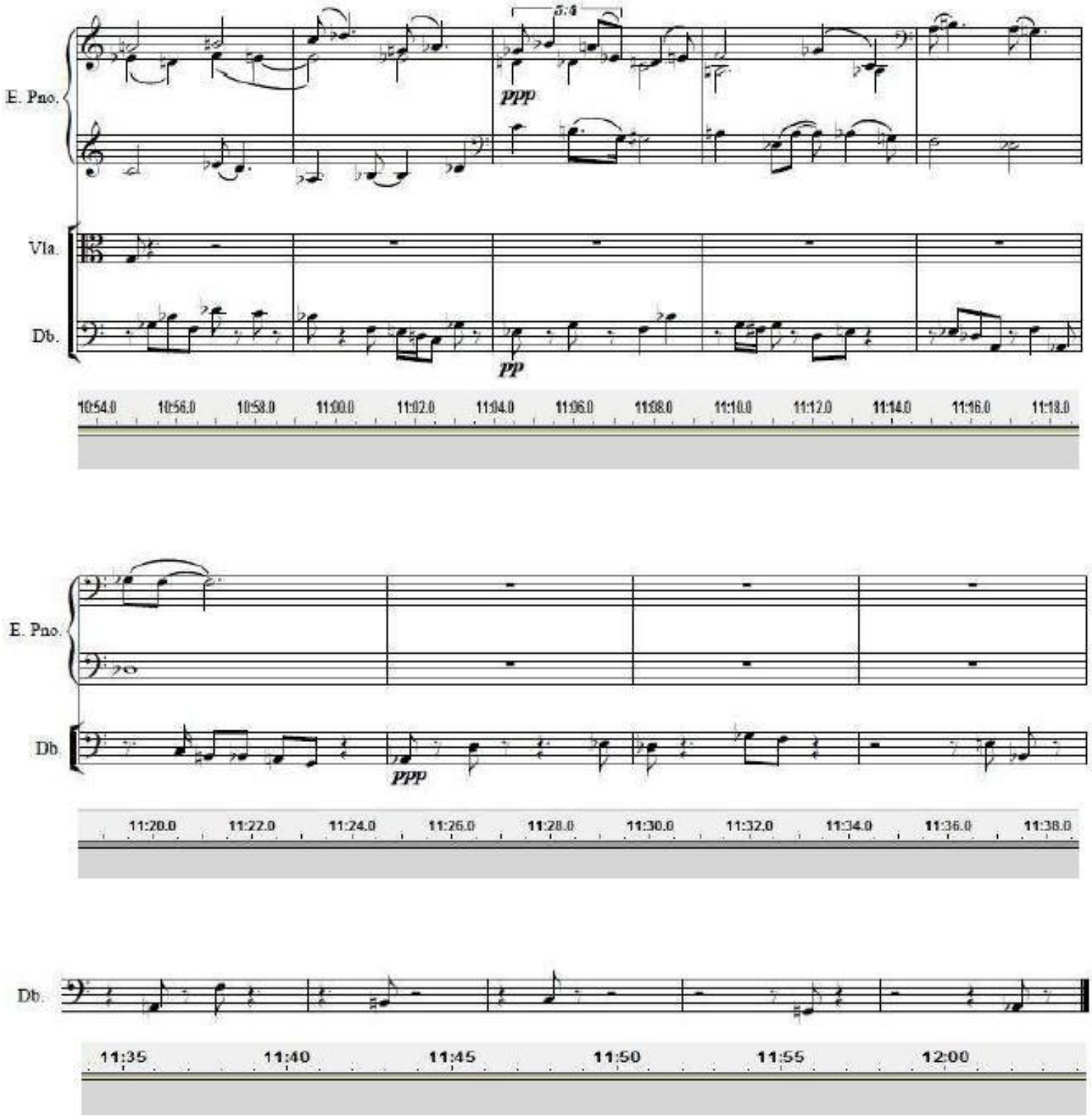
becoming so great that I am forced to abandon my long-standing principle of avoiding pitch duplication in different registers as layers of activity expand, building to a very loud climax at 9 minutes 31 seconds (lasting around eight seconds). See Example B (below).

**Example B *Submerge*: Loud climax in 'H' with dynamic peak in notated music matched by similar peak in volume and amplitude of USM.**




In Section I, the music deconstructs, the USM first to fade, the upper strings following shortly after until there is only the ethereal quality of the electric piano playing quietly against fragmented pizzicato in the Double Basses. The piece ends with the Basses plucking single notes punctuated by greater and greater gaps, leaving the listener uncertain initially as to whether or when the piece has ended; ambiguous and lacking a sense of finality. Example C (Page 90) demonstrates the deconstructive process taking place in this final stretch.

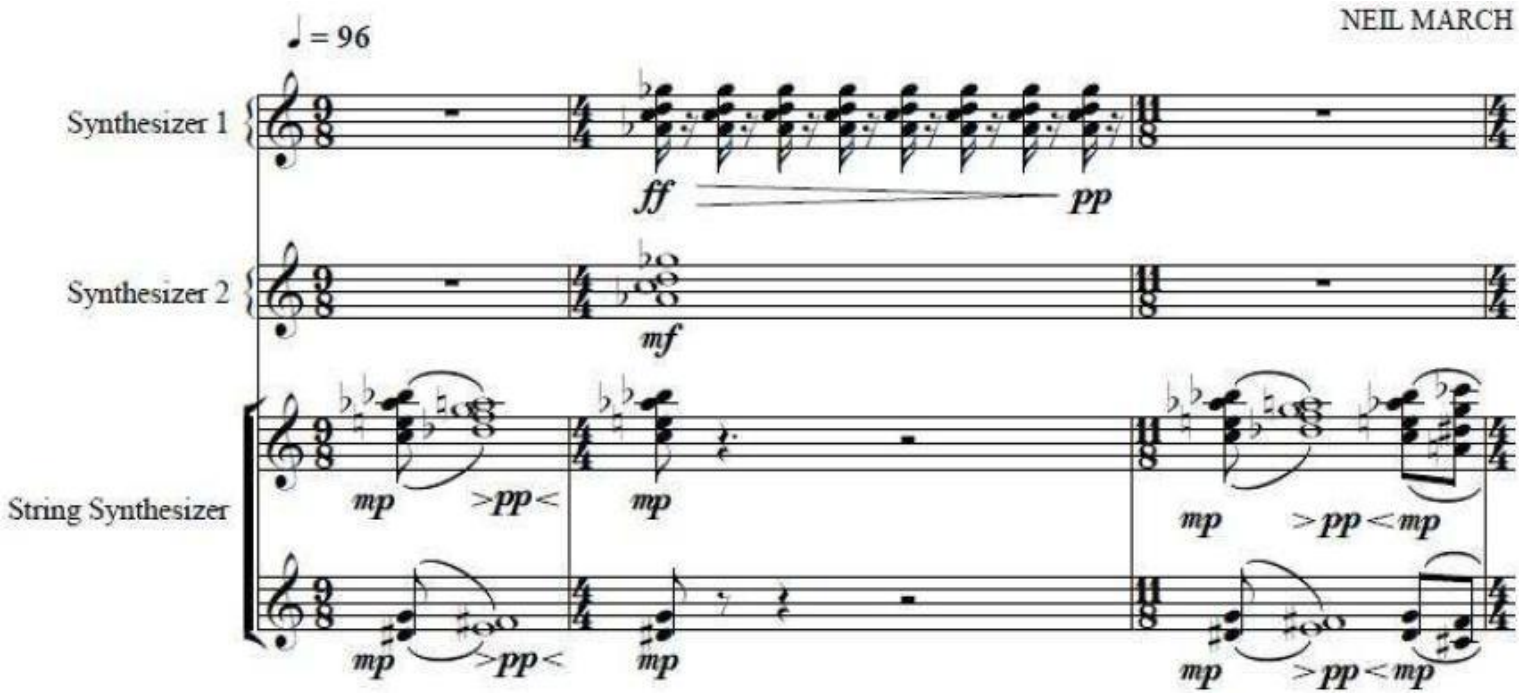
**Example C *Submerge*: Deconstructive process taking place in 'I'**



**20. Metrospectra II (3 Synthesizers, Fender Rhodes Electric Piano, Piano & USM)**

*Metrospectra II* continues with the idea of combining notated music and USM, condensing this process into just over six minutes of music. The opening theme is based around two Compound Whole-Tone chords played by a String Synthesizer, answered by an echoing whole-tone chord in the first Synthesizer (which reduces in dynamic from *ff* to *pp* in eight staccato stabs). The second Synthesizer holds the same chord as it echoes. (See Example A, below) The aural effect is mechanical and machine-like even though each variation of the preceding compound whole-tone chords uses a different time signature and configuration; the unpredictable human character set against the precision of the sequencer. This figure dominates the opening and closing sections and appears in altered form elsewhere.

**Example A: *Metrospectra II*, Bars 1 – 3: Compound Whole-Tone Chords, mechanical Synthesizer echo and simultaneous held chord.**



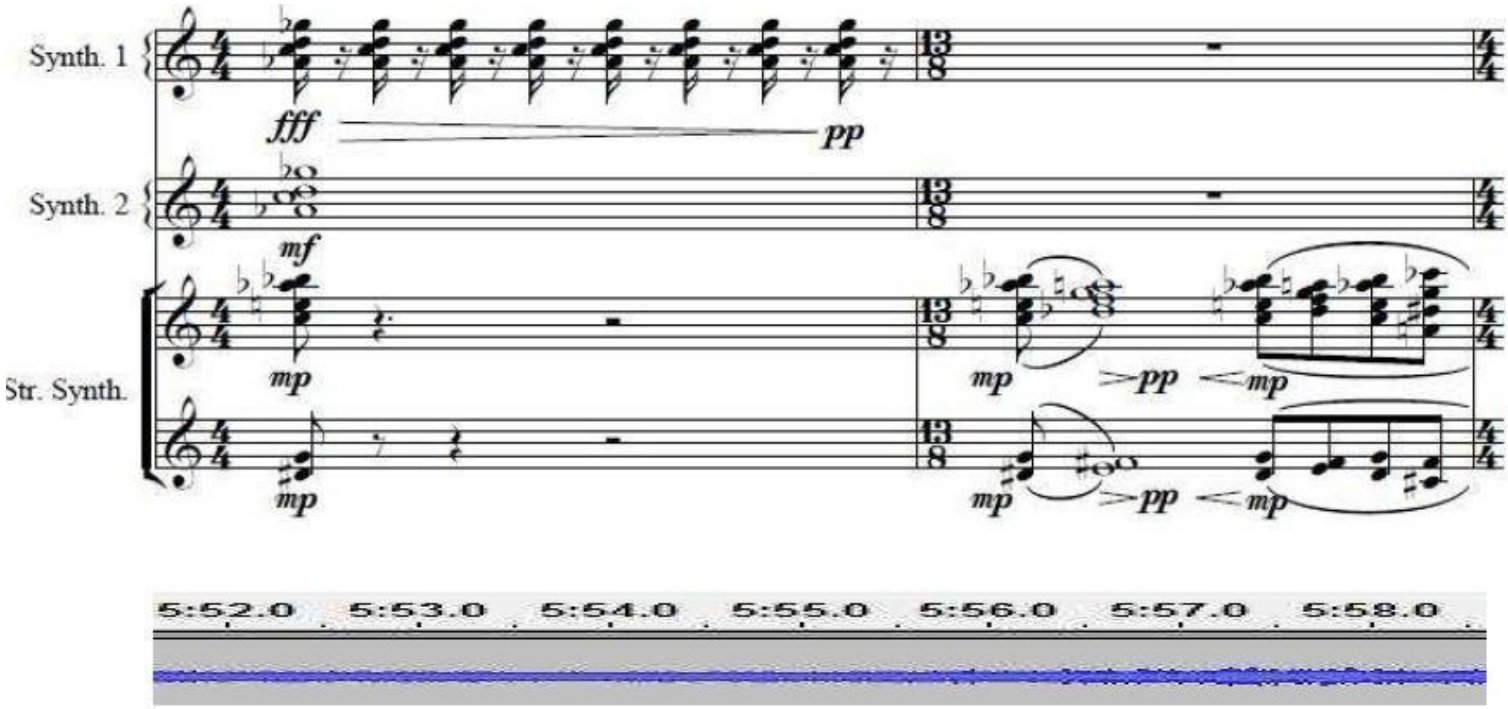

It is contrasted initially by the lighter-textured movement of the Fender Rhodes Electric Piano which plays fluid melody lines over short chords, mainly in the treble clef. As the

section marked ‘B’ approaches, the Acoustic Piano adds a weightier presence and the first non-pitched USM appears, a combination of sounds (wind, rain, machinery, shopping centre etc.). This leads into the slower B section, the now dominant piano involved in interplay with the light-textured electric piano and the mechanical synthesizer.

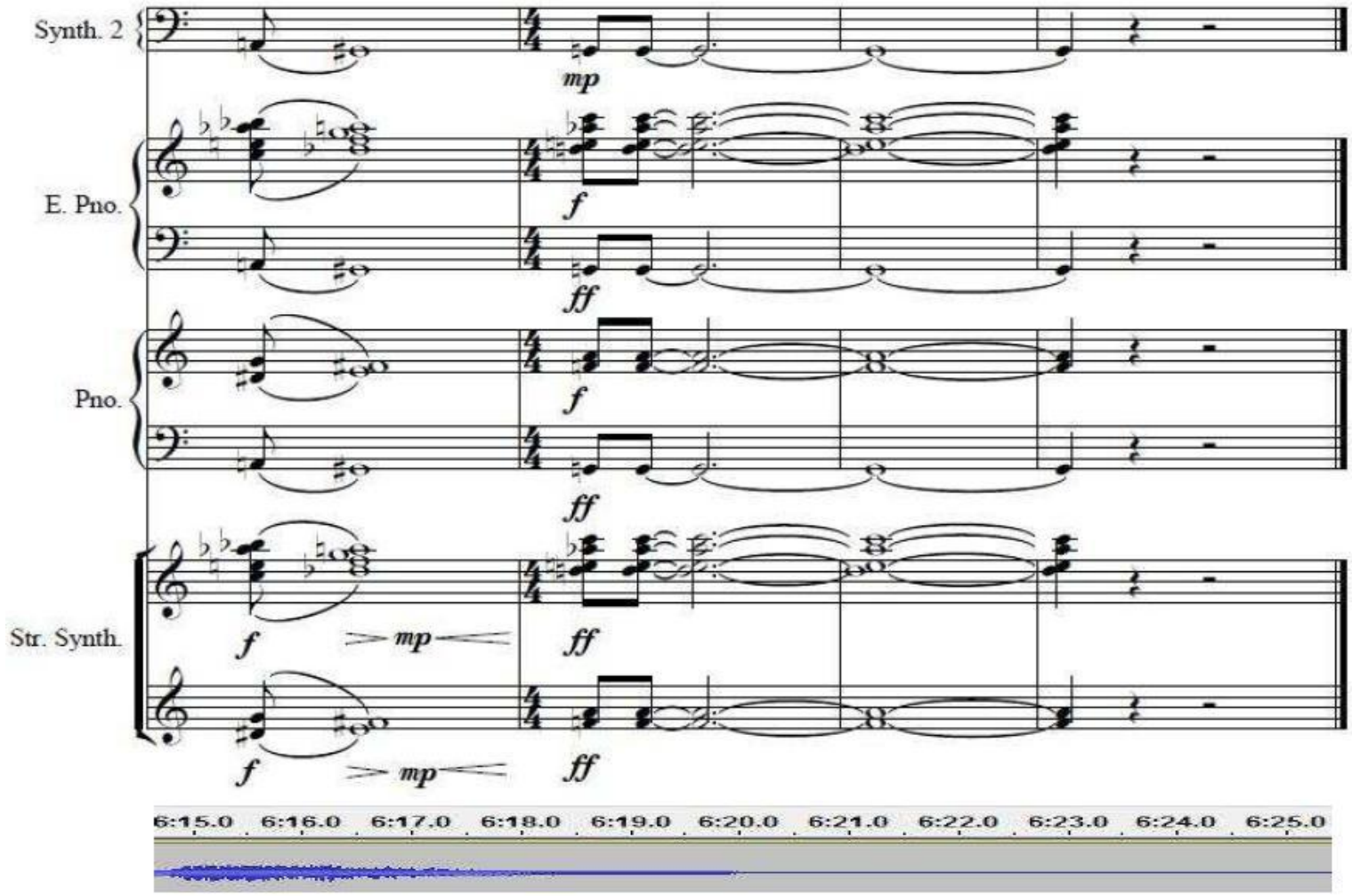
‘C’ sees the notated music disappear altogether giving way to a thirty-second passage of layered, pitched USM before ‘D’ introduces a more rhythmically complex, contrapuntal electric piano figure, contrasted by other sounds that appear and disappear reinforcing the notion of strands of activity and inactivity referred to in Section 11 (Pages 50 – 52).

‘E’ sees the USM return with a vengeance, its relationship with the notated music somewhat ambiguous since it is ‘pitched’ and yet its harmonic role is blurred by the density of the chords. The aural effect is unsettling until it fades away leaving the piano and synthesizer to begin introducing familiar features as a transition towards the final ‘F’ section. This begins like a recapitulation of the opening until figures from elsewhere in the piece also resurface. The USM reappears, gradually intensifying until, at five minutes, fifty-eight seconds, it is competing for supremacy with the synthesizers, its blend of dense chords and pitchless sound effects having brought all previous features together in a simultaneous wall of sound. Example B (Page 93) demonstrates this event. The piece ends with the main compound chord theme reinforced by the piano, electric piano and pitched USM while the second Synthesizer uses descending bass notes to widen and alter the chords (See Example C, Page 93).

**Example B** ***Metrospectra II*** **5 mins 51.5 secs to 5 mins 58.5 secs: USM intensifies.**




**Example C** ***Metrospectra II*** **Ending: Reinforced compound whole-tone chords etc.**



**21. Metrospectra III (Piano, Synthesizer, Bass Guitar & USM)**

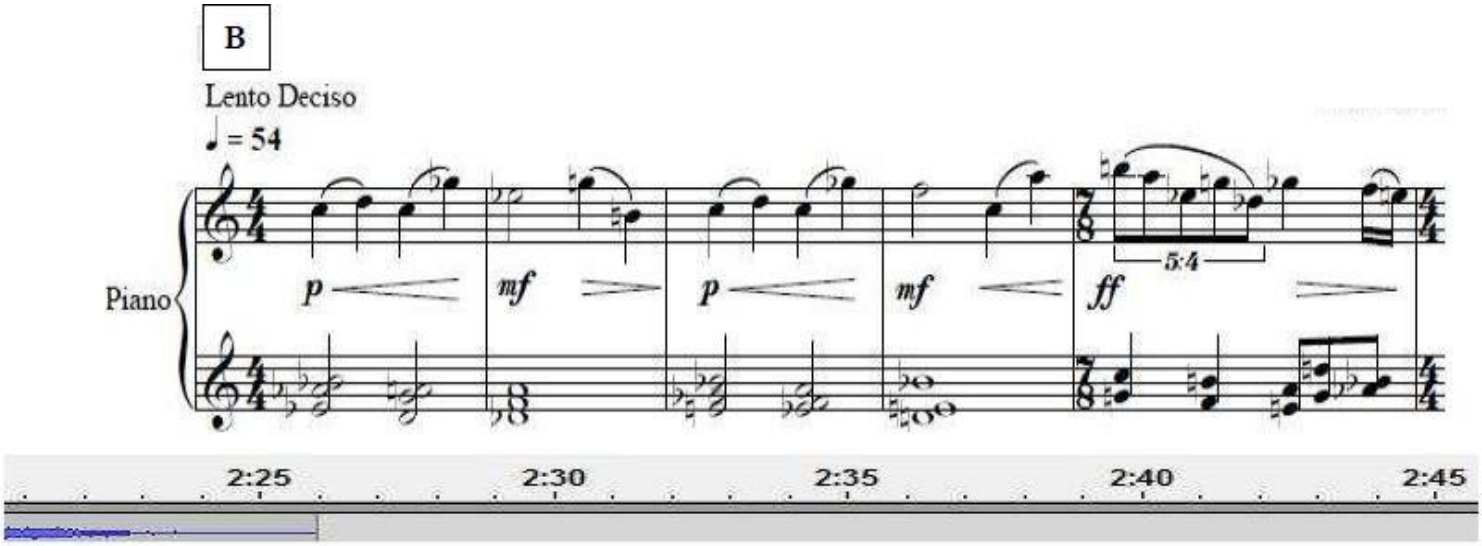
*Metrospectra III* completes the 'Metrospectra' Trilogy and, for now, concludes my research. The first *Metrospectra* is gestural but deploys no USM, a transitional work linking my previous style to my current one. The second combines notated music with USM but with the latter firmly in a supporting role. The third sees the pre-recorded sounds of the City, as altered, primarily dictating events while the notated parts respond and provide contrast to those events. It is perhaps possible to suggest that *Metrospectra III*, more so than any prior work, is as much a celebration of urban life as an attempt to highlight its darker elements (though their presence may be felt at times).

I had begun with the intention that the mostly machinery-driven textures of the USM would be countered only by sparse Piano and Bass Guitar parts. As the piece developed, I changed my mind and decided these extremes required mediation by the warm but mechanized sounds of the synthesizer, initially deploying an FX1 effect [frequently called *Rain* on Roland and other keyboards] before switching to Strings.

*Metrospectra III* opens with the thick, abrasive sound of construction machinery; ascending and descending slides either side of a long sustained note. This is immediately reinforced by a second identical sound pitched a tone below. The scene is set as layers of the same sound appear, producing denser harmony (initially whole-tone) built from an abrasive, highly distinctive timbre. As this idea is developed, a melody emerges too and a metallic industrial sound is deployed in a rhythmic percussion role. At the lower end of its range, a chromatic descent in the Bass contrasts the repeating melody and alters the accompanying chords. This opening lasts two minutes and twenty-seven seconds before the B Section arrives courtesy of a quiet solo piano, its modal chords and simple melody initially imitating events in Section A

in a much more tranquil manner exploiting the piano's middle and upper range before elaborating on this opening. (See Example A, below)

**Example A *Metrospectra III* Section B: Solo Piano imitates events played by USM in A.**

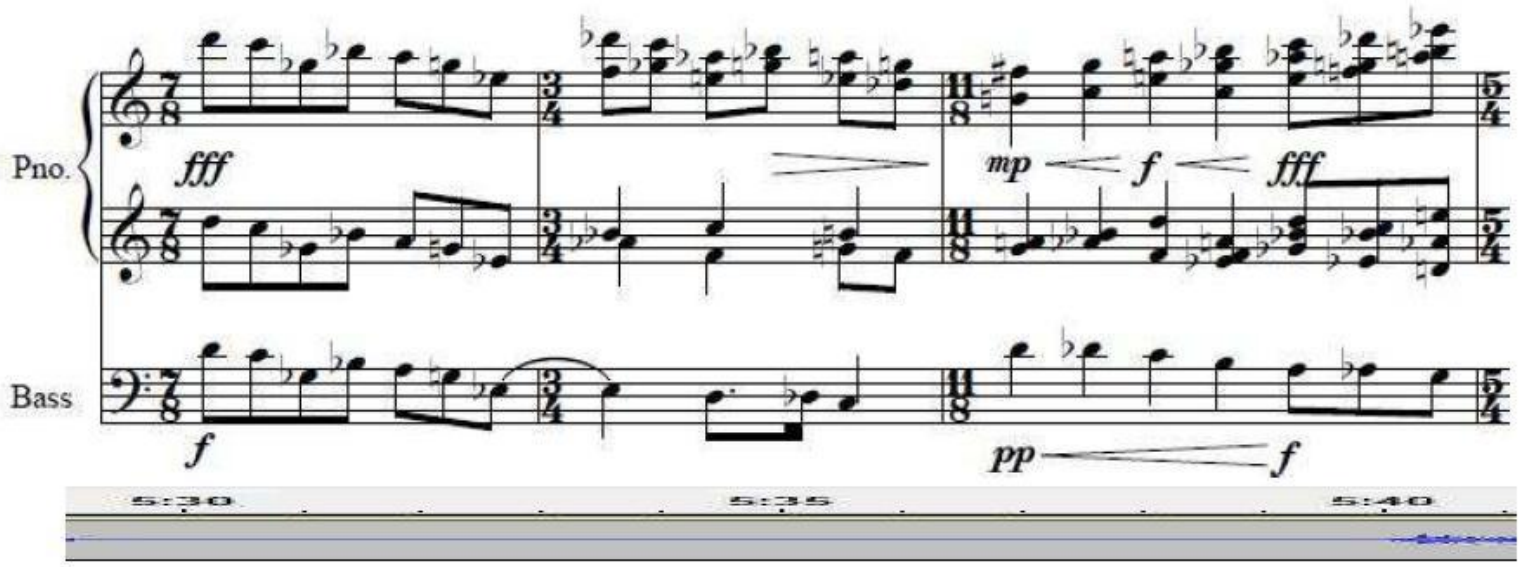



After its initial statement, the Piano is silent for a few seconds, unpitched USM appearing before the Piano recommences its progress, the Bass Guitar now adding a softer, deeper tone but bringing a dissonant edge to the harmonic language. For the final nine bars of this section, the Synthesizer assumes the driving seat, mostly by playing six-note chords using the FX1 sound which has a watery, reverberant quality.

This section ends with chords of increasing duration and is replaced by another wave of USM derived from several sound sources, pitched and unpitched. Another thick-textured and abrasive industrial sound dominates, expanding harmonically in repeating patterns. Other sounds are added, a high-pitched melody and accompanying harmonies derived from the 'bleeping' sound that precedes most tannoy announcements in large stores which are left suddenly exposed as the accompanying USM drops out and the Piano reappears, announcing the D section with a simple staccato figure, twice joined by the Bass Guitar repeating single

notes before they combine first in a three-octave unison figure, then an imperfectly symmetric [contrary motion] chord progression and finally a concluding quintal/quartal chord. (See Example B below)

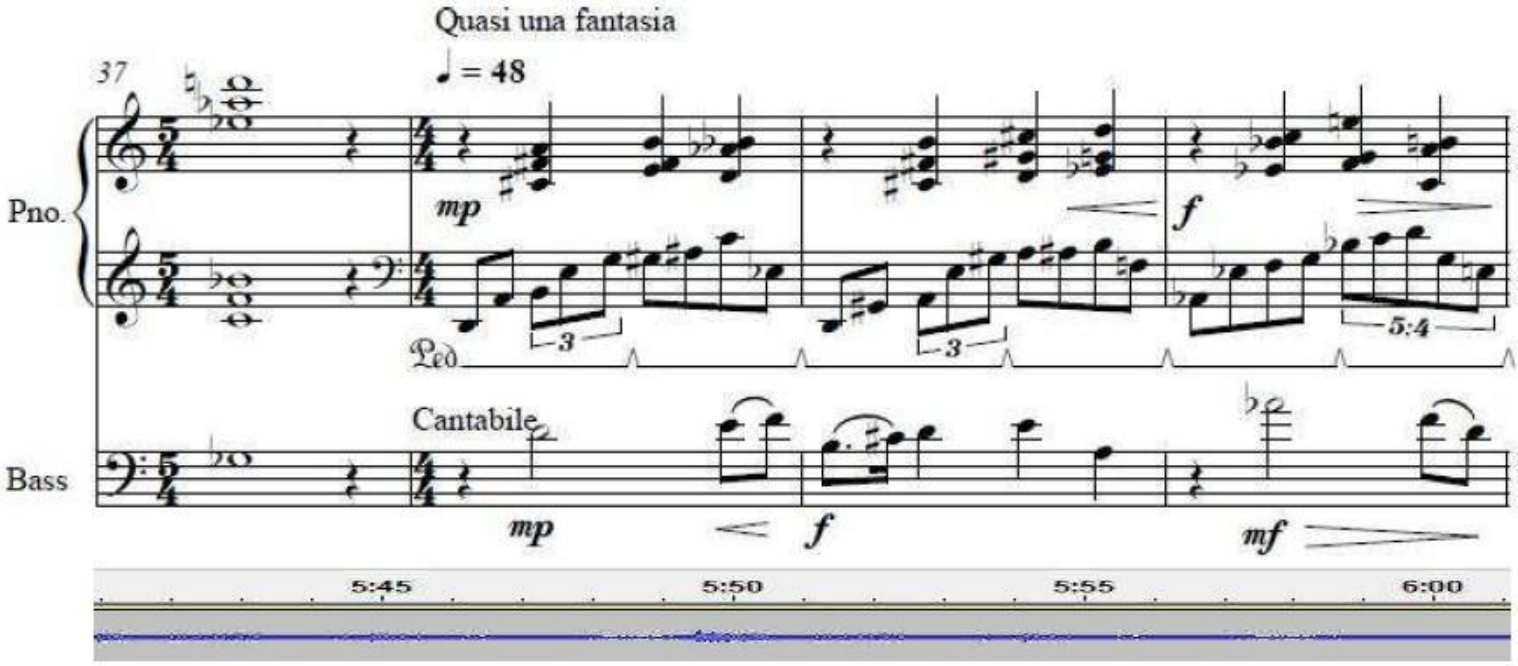
**Example B *Metrospectra III*: Unison figure & imperfect symmetry ends D section**




In the E section that immediately ensues, the piano part is marked *Quasi una fantasia* and the Bass is marked *Cantabile*. Here the Bass takes up the melody while pedalled piano plays fluid broken chords set against a backdrop of unpitched USM (See Example C, Page 97). This passage is short but distinct, ending with a series of quiet chords (each an altered version of its predecessor).

The penultimate F section begins with a repeat of the piece's opening before other previous USM passages also briefly resurface. The attempt to fuse these elements is shortlived and the additional layers fall away, giving way to one last statement of the original opening theme.

**Example C *Metrospectra III*: Piano "fantasia" and Bass Guitar melody in E Section**

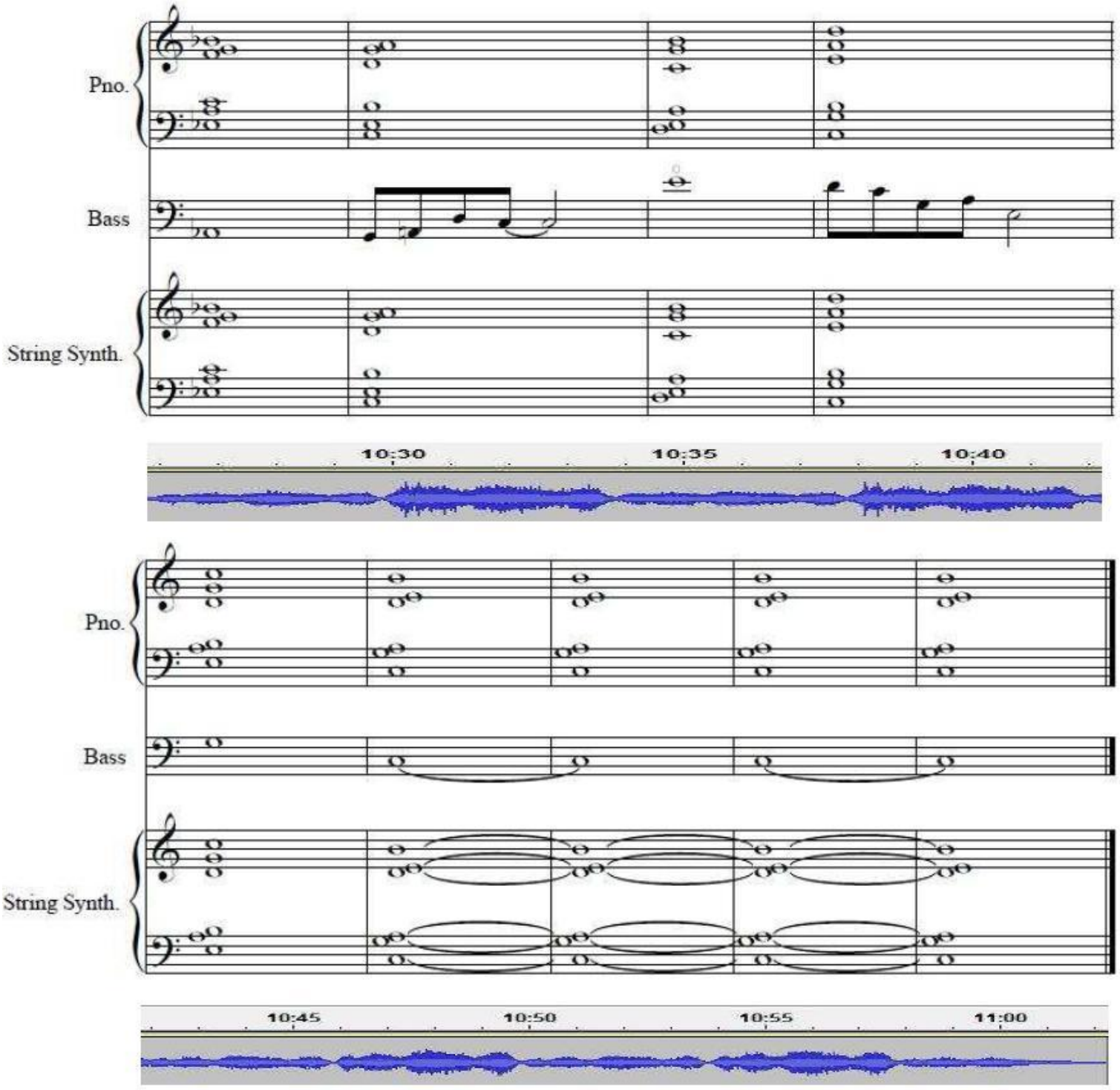



The G Section is announced by a series of sustained chords played by Piano and Bass Guitar. At nine minutes and forty-three seconds, the Synthesizer (Strings) returns along with layers of USM. These expand both in harmonic width and sound combinations, creating a feeling of intensity as both volume and density reach peak levels. It does not last though and the piece ends with a series of static chords based around a tonal centre of C in which the USM pitches are spread out intervallically to create a greater sense of space, directly cooperating with the Piano, Synthesizer and Bass Guitar. The final chord, if produced for a Jazz score, might read C major 9/6.. (See Example D, Page 98)

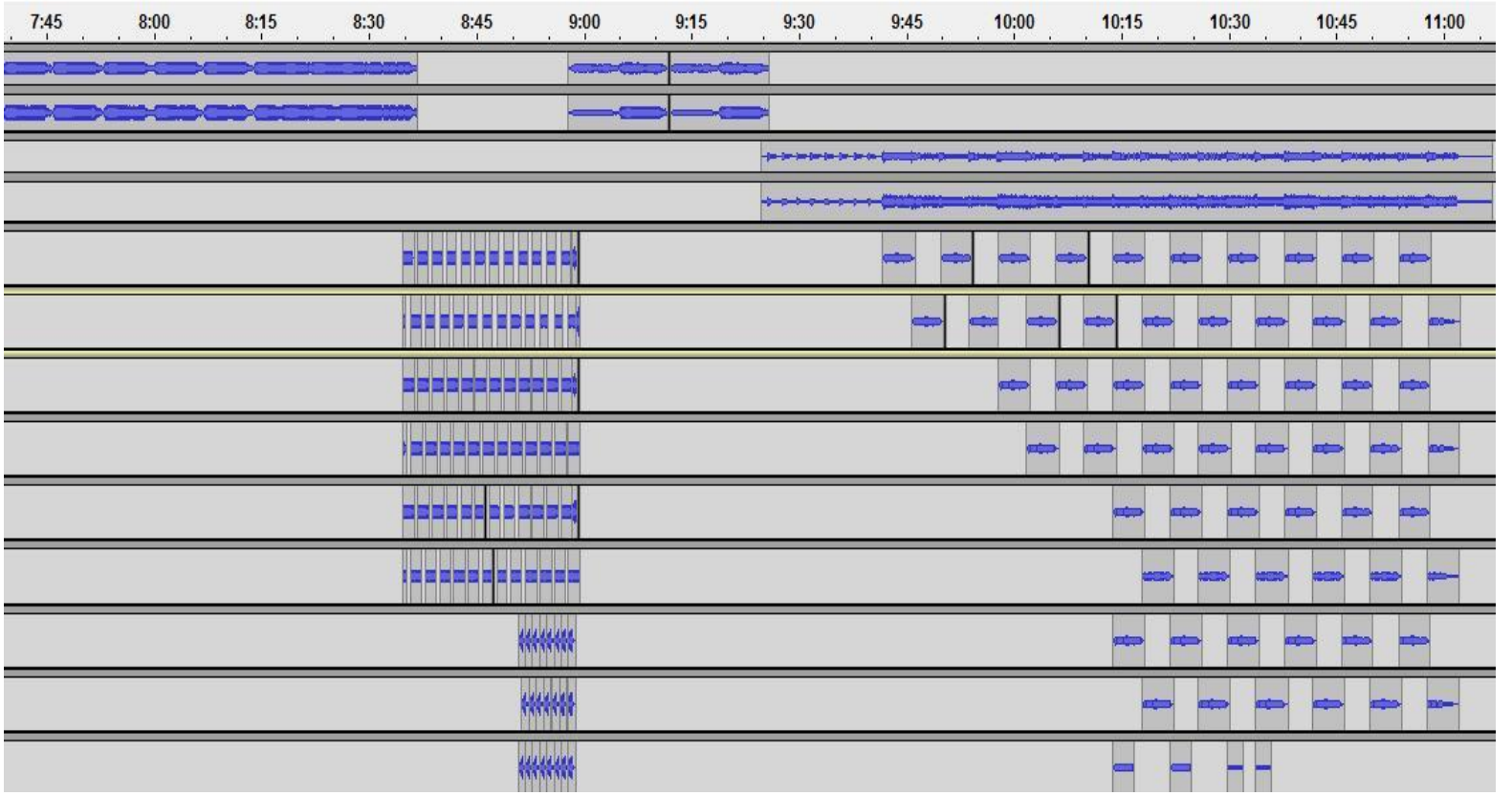
Example E (Page 99) demonstrates the Audacity file in which all the parts are organised, mixed and exported to audio. The first stereo track is actually the result of multiple USM tracks playing the opening figure which have previously been mixed and exported to one track in order to make room for further audio files. The second stereo track includes the exported Piano and Synthesizer from Sibelius 7 and my audio recording of the Bass Guitar

mixed and exported onto a single track. The remaining audio tracks contain a variety of USM drawn from different sources, each panned to a different degree in pairs (i.e. Tracks 3 and 4 are panned 40% to the left and 40% to the right, 5 & 6 are 60% left and right, 7 & 8 are 30% left and right and so on).

**Example D** ***Metrospectra III*****: Notated music and USM combine in chord-based climax.**



**Example E** ***Metrospectra III*****: Audacity File from 7 minutes 44 seconds to 11 minutes 6 seconds. Two stereo tracks (top four lines of data) represent mixed, exported USM and notated music respectively. The remaining audio tracks represent various types of USM. From 10 minutes 26 seconds onwards, the blocks of USM represent the final series of chords shifting from left to right (and overlapping in the process), reinforcing the notated chords which are represented in the second stereo track (lines 3 & 4).**



## CONCLUSION

One must be cautious about the term *conclusion* when referring to what is essentially one stage in a lifelong journey. Nevertheless this work would be incomplete without a summary conclusion of how these two and a half years of research have informed my current approach.

From the outset, the key aim was to develop the basis of an Urban Art Music. It was initially important for me to identify any means by which I could successfully balance the potentially conflicting demands of Soundbite Form, Polyfluidity and Cycles of Transformation whilst respecting democratic principles of pitch distribution; conceptually reflecting the impatient communications culture of the modern world and the complex, sometimes dysfunctional, events and behaviours it produces whilst observing (and, from an ideological standpoint, postulating) [gradual] reform as the most effective means of bringing about permanent, progressive change.

One of the first conclusions I reached was that my initial faith in polyfluidity to form the basis of entire (and detailed) works was questionable. Worse, I was in danger of allowing an obsession with representing dysfunction, just one aspect of urban culture, to cause the music itself to become dysfunctional. My conscious decision to deploy polyfluidity more selectively thereafter explains why, after *Devolution*, it notably decreased in importance. Initially this led me to focus on the transformational element of my music. My largest scale work of the past three years, *Sinfonietta* uses transformation to link eleven sections that appear in both movements whilst polyfluidic elements (Types I & II) are deployed at various points. However, like *Devolution*, it is a work that falls short in too many areas and would require a good deal of revision if it were to be performed.

I stated, in the Introduction, that the primary driver for me is language with harmonic language sitting atop my compositional hierarchy. I have continued to hone that language and the section in which the piano piece *Perspectives* is used to demonstrate language sets out the key elements of harmony, movement and texture. Over time, a developing interest in Spectral Music has significantly influenced my thinking. The most important facet of this change, given that I describe my music as *urban* in character, is that it has led me towards the inclusion of recorded and subsequently altered sounds from within my living, working environment, leading to what I now call Urban Sound Manipulation (USM). This, in turn, has brought about not only the potential to make use of physical urban sounds as reference points but for them to provide direct source materials with which to compose; also for them to be artificially altered often beyond recognition, mirroring the modern obsession with synthesizing and altering everything from recorded music to the food and drinks we consume. For such purposes I use the computer programme Audacity to manipulate frequencies, amplitude and other properties, producing fascinating colours, textures and resonances.

*Tranquillity:Trepidation:Trauma* represents my first substantial attempt to combine notated music with the deployment of physically recorded sound (subsequently altered and enhanced), adding a further dimension to my notion of *ethereal* music. It is explicitly urban in character, the sounds of the City contributing to and shaping the music. *Metal Cutter* takes this utilization of real urban sounds in a radical direction despite its comparatively more tonal character, using one short snippet of an electric metal saw from a construction site, to provide all material. Although this piece may seem almost out of place here, it offers a snapshot of what was to come in *Submerge* where notated music and USM combine to influence harmonic as well as other aspects, underlining the degree to which the "urban" element of my music has become much more direct and less theoretical.

I would of course have preferred to have actual musicians playing the notated parts on "real" instruments if such facilities had been available to me (though I played Bass Guitar on *Metrospectra III*). However, it is arguable that the synthetic sounds on these recordings has a degree of appropriateness to the culture of mass production and urbanization that the music seeks to reflect. This realization certainly led me to compose using instruments that work sufficiently well as computer-generated sounds, combining with various types of USM. The final portfolio work, *Metrospectra III*, offers a useful conclusion as a piece in which the pre-recorded sounds direct the music with the notated parts in a supporting (responsive and contrasting) role, the melodic and harmonic potential of the USM consciously extended.

I hope that, in undertaking this work, I have explored, utilized and demonstrated a number of ways in which Urban Art Music may be developed, culminating in an approach that places the direct influence of real urban soundscapes (albeit altered often beyond recognition) at the heart of the music. In so doing I hope I have, perhaps in some small way, laid ground for others to consider how these ideas may be further developed and improved upon.

**NEIL MARCH**

## ACCOMPANYING CDs

There are two CDs accompanying this submission. The content of these is as follows:

### CD 1: Live & Studio Recordings

This CD contains two live and six studio recordings. The live recordings are of the three earliest portfolio works. The first, *Perspectives*, is taken from a concert in The Great Hall at Goldsmiths University. The second, *Devolution*, is from a workshop involving the Allegri Quartet and represents their only full run-through of the piece. The other six tracks are all studio recordings made using computerized sound (and, in the case of the final five, recorded urban sound) and demonstrate the transition from my earlier model of Urban Art Music to my current one. The final track also includes Bass Guitar.

### CD2: Sibelius Version of *Sinfonietta*

This CD contains a version of *Sinfonietta* (both movements) created using a combination of Sibelius 4 and Sibelius 7 with some mastering carried out using Audacity and, as such, is included purely for information.

### Track Listing

**CD1: Live & Studio Recordings**

1. Perspectives (recorded at The Great Hall, Goldsmiths University, 2012)
   Helena Gascoyne – Pianoforte
2. Devolution (recorded at Deptford Town Hall, 2011)
   Allegri Quartet
3. Metrospectra (created via Sibelius 4, exported to audio via Sibelius 7, mastered in Audacity, 2013)

4. Tranquillity:Trepidation:Trauma (created via Sibelius 4 & USM, exported to audio via Sibelius 7, mastered in Audacity, 2014)
5. Metal Cutter (created using USM, mastered in Audacity, 2014)
6. Submerge (created via Sibelius 4 & USM, exported to audio via Sibelius 7, mastered in Audacity, 2014)
7. Metrospectra II (created via Sibelius 4 & USM, exported to audio via Sibelius 7, mastered in Audacity, 2014)
8. Metrospectra III (created via Sibelius 4 & USM, recorded onto Audacity with Bass Guitar performed by Neil March, mastered in Audacity, 2015)

**CD2: Sinfonietta** (created via Sibelius 4, exported to audio via Sibelius 7, mastered in Audacity, 2012)

1. Summary
2. Elaboration

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