A University of Sussex DPhil thesis

Available online via Sussex Research Online:

http://eprints.sussex.ac.uk/

This thesis is protected by copyright which belongs to the author.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

Please visit Sussex Research Online for more information and further details
UNIVERSITY OF SUSSEX

Benjamin Oliver
DPhil in Musical Composition

Portfolio of Musical Composition:

Integration in Music:
Controlling Diverse Methods of Expression within the Context of the Globalisation of Musical Culture

March, 2010
Musical culture is increasingly globalised and technology allows us to engage with an evermore diversified range of musical approaches, traditions and sound-worlds. How composers react to this diversity of musical approaches is an important theme in contemporary composition. My approach to composition within this globalised situation has been to focus on the notion of ‘integration’ and creating structurally consistent score-based frameworks. I have composed a portfolio of work that reflects the central focus of ‘integration’, concentrating on three inter-related research areas:

1. Exploring how one can integrate or frame improvisation and/or electronics into notated structural frameworks.
2. Exploring the use of technology to translate or integrate material generated through improvisation into notational practice.
3. Developing a coherent and individual technique and aesthetic that draws on structural influences from a range of musical idioms, but never resorts to cliché or pastiche.

My exploration of integration in writing the compositions in this portfolio has been primarily technical. I am fundamentally interested in the ‘nuts and bolts’ of composition, how musical materials can fit together and interact. Therefore although the character and substance of the different materials I engage with is important, my foremost preoccupations when composing are the formal and technical aspects such as: structure and proportion; pitch and rhythmic organisation; orchestration technique; the use of extended notations; and compositional processes such as abstraction, permutation and rotation.

As I outline in my commentary the composition in this portfolio reflects my aesthetic position that working with an eclectic range of musical materials and diverse methods of expression such as improvisation and electronics is not an end-in-itself. By integrating diverse musical influences I am not trying to create a pluralist synthesis of different semantic paradigms, but aim to find my own innovative, coherent and consistent compositional approach.
**Statement**

I hereby declare that this portfolio of compositions and commentary have not been and will not be, submitted in whole or in part to another University for the award of any other degree.

**Signature:**.................................................................
CONTENTS

List of Portfolio Works and Recording Details 4

Introduction 6

Chapter 1 11
Integrating Improvisation and Electronics into Score-based Frameworks

1a Integrating Improvisers into the Notated Score 11
Jalapeño Slammer – Fasten Your Seatbelts

1b Integrating Improvisation and Live Electronics 20
SOFT/soft – again and again – Interplay

Chapter 2 24
Integrating Musical Materials Generated Through Improvisation into Score-based Frameworks
Schism – Horizontal

Chapter 3 34
Integrating Serial Techniques and Procedures into my Compositional Practice
War with Terror - Jagged Curves - Suppressing Repression

Chapter 4 45
Creating a Labyrinth of Processes:
Integrating Structural Elements from Diverse Musical Idioms in Hidden Games
Hidden Games – Broken Society

Conclusion 67

Bibliography 69
Selected Scores 73
Selected Discography 75

Appendix A 79
Sudoku Woodwind Fugue Section from Hidden Games
**List of Portfolio Works and Recording Details**

Recordings are submitted on five CDs that correlate to a chapter or chapter section. All recordings are of live performances except for the MIDI version of *Hidden Games*. Scores for all works are included in the portfolio except for *soft/SOFT*, which is an acousmatic work for two loud speakers.

**CD 1a**

**Chapter 1a**

1. *Jalapeño Slammer*  
   performed by ‘Dan Stern’s Woodwork’ as part of the London Jazz Festival, November 2008.

2. *Fasten Your Seatbelts* – Introduction and Section 1  
3. *Fasten Your Seatbelts* – Section 2  
4. *Fasten Your Seatbelts* – Section 3  
5. *Fasten Your Seatbelts* – Section 4  
   performed by the ‘Ben Oliver Quartet’ as part of the Soundwaves Festival, Brighton, June 2007.

**CD 1b**

**Chapter 1b**

1. *soft/SOFT* (part 1)  
2. *soft/SOFT* (part 2)  

3. *again and again*  
   performed by Ben Oliver at the ‘Beckett and Music Symposium’, University of Sussex, February 2009.

4. *Interplay* (first performance)  
5. *Interplay* (second performance)  
   both performances by Anna Durance (cor anglais) and Ben Oliver (live electronics), first performance University of Sussex, April 2009, and second performance Kingston University, September 2009.
CD 2
Chapter 2

1. *Schism* 10:39
   performed by ‘Labyrinth’ at the University of Huddersfield, October 2008.

2. *Horizontal* 5:02

CD 3
Chapter 3

1. *War with Terror* 3:06
   performed by ‘orkest de ereprijs’ at a workshop at the University of Sussex, April 2007.

2. *Jagged Curves and Smooth Cracks* 7:09
   performed by the LS6 Ensemble at St. Alfege Church, Greenwich, April 2007.

3. *Suppressing Repression* 7:30
   performed by the ‘Ostravská banda’ at the Ostrava Days Festival, Czech Republic, August 2009.

CD 4
Chapter 4

1. *Hidden Games* (MIDI version beginning to figure 19) 10:27
2. *Hidden Games* (MIDI version figure 19 to figure 37) 13:08
3. *Hidden Games* (MIDI version figure 37 to the end) 9:42 33:17

4. *Broken Society* 2:58
   performed by ‘orkest de ereprijs’ at the International Composers Meeting 2010, The Netherlands, February 2010.
**Introduction**

Musical culture is increasingly globalised and technology allows us to engage with an evermore diversified range of musical approaches, traditions and sound-worlds. How composers react to this musical diversity is an important theme in the field of contemporary composition. Austrian composer Bernhard Lang points to a ‘style explosion’ in the mid-1990s that he attributes to the market taking over the ‘management of stylistic idioms’ and the development of ‘internet compression streaming’.¹ Lang asserts that ‘young composers’ were therefore ‘able to construct pieces…by assembling the available samples from the now open archives, the supermarket’.² Lang bemoans the loss of individuality and the ‘personal style’ or ‘signature’ within this cultural situation, but welcomes the resulting freedom and that composers could play ‘with the existing stylistic paradigms like a set of lego’.³

This portfolio represents my compositional response to the stylistic freedom inherent in new music today. The works are a reflection of the diverse influences on my musical development and therefore individual set of preoccupations. Georgina Born and David Hesmondhalgh question the notion of a ‘fixed and unitary’ ‘musical subjectivity’, pointing to the ‘ubiquity of music in the mass-mediated world’ and our engagement with a ‘number of different musics’ as reasons for how ‘several musical “identities” may inhabit the same individual’.⁴ I identify with this notion of ‘fragmented’ ‘musical subjectivity’ as I often feel musically nomadic or restless in that I don’t quite belong to any particular musical tradition, rather I inhabit a space between different ‘musical identities’.

² ibid., 5.
³ ibid., 5.
I have studied as a contemporary composer for many years but I am also a jazz and contemporary pianist and a conductor. I have worked within, and am influenced by an eclectic range of musical idioms and traditions. I am as comfortable conducting Debussy or Beethoven, playing Rhodes piano in a trip-hop band, or playing piano in a contemporary music ensemble. Moreover as a twenty-eight year old avid recording (CD and latterly mp3) collector my musical listening habits and preoccupations have been partly shaped by the ‘style explosion’ that Bernhard Lang alludes to. My listening interests include J.S. Bach, Nirvana, Radiohead, Louis Andriessen, Bernhard Lang, Ella Fitzgerald, Igor Stravinsky, Wolfgang Mitterer, Steve Coleman, Magnus Lindberg, Miles Davis, Vinko Globokar, Frank Zappa, Chris Bowden, Herbie Hancock, Charles Ives, Christophe de Bezenac, Brian Ferneyhough, Buena Vista Social Club, Jonathan Harvey, Oscar Peterson, Nick Cave and Louis Andriessen. My composition is necessarily influenced by these diverse musics. How could I escape them, even if I wanted to? This is not to say that influence is always perceivable or ‘concrete’. As Brian Ferneyhough asserts ‘sometimes one can be decisively influenced by a simple attitude of optimism or creative energy without identifying with the ultimate product’.  

My approach to dealing with these multifarious influences within the context of the free globalised musical situation has been to focus on the notion of ‘integration’. I understand ‘integration’ to be combining or bringing together different musical structures, elements or practices that are often thought of as separate. I work within and am influenced by various musical traditions and I am interested in exploring how different musical structures and practices can interact and work together coherently. The compositions in this portfolio explore three inter-related research areas relating to the central theme of integration:

1. Exploring how one can integrate or frame improvisation and/or electronics into notated structural frameworks.

---

5 Brian Ferneyhough, ed. by James Boros and Richard Toop, Collected Writings (London: Routledge, 1995), 236.
2. Exploring the use of technology to translate or integrate material generated through improvisation into notational practice.

3. Developing a coherent and individual technique and aesthetic that draws on structural influences from a range of musical idioms, but never resorts to cliché or pastiche.

My exploration of integration in writing the compositions in this portfolio has been primarily technical. As will become clear in this commentary I am fundamentally interested in the ‘nuts and bolts’ of composition, how musical materials can fit together and interact. Therefore although the character and substance of the different materials I engage with is important, my foremost preoccupations when composing are the formal and technical aspects such as: structure and proportion; pitch and rhythmic organisation; orchestration technique; the use of extended notations; and compositional processes such as abstraction, permutation and rotation.

I identify closely with Brian Ferneyhough’s assertion that ‘young composers’ should ‘try to form some sort of critically aware synthesis’ from the ‘inevitably fortuitous collection of impressions’ which we collect.\(^6\) While I would refrain from defining my work as a ‘synthesis’\(^7\), I aspire to compose music that is ‘critically aware’ of the different influences and musical practices evident in my compositional methodologies. I also want to draw on the ‘fortuitous’ eclectic musical background I outlined previously.

By integrating various musical structures and working with diverse methods of expression such as improvisation and electronics I am not trying to create a pluralist synthesis or collage of different semantic paradigms. Relativist ‘supermarket’ pluralist composition cannot be an end in itself; in this sense I agree with John Croft’s claim that eventually ‘the frisson of colliding codes’ in ‘stylistic eclecticism’ simply ‘solidify[ed] into

---
\(^6\) ibid., 220.
\(^7\) Due to the dubious colonialist implications of the word synthesis relating to Stockhausen’s ideas on ‘Weltmusik’, which I discuss immanently.
stylistic orthodoxy'. Eclecticism for the sake of eclecticism is, in my opinion, a cultural cul-de-sac. Neither do I, however, associate myself with what Björn Heile describes as ‘Stockhausen’s self-aggrandising claim of being able to synthesise the world’s musics into a higher unity’. Stockhausen makes dubiously colonial claims that following the ‘intermingling and integration of all the earth’s musical cultures’, composers such as himself will be able to develop ‘original forms as a contribution to harmony between all cultural groups’. He gives a ‘number of [his] compositions’ as examples of these hybrid ‘symbiotic forms’. As I will seek to demonstrate from examples in my own work I am not interested in such universal designs but merely want to extend my own compositional methodologies by integrating, abstracting and re-contextualising musical structures evident in music from the Western ‘classical’ tradition, and in other musical idioms such as jazz or funk. My technical approaches to structural influence are related more to the music and ideas of Igor Stravinsky, György Ligeti and Louis Andriessen than the utopian integrationist claims of Stockhausen. I do not claim to be at the top of a cultural hierarchy or at the forefront of musical progress but simply engaging critically with diverse musical materials.

Each chapter of this commentary will focus on one of the three research areas relating to my technical preoccupation of integration. In chapter one I will provide examples of how I have integrated improvisation and electronics into structural frameworks using extended notations, focussing in particular on the notion of performer specificity. In the second chapter I will examine how I used technology to integrate or translate ideas generated through my piano and Max/MSP improvisational practice. In

11 ibid., 6.
the third and fourth chapters I will provide examples of how I have adopted and re-contextualised techniques and structural ideas from different musical idioms including: classical and total serialism; contemporary jazz; funk; and Cuban music. I will contextualise my approach to integration in relation to particular composers and their relationships to influence. I will assert that the wide range of influences and methodological approaches evident in my music is a reflection of my diverse educational experiences, musical performing experiences and listening habits. I am a well-educated, middle-class, British/European composer and in many ways my music is a reflection of my cultural and socio-economic background.
Chapter 1

Integrating Improvisation and Electronics into Score-based Frameworks

1a Integrating Improvisers into the Notated Score

Jalapeño Slammer – Fasten Your Seatbelts

Evan Parker insists that ‘if anyone in the production of a music event is dispensable’ then ‘it is the score-maker, or the “composer” as he is often called’.\textsuperscript{12} Parker’s “ideal music” is ‘played by groups of musicians who choose one another’s company and who improvise freely in relation to the precise emotional, acoustic and psychological…conditions’ at the time of the music event.\textsuperscript{13} While I can identify to an extent with Parker’s somewhat idealistic point of view I have often felt a sense of frustration at the lack of structure and formal development when performing or listening to free improvisation performances (live or on record). I have had absolutely fantastic experiences undertaking scoreless improvising with long-term collaborators such as clarinetist David Bennett. I have also been spellbound by improvisers such as Christophe de Bezenac or John Tilbury, but these great performances are outweighed by copious examples of what I perceive to be musical self gratification. On many occasions I would agree with composer and pianist Anthony Davis’ assertion that “free” or “open” improvisation has become a cliché, a musical dead end.\textsuperscript{14}

While Davis’ response was to turn towards ‘precise notation to insure that the improviser is consciously…tuned into the overall structure of a piece’\textsuperscript{15},

\textsuperscript{13}ibid., 81.
\textsuperscript{14}Anthony Davis, liner notes to \textit{Episteme}, Gramavision GR 8101, quoted in \textit{Audio Culture: Readings in Modern Music}, eds by Christoph Cox and Daniel Warner (New York: Re-Continuum, 2007), 250.
\textsuperscript{15}ibid., 250.
my own approach has been to explore how I can integrate improvisation into score-based frameworks by loosening my control of certain elements of the musical discourse. I am interested in ‘harness[ing] the energy that is generated by improvising musicians’, in acting as a facilitator for musical expression. My aim has been to retain control of the overall proportions and formal structures of works while ensuring the improvisers are not mere puppets for my artistic vision.

My approach to framing and creating structured contexts for improvisation is exemplified in several of the works in this portfolio including: **Jalapeño Slammer** for jazz sextet; **Fasten Your Seatbelts** for clarinet/bass clarinet, electric cello, electric guitar, keys and pre-recorded electronics; and **again and again** for prepared piano and live electronics.

**Jalapeño Slammer** was the outcome of a commission to write a new piece for ‘Dan Stern’s Woodwork’ for the London Jazz Festival. The score was constructed with the specific strengths and weaknesses of the jazz sextet members taken into account. This notion of performer specificity is an important concern when integrating improvisers into notated frameworks. For example the drummer in Dan Stern’s group, Laurie Lowe, is uncomfortable reading notation and requested that I wrote him a rhythmic guide and structural outline of the piece rather than a strictly notated part. Accordingly I wrote a minimal drum part, simply indicating the basic bar and rhythmic structuring. This pragmatic approach to notation developed through discussions with the musician facilitated the situation where the most flexible and dynamic musical result could be achieved. I was pleased with how Lowe drummed in the performance, it would have been impossible and counterintuitive to have notated the exact patterns he played. Importantly, however, Lowe still needed a notated part to co-ordinate him with the rest of the ensemble, the score provided a structural framework for his creativity. Indeed all members of the sextet

---

17 He also requested a midi version of the full ensemble parts to practise with.
were engaged with notation of some description throughout the performance.

The first system of the score (example 1.1) reveals a number of the different notations I employed in the first section of the piece. Although given a wide range of freedom the accompanying players must follow certain limiting notations including: pitch rows that give a context for the bass soloist; text descriptions that indicate the type of sonorities or instrumental techniques they should explore and their individual function within the ensemble; simple graphic notations that indicate the relative density they should play; and traditional notations such as dynamic markings. The limitation of certain parameters ensures an overall shape for the section but there are evidently a tremendous range of possible musical outcomes. For example, I give no indication of the expected duration of this section. This key aspect is dependent on factors such as the atmosphere at the performance and the creativity and intuition of the musicians. Example 1.2 provides a rather more constrained example where I use detailed traditional notation to closely define the musical discourse. In the second solo section of Jalapeño Slammer (example 1.3) the bass clarinet and double bass riff provides the foundation for the piano (later group) improvisation with the jazz chord notation denoting the harmonic field. The notation here provides the framework which supports the extended freedom afforded to the soloist(s) and the drummer.

Example 1.1 – The various notations in the first system of Jalapeño Slammer
Example 1.2 – Page 7 of Jalapeño Slammer

Example 1.3 – Page 22 of Jalapeño Slammer
These examples illustrate some of the procedures I adopted to integrate improvisation into score-based frameworks when writing for a commission for a pre-existing group of jazz musicians. I tailored the notation and my compositional approach towards their knowledge and experience of working within notated and improvisatory contexts. This pragmatic approach to performer specific composition allowed me to retain control over the overall formal design, character and trajectory of the material, while harnessing the creativity, musical sensibilities and skills of the specific musicians involved.

*Fasten Your Seatbelts* was composed for my own quartet, which I formed especially for a performance at the Soundwaves Festival 2007. My knowledge of my quartet’s individual playing styles, skills and performance interests greatly informed my compositional choices, allowing me to successfully integrate the performers and pre-recorded electronics within a limited rehearsal period. Writing for specific performers rather than generic instrumental ensembles is also evident in John Zorn’s compositional approach. He claims to pick his groups in the ‘Ellington tradition’, where ‘the selection of the people’ and the ‘chemistry’ of the ensemble, rather than the combination of instruments are the key concerns.18

I adopted various approaches to retain control over the proportion, formal structure and development of *Fasten Your Seatbelts*, while at the same time letting go of certain elements of the musical discourse including: constructing a detailed score that forced limitations on the improvisation using a wide array of different notations; creating an intricate electronic soundtrack which provided a constant music reference point; directing the pre-performance rehearsals; and interacting with the quartet in the performance through my piano and electric piano playing and on-stage direction.

I built the electronic soundtrack from samples and extended improvisations recorded in sessions with the cellist and guitarist, as well as multiple recordings I made on the piano and with samplers. I decided to limit the source sounds for the electronic soundtrack to recordings of the actual live performers in order to achieve a sense of sonic cohesion, or integration, between the soundtrack and the live instruments. I wanted to avoid the electronic or not-electronic scenario often apparent with works that align live players with pre-recorded electronics.

Example 1.4 is a scan of one of the notation sheets I asked the cellist to interpret in a session. I used ‘notated’ improvisation to collect materials which I could then work with electronically using effects (e.g. ring modulation, delay, reverb), juxtaposition and looping. In this session I collected around fifty different percussive sounds, which I later used in ‘cello drum-machines’ which I built in Logic Pro using ‘Ultrabeat’. I also designed other midi ‘instruments’ using the ‘EXS-24’ sampler in which I could trigger and manipulate various ‘cello samples using a midi keyboard.

The only electronic sounds in Fasten Your Seatbelts that were not generated from recordings or samples of the live performers were recordings of Noam Chomsky discussing the Iraq War previous to the invasion in 2003. I chose to use the Chomsky speech recordings as I was particularly angry at this time about our illegal invasion into Iraq. I do not regret using these samples but appreciate that using speech audio samples in this way could be critiqued in ‘Adornian’ terms as ‘didactic’ or ‘authoritarian’.19 It could be dismissed as ‘political or propaganda art’ that ‘tells the audience what to think’ rather than aspiring towards the ‘greatest art’ which is ‘autonomous’, art which is ‘not prescriptive but allows for freedom of response’.20 In many ways I agree with this critique and have not used audio samples in the same way since these two works, but my use of Chomsky was done with the best of intentions. I did not necessarily want to be ‘prescriptive’ but rather use Chomsky’s words to articulate my

20 ibid., 178.
concern about what had happened. The audience were free to form their own opinions.

Example 1.4 – Improvisation sketch for the ‘cello recording session for Fasten Your Seatbelts, December 2006

Example 1.5 illustrates some of the notations I employed to construct the score for Fasten Your Seatbelts including: conducting flag notations derived from Lutoslawksi’s flag techniques\(^\text{21}\); boxed numbers to indicate

\(^{21}\) Photo 1 illustrates me giving a conducting flag direction in the performance.
the percentage of time the players should aim to improvise; motives given as the basis for improvisation; jazz chord notation; and text descriptions.

Example 1.5 – Different notations from page 3 of the full score of Fasten Your Seatbelts

Photo 1 – My quartet at the performance of Fasten your Seatbelts, Soundwaves Festival, 2007.
In my opinion my approach to integrating improvisation and electronics in *Fasten Your Seatbelts* was successful because I was the arbiter and decision maker from the initial conception of the piece in October 2006 to the performance in June 2007. Larry Ochs asserts that composers ‘working in structured improvisations’ must ‘balance [their] desire for control with [their] desire to provide a vehicle for the players’. I consciously relinquished control over certain aspects of the work, allowing the quartet to bring their intuition and creativity to the performance, but stepped back from letting them usurp my control over the formal structure. This resonates with Lutoslawski’s use of aleatoric rhythmic structures in which ‘the element of chance’ does not ‘affect in the slightest degree the architectural order of the composition’. I do not claim like Lutoslawski to be able to ‘foresee all possibilities which would arise within the limits set beforehand’ or to have complete control of the ‘pitch organisation’, but through limitation I aspired to achieve the situation where ‘even the least desirable…execution [of the notation]…should nevertheless be acceptable’. The score of *Fasten Your Seatbelts* combined with the electronic soundtrack allows the musicians to bring their own voice to the work while the limitation ‘guarantees that everything that may happen…will fulfil my [musical] purpose’ or intentions.

---

24. Ibid., 88.  
25. Ibid., 88.
John Croft asserts that the ‘first question’ we should ask when it comes to using ‘new technologies in music’ is “‘Why?’” My reasoning behind using pre-recorded electronics when creating *Fasten Your Seatbelts* was to create a structural framework for the live improvising musicians, I created a backdrop or soundtrack on which the live sounds could be superimposed. I found this process of aligning the score to pre-recorded electronics a somewhat restrictive manner of working however, and began exploring live electronic manipulation using Max/MSP. My aim was to develop reactive and interactive relationships between the human performer and computer, to integrate the live and electronic sound worlds.

The first piece I created using Max/MSP was *SOFT/soft*, which was a collaborative inter-arts project with Dylan Robinson, Karen Schaller and Heather Thomas examining *Soft* for bass clarinet by Franco Donatoni. I composed two short acousmatic pieces that book-ended a performance of *Soft*. I built the pieces by manipulating, granulating, convolving and filtering samples taken from various sources including: a recording of *Soft* by Heather Thomas; recordings of the other three collaborators reading sections of *Stirrings Still* by Samuel Beckett; and other field recordings including paper scrunching and key clicks. I ‘improvised’ using Max/MSP to create electronic materials that I could then manipulate and organise with Logic Pro to create the final tracks.

---

27 Here I am accepting Hugill’s description of *acousmatic* music, which follows the use of Pythagoras’ term by Pierre Schaeffer, as being electronic music ‘in which the original source of the sound is not visually apparent, the immediate source being…loudspeakers’, see Andrew Hugill, ‘The Origins of Electronic Music’, in *The Cambridge Companion to Electronic Music*, eds. Nick Collins and Julio d’Escriván (Cambridge: Cambridge University Press, 2007), 9.
29 There is no score for these works but the recordings are submitted.
Two works in this portfolio, **Interplay** for cor anglais and electronics and **again and again**\(^\text{30}\) for improvising prepared piano and electronics, represent my work exploring the integration of live soloist and electronics. To try and ensure a connection between the live and electronic sonorities in both works I decided that all sounds produced by the computer would be generated from samples of the live instrument recorded in the actual performance. The live sound is recorded from the beginning of each of the works and samples from these recordings are then triggered and manipulated by data generated by analysis of the attack points, dynamic variation and pitch of the acoustic sound. The streams of data (lists) generated by this analysis of these various parameters (with the analyzer~ object) is used to control various aspects of the playback including: the speed and direction of samples; the volume; the frequency components allowed to pass through the FFT filters; delay time; and even different variables of granulation such as the position of a sample granulated or grain size. Example 1.6 is a screenshot of the Max/MSP patch for **again and again**, the left hand side is the recording section while the right hand side relates to the playback and manipulation. The piano was unamplified in **again and again** but in **Interplay** there is also some live signal processing, with reverb and harmonisation (using gizmo~) added to the amplified acoustic sound.

In composing these works I was interested in developing homogeneity between the live and electronic sounds by establishing timbral associations and interaction between the sound worlds which can be very clear such as triggers from heavy articulations, or more abstract such as in delay effects which are dictated by the pitch of the soloist. The electronic sounds are often quite different from the original source but the underlying connection of source ensures a homogenous sonic character.

---

\(^{30}\) **again and again** is inspired by Samuel Beckett’s *Stirrings Still* and reflects the stillness, atmosphere and repetition of Beckett’s prose.
Interplay was written for oboist Anna Durance and while there is some rhythmic flexibility afforded to the performer it is essentially a fully notated piece. I operated the laptop in the performance using the QUERTY keyboard and mouse, following a pre-determined part that designated the keyboard keys that should be pressed and parameters that should be changed with the mouse. The laptop part operator does not trigger or manipulate the playback of samples, merely changing parameters or turning different processes on or off. Therefore although I operated the laptop in the premiere it can be easily take on by somebody else who is Max/MSP proficient.

The score of again and again exhibits the most flexible notation of any work in this portfolio which is simply because I was the performer and laptop operator for the premiere. A different pianist would almost certainly interpret the notation in a different fashion but the score was intended for my use, it was performer specific. The pitch rows,\(^3\) gestural notations and

\(^3\) The pitch rows were created using Stravinsky’s serial transposition-rotation method which is outlined in chapter 4 in relation to Hidden Games.
detailed midi and QUERTY keyboard instructions were crucial in giving me instigations to improvisation, with the score being the structural framework.

*Interplay* and *again and again* are rather different in character to many of the other works in this portfolio, specifically in relation to an absence of a fixed pulse. This is a reflection of using Max/MSP which I find rather cumbersome in relation to exploring pulse-based structures. Assimilating live electronic processes into my work has challenged me to explore musical pathways that I may not have done through instrumental composition alone. I have had to develop and adapt my approach to successfully integrate live electronics into score-based frameworks. My readiness to work with Max/MSP and the infinite variety of musical possibilities it allows has helped me to establish interesting relationships and connections between the live performers and computer. Integrating live electronic processing into my compositional and improvisational practices has offered another dimension to my musical vocabulary.
Chapter 2
Integrating Musical Materials Generated Through Improvisation into Score-based Frameworks

Schism – Horizontal

In this chapter I will outline some of my explorations into using technology to help me translate or integrate ideas into notated formats that were generated through my own improvisation, focusing on two works to illustrate my methodological approach: Schism for violin, bass clarinet and piano and Horizontal for flute, guitar and ‘cello.\(^{32}\) The process of translating improvisation into notation is in a sense opposite to my engagement with created structural frameworks for improvisation discussed in chapter 1 as this diagram exemplifies:

Approach 1 (e.g. Fasten Your Seatbelts, Jalapeño Slammer)

Score /Notation \(\rightarrow\) Improvisation

Approach 2 (e.g. Schism, Horizontal)

Improvisation \(\rightarrow\) Score/Notation

According to Rzewski the ‘most basic technique of composition is that of transferring information from short-term memory to long-term’, translating or ‘reforming an impulse’ into a ‘symbolic language’. Improvisation, on the other hand, is ‘more like free association, in which ideas are allowed to express themselves without having to pass the...barriers erected by consciousness’.\(^{33}\) My aim in writing Schism was to find a hybrid area where the translation and editing processes that Rzewski ascribes to

\(^{32}\) I also generated material for the first and final sections of Hidden Games with a similar methodological approach to Schism. I will discuss this work in detail in chapter 4 without focusing on the compositional approach being discussed presently.

composition are applied to musical material generated through improvisation. I wanted to draw on my own improvisational practice in an intuitive and flexible way. I generated the musical material for Schism by improvising with a midi-keyboard into Logic Pro. I exported the resulting midi files into Sibelius where I created a coherent score for live performance. It is of course nothing new to improvise at the piano to help create notated compositions\(^{34}\) but I was attempting to bypass the ‘barriers erected by consciousness’ that improvisation can help avoid while allowing myself the critical filtering of the notated score. By capturing musical ideas in-the-moment of expression the midi technology helped me to translate musical strategies developed through my improvisation practice into the symbolic language of traditional notation. I was not trying to write strictly notated music that sounded improvised, indeed complex notations used by composers such as Brian Ferneyhough would probably achieve this more effectively.

Louis Andriessen relates how he ‘planned the form [of De Staat] – where choruses were to come in, the proportions, timing and so on’ but following these initial decisions he ‘wrote the piece completely freely, by playing and improvising’.\(^{35}\) My own pre-compositional (or perhaps more precisely pre-improvisational) procedures for Schism were focused on three interrelated areas that gave me a frame of reference when undertaking the improvisation:

1. I brainstormed the modes of expression and timbral qualities I wanted to explore in the piece. These parameters were not exhaustive but included the ‘articulation classes’\(^{36}\) I envisaged the different instruments exploring:

\(^{34}\) There are numerous examples of composers who wrote at the keyboard including Bach, Beethoven, Stockhausen, and Stravinsky.


\(^{36}\) Brian Ferneyhough’s description of different basic elements such as “pizzicato”, or “repeated note”, etc., quoted by Harry Halbreich in the liner notes of Berne String Quartet; *Brian Ferneyhough: Sonatas for String Quartet*; Red Seal (RL25141); 1977.
2. My second pre-improvisational preoccupation was exploring the idea of creating a schism within the ensemble. Schism can be defined as the ‘division of a community into factions’. The corporate ensemble sound in Schism forms a kind of community, but the three instruments are divided into three separate entities or ‘factions’ that thread through the musical texture in their own individual manner.

3. The final important pre-improvisational focus was the formal proportions of the piece. I sketched a morphology (shown in example 2.1), which provided an outline of how the piece would evolve in terms of tension and release (or activity and passivity).

---

I prepared the Logic file by setting tracks to representative midi sounds of the three instruments and then improvised the three parts of the trio in turn (violin, bass clarinet and finally piano). While the morphology and predetermined parameters helped me develop coherent material I also allowed myself to explore areas where my imagination and intuition took me. For example my original intention was to have an abrupt conclusion at the end of the work, but while improvising I was pulled towards the strident piano motives that dominate the final section. The pre-improvisational limitations I designed were important but my attitude towards ‘rules’ echoes Boulez who takes ‘pleasure’ in destroying rules he has invented, describing the process as a ‘dialectical evolution between freedom of invention and the need for discipline in invention’.\(^\text{38}\)

The pitch and rhythmic processes in *Schism* were secondary concerns to the overall intentions of the composition. Although I gravitated towards

---

specific interval construction, chords or syncopated rhythmic patterns, these concerns took a lower hierarchical position than the gestural quality of ideas. The interaction between the three threads of the corporate sound was more important than individual notes or harmonies.

The final process in composing *Schism* was translating the midi files collected in Logic Pro into a coherent score for live performance. This procedure is illustrated by examples 2.2, 2.3 and 2.4 that relate to the material in bars 85-86. Example 2.2 reveals how the midi files looked when initially imported into Sibelius. You can choose the smallest unit of quantization and for practical reasons I chose to take both the demi-semiquaver version shown in blue and the semiquaver version shown in yellow and then work with both forms of quantization.

Example 2.2 – *Schism* bars 85-86 original midi file imported into Sibelius
Example 2.3 is the same material but filtered to isolate what I determined to be the most important elements. I wanted to retain all the basic ideas from the improvisation but simplify the notation in order to communicate effectively to live instrumentalists.

Example 2.3 – *Schism* bars 85-86 midi after filtering

Example 2.4 is how the material appears in the final score. It is augmented to ensure clarity and I have added detailed dynamics and articulations.

Example 2.4 – *Schism* bars 85-86 as it appears in the score
Through critical filtering the material given by improvisation was transformed from an indecipherable mess into a coherent and detailed form. It is not a literal translation of the original improvisation but a considered, edited version. Although developing the score was a fluid and intuitive process I frequently referred back to my original pre-improvisational plans. The waveform view of the recording by the Labyrinth Ensemble\textsuperscript{39} (example 2.5) illustrates that I managed to broadly achieve the outline of my original morphological diagram, excepting the strident piano sonorities in the coda.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Schism_Labyrinth_CD.png}
\caption{Waveform view of the performance of Schism by Labyrinth
Horizontal axis = time; Vertical axis = amplitude}
\end{figure}

\textit{Horizontal} was created in a rather similar way to \textit{Schism} with the fundamental difference being that the material was generated using pitch and rhythm generators in Max/MSP rather than by piano improvisation. I ‘improvised’ the material into Logic Pro using a combination of the ‘brown-rhythm’; and ‘brown-melody’ objects designed by Karlheinz Essl for his Real Time Composition Library\textsuperscript{40}. These objects generate ‘Brownian-movement-like’ rhythmic and melodic material.\textsuperscript{41} The material created is

\begin{itemize}
\item \textsuperscript{39} \textit{Schism} was first performed by the ‘Gemini Ensemble’ at the RMA Student Conference 2008.
\item \textsuperscript{40} <http://www.essl.at/works/rtc.html>, accessed 17\textsuperscript{th} March, 2010.
\item \textsuperscript{41} Essl describes brown-melody: ‘Generates a brownian-movement-like melody within a given ambitus. The distance between two notes is determined by the brownian factor <0-}
essentially random but the level of randomness is controlled by the parameters within which each object works. I developed a series of presets (example 2.6) with which I could automatically change these parameters so that I could control the generator (to a certain extent).

I linked Max/MSP with Logic Pro and recorded each of the three voices of the trio. I then followed a similar filtering process as outlined above for Schism to create the score (examples 2.7 and 2.8). The brownian generator was a way of creating material, which I could then engage with compositionally.

1>. When this factor is 1, each note of the given range can be choosen. When the rate is 0, the same note will be always repeated. The right outlet shows the chosen interval.
Example 2.7 – Original midi import into Sibelius from Logic of the material for bars 32-40 of *Horizontal*

Example 2.8 – Bars 32-40 *Horizontal* final score
*Horizontal* works well creating a dislocated, disorientating effect where musical events seem to happen randomly but the control of the notation allows effective moments of coincidence and development such as the unison melody between the flute and guitar in bars 58-61.

The translation processes involved in working with improvised materials in *Schism* and *Horizontal* allowed me to coherently integrate materials generated through improvisation into score-based frameworks. Technology helped me bridge the gap that can exist between my improvisational and compositional practices, allowing me to arrive at formulations that would not necessarily have come to me through paper composition alone.
Chapter 3

**Integrating Serial Techniques and Procedures into my Compositional Practice**

*War with Terror – Jagged Curves – Suppressing Repression*

In the first two chapters of this commentary I consciously avoided detailed analyses of structural elements such as harmonic or rhythmic construction and compositional processes such as abstraction or permutation, choosing to focus on my use of extended notations and the relationship between my compositional and improvisational practices. In this chapter I will focus on my integration of systematic, particularly serialist, techniques into my compositional methodologies, before outlining in chapter 4 some of the diverse processes and techniques I employed to compose my orchestral work, *Hidden Games*.

I adopted twelve-tone techniques in order to develop more systematic ways of working within atonal harmonic and melodic fields. The pitch structures of works previous to and in the early stages of my doctoral research were often developed from initial sketches or improvisations. I wanted to develop more systematic ways of working within an atonal context to establish pre-compositional frameworks that would enable me to bypass the ‘terror’ that Stravinsky attributes to the ‘infinitude of possibilities’ available to the composer when one first begins to compose a new piece.42 What particularly interests me about serialist procedures are not only their constructive, formalist character but also the radical intention of their initial conception and development. I identify with the essentially European ‘programme of post-war aesthetic modernisation’ of breaking with ‘inherited pathways’ through ‘systematic and transparent modes of production’.43 My appropriation of classical and total serialist techniques

rather than say stochastic, spectral or even modal pathways of constructing harmonic and formal structures, is a reflection in particular of my engagement with the works of the 1950s European avant-garde. I am attracted to the uncompromising nature of many works from this period and the abstract organisational processes that were employed.

In *War with Terror*, for soprano and ensemble, I developed a systematic but non-serial way of working by using letters of the alphabet to create pitch rows. Example 3.1 illustrates how I designated each note of the available pitch span (range of the piano) a number from one to twenty-six (the number of letters in the modern English alphabet). The bottom note (A-1) is designated as 1 with each rising chromatic pitch taking the next integer. After the twenty-six letters are exhausted the pattern repeats at the next level. The word I chose to use to find pitches in this system was the Anglo-Saxon word ‘woruldende’, which means ‘the end of the world’.44 I mapped the letters onto the matrix and used the resulting note row to compose the work.

---

44 I am indebted to Charlotte Hellier, BA (English and Philosophy) University of Leeds, for her help with Anglo-Saxon translation and word choices.
Example 3.2 illustrates my use of this pre-compositional design. While some of the lowest strata pitches are displaced by an octave all other pitches are generated by the alphabet mapping process. I found this pre-compositional process-driven limitation of pitch material extremely liberating as it gave me pitch structures with which I could compose with instinctively.  

Example 3.2 - Bars 16-17 of War With Terror (in C [transposed in full score])

45 I also used this system to generate pitches in Fasten Your Seatbelts, Interplay and Broken Society.
The first work in which I used serialist techniques was *Jagged Curves and Smooth Cracks* for flute, oboe, 'cello and piano. I initially devised a twelve-note pitch row (example 3.3) and created a 'magic-square' to establish the forty-eight different versions of the row (example 3.4).

![Example 3.3 – Twelve-note row for Jagged Curves](image)

Example 3.4 – Magic-square for Jagged Curves and Smooth Cracks

I used the rows very freely, treating the matrix as a source of interrelated melodic and harmonic materials that I could use in whatever way I chose. This intuitive approach is illustrated in example 3.5, in which I distribute seven different rows between three layers in just three bars.

![Example 3.5 – Bars 78-81 of Jagged Curves and Smooth Cracks](image)
It was not my intention that an audience should be able to identify the abstract processes I adopted for creating pitch material in *Jagged Curves* and *Smooth Cracks* and *War with Terror*. The works have a certain harmonic coherence and sense of connectedness but the methods of generating and limiting pitch structures simply gave me consistent frameworks to work within, liberating me to focus on other aspects of the composition.

Total-serialism (particularly Stockhausen’s technical procedures in *Kreuzspiel*) exerted an important influence in the pre-compositional procedures I developed for *Suppressing Repression*, in relation to the twelve-tone pitch control, rhythmic structures, timbral choices and overall formal organisation. In writing this piece for chamber ensemble I was not interested in writing a 1950s total-serialist pastiche, but rather in integrating the organisation of the total-serialist processes with intuitively composed (almost improvisatory) material.

I devised a twelve-note row in which I gave each one of the chromatic pitches an integer relating to their relative position in the octave where Ab equals 1 (example 3.6), and created a magic-square (example 3.7).

---

Example 3.6 – Note row chromatic pitch numbers for *Suppressing Repression*

```
P-1
```

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Example 3.6 – Note row chromatic pitch numbers for *Suppressing Repression*

```
P-1
```

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Example 3.7 – Magic-square for *Suppressing Repression*
I created rhythmic charts following Stockhausen’s procedures in the first section of *Kreuzspiel* in which he ‘attaches a duration between 1 and 12 to each pitch class’.\(^6\) Example 3.8 illustrates how row P-1 would appear if the unit of duration was one crotchet (\(u = \underline{\text{♩}}\)).

Example 3.9 illustrates how I used this rhythmic scheme to create sustained sonorities, while example 3.10 demonstrates my use of the durations as attack points for pointillist textures.

I also used the serially derived durational scheme to devise the formal structure of *Suppressing Repression*. The piece is divided into three main sections with the durational unit shortening by a quaver in each subsequent section (example 3.11). The large-scale sections provided the structural framework of the piece but ideas overlap and dovetail different sections as I aligned more instinctively composed elements with the materials generated by total-serialist procedures. The strictly controlled formal structure provided the necessary foundation for me to coherently integrate the different musical elements.

---

*Denoted as ‘FREE MATERIAL’ in example 3.11.*
### SECTION 1

**REHEARSAL MARKS**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>7</td>
<td>12 (3 + 9)</td>
<td>8</td>
</tr>
</tbody>
</table>

**FREE MATERIAL**

- Complete P1 - freely distributed around the instruments (pn., bcl., vcl., vln)
- Varied repeat of P1 (same - vln)
- Free dissonant piano material (FDP) derived from opening ideas, linked to str. (pn)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P6, u = J (vln)</td>
<td>P11, u = J (vln)</td>
<td>last note held</td>
</tr>
<tr>
<td>I10, u = J (vcl.)</td>
<td>R3, u = J (vcl.)</td>
<td>last note held</td>
</tr>
</tbody>
</table>

- P6, u = triplet 2 (tpt, igato)
- P1 + R1, u = triplet 2 (tpt, acc.)
- R1 + R1, same
- P1 + R2, R2, same
- P7 + R7, u = triplet 2 (mar.)
- R7 + R7, same
- P1 + R1, same

### SECTION 2

**FREE MATERIAL**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

- FDP, (pin.)
- FDP
- FIB, (b.ca.)
- FDP
- FIB
- FDP (pin. + b.ca.)
- FIB (b.ca. + tpt, mar.)
- FIB + FDP

- P1 + R12, same
- P11 + R11, same
- R11 + R11, same, + FIB material
- P11 + R11, same
- P1 + R12, same
- R11 + R12, same, then arco

### SECTION 3

**FREE MATERIAL**

<table>
<thead>
<tr>
<th></th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 (1+12)</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

- piano accented rit.
- + gongs

- P + R
- I + R
- P + R varied
- I + R + P + R altered

**Example 3.11**

Diagram to illustrate the structure and materials of Suppressing Repression

- + four-part canon, u = triplet 2
- * return to P1 ideas from the beginning - link in with the piano
In some parts of *Suppressing Repression* I used total-serial procedures for making timbral decisions. In the final section (bar 75 beat three onwards) I designated a particular percussive sound to each of the twelve duration units or pitch numbers (example 3.12). Example 3.13 illustrates my use of these timbral choices and how the rhythmic material from the two rows is combined to create the explosive percussion sonorities.

<table>
<thead>
<tr>
<th>Bar 75 (beat 3)</th>
<th>Bar 78 (beat 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>P</td>
</tr>
<tr>
<td>1 Cymbal</td>
<td>1 Cymbal</td>
</tr>
<tr>
<td>2 High-Tom</td>
<td>2 High-Tom + Low-Tom</td>
</tr>
<tr>
<td>3 High-Tom</td>
<td>3 High-Tom</td>
</tr>
<tr>
<td>4 Low-Tom</td>
<td>4 Low-Tom</td>
</tr>
<tr>
<td>5 High-Tom</td>
<td>5 Low-Tom</td>
</tr>
<tr>
<td>6 -</td>
<td>6 Low-Tom</td>
</tr>
<tr>
<td>7 Low-Tom</td>
<td>7 Low-Tom</td>
</tr>
<tr>
<td>8 High-Tom</td>
<td>8 -</td>
</tr>
<tr>
<td>9 Snare roll</td>
<td>9 High-Tom + Low-Tom</td>
</tr>
<tr>
<td>10 Snare roll</td>
<td>10 Snare roll</td>
</tr>
<tr>
<td>11 Snare</td>
<td>11 Snare</td>
</tr>
<tr>
<td>12 High-Tom</td>
<td>12 High-Tom</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IR</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Low-Tom</td>
<td>1 High-Tom</td>
</tr>
<tr>
<td>2 High-Tom</td>
<td>2 Low-Tom</td>
</tr>
<tr>
<td>3 Snare</td>
<td>3 Snare + Cymbal</td>
</tr>
<tr>
<td>4 High-Tom</td>
<td>4 High-Tom</td>
</tr>
<tr>
<td>5 Snare drum</td>
<td>5 Snare drum</td>
</tr>
<tr>
<td>6 Low-Tom Roll</td>
<td>6 Low-Tom Roll</td>
</tr>
<tr>
<td>7 Snare roll</td>
<td>7 Snare roll</td>
</tr>
<tr>
<td>8 Snare + cymbal</td>
<td>8 Snare + cymbal</td>
</tr>
<tr>
<td>9 Snare drum</td>
<td>9 Snare drum</td>
</tr>
<tr>
<td>10 High-Tom</td>
<td>10 Snare roll</td>
</tr>
<tr>
<td>11 Low-Tom</td>
<td>11 Low-Tom</td>
</tr>
<tr>
<td>12 Low-Tom</td>
<td>12 Low-Tom + High-Tom + Cymbal</td>
</tr>
</tbody>
</table>

Example 3.12 - Percussion timbre decisions based on total-serial parameters (bars 75-end) in *Suppressing Repression* (bold and italics denote changes made for preferred musical results)
The various serialist techniques I employed in *Jagged Curves* and *Smooth Cracks* and *Suppressing Repression* gave me sets of interrelated materials that I could work with, a 'way-in' to composing the works. The processes helped me create musical objects and formal structures that I could not necessarily have created through intuition alone. I was not interested in 'guaranteeing “unity” in the sense of an organicist model' but rather in 'pragmati[call]y' using serialism as 'a tool for creating musical structures'. Serial techniques helped me assert valuable limitations on material and gave me springboards to develop structural frameworks for my creativity. I ‘wilfully reinterpret[ed]’ serial techniques for my own ends, ‘transmuting received materials’ in order to ‘push…precursors aside and clear creative space for [myself]’.49

---

benefited from engaging with the systematisation and parameterisation processes inherent in serialist thought and concur with Ligeti’s assertion that serialism can give ‘an insight into structural relationships and refinements of thought in regard to the subtlest of musical ramifications’.  

Chapter 4

Creating a Labyrinth of Processes: Integrating Structural Elements from Diverse Musical Idioms in Hidden Games

Hidden Games – Broken Society

In this chapter I will outline some of the technical approaches and strategies I employed to integrate and re-contextualise techniques and structural ideas from diverse musical practices in Hidden Games. My aim in composing this large-scale orchestral piece, which represents the culmination of my research into integration at the University of Sussex, was to create an individual, innovative yet coherent work that drew on multifarious influences but never resorted to cliché or pastiche. I wanted to create a labyrinth\(^{51}\) of processes in which I worked coherently with a complex collection of interrelated materials. There is an intentional savageness to the work and in this sense I identify closely with Ligeti’s comments about his early works and music in general:

> Already then I tended towards something irregular and freakish in music. Music should not be normal, well-bred, with its tie all neat.\(^{52}\)

I will begin my explanation of some of the technical procedures in Hidden Games by outlining how I appropriated and adapted Stravinsky’s serial methodologies in his Variations: Aldous Huxley in Memoriam to create the formal and harmonic structures of my orchestral work. I will later describe how I constructed a sudoku fugue that I superimposed on

---

\(^{51}\) Schoenberg’s conception of ‘the artwork [as] a labyrinth in which at every point the expert knows the entrance and the exit…’ has been influential on my thinking. Arnold Schoenberg, “Aphorismen”, Die Musik 9 (1909-10), 160, quoted in Theodor W. Adorno (trans. Robert Hullot-Kentor), Philosophy of New Music (Minneapolis: University of Minnesota Press, 2006), 89.

\(^{52}\) György Ligeti, György Ligeti in Conversation, 14.
particular sections of the serially derived formal outline, creating one of several secondary structural frameworks for my creativity.

I will outline two principal examples of how I integrated structural elements from musical idioms normally considered to be outside the 'classical' tradition into the orchestral medium. The first of these is my creation of orchestral hocket textures in which I integrate rhythmic influences from jazz, funk, jungle and disco. In the second example I will describe how I used various processes to transform cow-bell patterns initially inspired by the energy of Cuban music into disjointed dissonant grooves. Like Louis Andriessen my ‘attitude to other music’ in some ways is a “direct result of the influence of Stravinsky”\(^{53}\), in particular his “anti-hierarchical” outlook', in that he was ‘prepared to reference and incorporate popular musical resources that are more usually excluded from progressive musics’\(^ {54}\). What is important in my approach is not what structural references are being used but how I abstract, re-contextualise or manipulate them. It is evidently beyond the scope of this commentary to outline every example of conscious (or indeed latterly perceived sub-conscious) influence in this portfolio of works. Therefore my critically engaged approach to working with elements from diverse musical idioms in *Hidden Games* should be seen as indicative of my intentional abstraction and integration of structural qualities throughout this portfolio.

Stravinsky’s serial transposition-rotation method, as outlined by Claudio Spies\(^ {55}\), provided the foundation for developing the harmonic, melodic, and even the micro and macro formal proportions of *Hidden Games*.\(^ {56}\) The Prime row in *Hidden Games* references blues and jazz interval

---

54 ibid., 49.
56 I used similar transposition-rotation processes in *again and again* and *Interplay*. 
construction, initially articulating seven pitches from the D blues scale\textsuperscript{57}, and thereafter avoiding large dissonant intervals (example 4.3). The first seven pitches of the Inversion row articulate the E blues scale (example 4.4).

I followed Stravinsky's hexachord transposition-rotation process for both the Prime and Inversion rows (example 4.5 for Prime) and was encouraged by the resulting vertical collections of pitches. The chords were dissonant while also echoing jazz sonorities but were constructions that I would not necessarily have come to without the rotational process. I subsequently followed the same transposition-rotation processes but with tetrachords (example 4.6 for Prime), and finally I undertook dodecachord transposition-rotation that gave me a series of twelve-note chords of varying polarities (examples 4.7 and 4.8 for the Prime and Inversion). This large pool of harmonic and melodic materials proved sufficient to sustain the pitch construction of the entire thirty-five minute orchestral work.

\textsuperscript{57} My D blues scale includes the major and minor 3\textsuperscript{rd} => collection = 0, 4, 5, 6, 7, 8, 10 where D is 0.
Example 4.5 – Prime Hexachord transposition-rotation and resulting verticals
(Inversion row equivalent also carried out but not outlined here)

Example 4.6 – Prime Tetrachord transposition-rotation and resulting verticals
(Inversion row equivalent also carried out but not outlined here)
I noticed more than a month into writing *Hidden Games* that I had made several mistakes in the initial transposition-rotation chart for this row. Evidently the generative method of limiting pitch materials was more important than serially consistent results.
Example 4.8 – Inversion Dodecachord transposition-rotation and resulting chord sequences
I created a table to count the number of occurrences of each chromatic pitch in each of the twelve-note chords created by the Prime and Inversion transposition-rotation processes (example 4.9). This gave me a series of twenty-two harmonic areas with corresponding number rows (e.g. number row 1 [R1] is ‘2 3 1 2 1 2’ reading down the pitches [highlighted pink in example 4.9], while inversion number row 1 [IR1] is ‘1 3 2 1 2 1’ [highlighted yellow]). I assigned progressively augmenting ‘time-signature-units’ (highlighted green) to each harmonic area in order to build a sectional framework for the piece. Each section was constructed from twelve of the time-signature-units and then divided into bars according to their respective number rows (R1-R11 and IR1-IR11).

<table>
<thead>
<tr>
<th>Pitches</th>
<th>Number of occurrences in each area</th>
<th>Number of occurrences in each area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row</td>
<td>R1</td>
<td>R2</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C-sharp</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>D-sharp</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>F-sharp</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>G-sharp</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>A</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Bb</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

| TIME UNITS | 2  | 3  | 2  | 5  | 3  | 7  | 4  | 9  | 5  | 11 | 12 | 8  | 8  | 4  | 8  | 4  | 8  | 4  | 8  | 4  | 8  | 8  |
| Section length | 12 | 12 | 18 | 18 | 24 | 24 | 30 | 30 | 36 | 36 | 42 | 42 | 48 | 48 | 54 | 54 | 60 | 60 | 66 | 66 | 72 | 72 |

Example 4.9 – Table of note rows from the Prime and Inversion Harmonic areas

For example figure 19 of the score correlates to IR6, 1 4 2 4 1, and has a time unit of 5/4 (highlighted blue).
Therefore this harmonic section was initially sixty beats long and was divided up into the following bar structuring:

<table>
<thead>
<tr>
<th>Number row</th>
<th>1</th>
<th>4</th>
<th>2</th>
<th>4</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time signature</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Although the final bar structuring at figure 19 in the score is adapted for reasons of clarity the section is the same length as generated from the formal process. My initial structural planning determined that each section of *Hidden Games* had a defined pitch area, was divided into manageable but malleable bars, and that each subsequent section would gradually augment (as highlighted orange in example 4.9).

Example 4.10 provides a concise overview of the formal construction and harmonic materials of *Hidden Games*. The ultimate formal structure owed much to my pre-compositional work but this planning was a springboard into composing rather than a set of strict formal rules. The serial procedures provided a coherent framework or platform for my creativity.

---

59 For example the material composed for sections R1, R3 and R4 did not even make the final score and I looped sections IR6-IR10 four times, intuitively augmenting each loop.
Example 4.10 - Structural and Harmonic Analysis of Hidden Games

Introduction – a kind of précis or overview of the piece (IR11, R2, IR10, R7/R8):

n.b. Much of the material was generated through improvisation following similar processes outlined in chapter 2 of this commentary.

A - Quick fire, abrupt block section, often exploring orchestral drum-kit hocket sonorities (R5-IR5):

B¹ - IR6-IR10 Loop 1 (beginning of sudoku fugue material):

B² - IR6-IR10 Loop 2:

B³ - IR6-IR10 Loop 3:

B⁴ - IR6-IR10 Loop 4:

Coda - closely related to the introduction, quasi-retrograde (IR11):

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>START</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARMONIC AREA</td>
<td>IR11</td>
<td>R2</td>
<td>IR11</td>
<td>IR10</td>
<td>+ R7/R8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time-signature-unit</td>
<td>12</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of beats</td>
<td>132 (72)</td>
<td>84</td>
<td>56</td>
<td>114</td>
<td>36</td>
<td>72</td>
<td>42</td>
<td>75</td>
<td>90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARMONIC AREA</td>
<td>R5</td>
<td>R6</td>
<td>R7</td>
<td>R8</td>
<td>R9</td>
<td>IR1</td>
<td>IR11</td>
<td>IR1</td>
<td>IR2</td>
<td>IR3</td>
</tr>
<tr>
<td>Time-signature-unit</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>No. of beats</td>
<td>24</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>50.5</td>
<td>42</td>
<td>56</td>
<td>40</td>
<td>54</td>
<td>75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARMONIC AREA</td>
<td>IR6</td>
<td>IR7</td>
<td>IR8</td>
<td>IR9</td>
<td>IR10</td>
</tr>
<tr>
<td>Time-signature-unit</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>No. of beats</td>
<td>60</td>
<td>60</td>
<td>66</td>
<td>83</td>
<td>101</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>29</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARMONIC AREA</td>
<td>IR6</td>
<td>IR7</td>
<td>IR8</td>
<td>IR9</td>
<td>IR10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time-signature-unit</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of beats</td>
<td>64</td>
<td>60</td>
<td>66</td>
<td>84</td>
<td>91</td>
<td>109</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>31</th>
<th>32</th>
<th>33</th>
<th>34</th>
<th>35</th>
<th>36</th>
<th>37</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARMONIC AREA</td>
<td>IR6</td>
<td>IR7</td>
<td>IR8</td>
<td>IR9</td>
<td>IR10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time-signature-unit</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of beats</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>87</td>
<td>77</td>
<td>122</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>39</th>
<th>40</th>
<th>41</th>
<th>42</th>
<th>43</th>
<th>44</th>
<th>45</th>
<th>46</th>
<th>47</th>
<th>48</th>
<th>49</th>
<th>50</th>
<th>51</th>
<th>52</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARMONIC AREA</td>
<td>IR6</td>
<td>IR7</td>
<td>IR8</td>
<td>IR9</td>
<td>IR10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time-signature-unit</td>
<td>5</td>
<td>4</td>
<td>11</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of beats</td>
<td>94</td>
<td>56</td>
<td>101.5</td>
<td>80.5</td>
<td>66</td>
<td>111</td>
<td>64.5</td>
<td>37</td>
<td>96</td>
<td>57</td>
<td>55</td>
<td>52</td>
<td>24</td>
<td>120</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>63</th>
<th>54</th>
<th>55</th>
<th>56</th>
<th>57</th>
<th>END</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARMONIC AREA</td>
<td>IR11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time-signature-unit</td>
<td>12</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of beats</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>102</td>
<td>(72 + 30)</td>
</tr>
</tbody>
</table>
I will now examine how I integrated diverse rhythmic elements by creating giant orchestral hocket textures, which I achieved by orchestrating intuitively composed sections of permutating, soloistic drum-kit material (example 4.11). In popular and jazz music the drum beat or pattern is often one of the most important factors of the musical style or genre. Small variations in the rhythmic combination of the three principal parts of the drum-kit (hi-hat/ride cymbal, snare and kick-drum) can change the ‘feel’ or ‘groove’ of the music. Often the individual parts of the drum-kit articulate relatively simple parts but the composite result of the different constituents can be rather complex. In orchestrating soloistic drum material I was interested in exploring how relationships inherent in drum patterns could work when taken away from the particular timbres of the drum-kit. I identify here with Louis Andriessen’s description of ‘references to other music’ in his composition as ‘deliberate “structural allusions”’ rather than ‘involuntary genetic traits’. When composing the drum material I was consciously alluding to structural elements and rhythmic qualities from diverse musics but approached the task critically, manipulating the rhythmic structures using procedures such as retrograde, permutation and fragmentation. In the orchestral sonority each of the different constituents of the drum-kit is articulated by a different combination of orchestral instruments within set harmonic parameters (example 4.12), creating a driving, rhythmic, permutating and dissonant hocket texture. The different layers of material interact in interesting and distinctive ways that replicate the interaction of the different constituents of the drum-kit. The resulting rhythmic combinations and polyphonic textures have a ‘feel’ that is not classical, that is more closely aligned to jazz, jungle, funk and even disco. The compositional rigour I employed in terms of the harmonic limitation, formal processes and permutational patterns ensures a non-clichéed result that nevertheless draws on eclectic rhythmic influences.

---

Boulez’s assertion that ‘we have to invent our own rhythmic vocabulary in accordance with our own norms’ is relevant here. My rhythmic ‘norms’ here were undoubtedly informed by various factors including: my knowledge of drumming notation, patterns and techniques; my listening and performing experiences; my engagement with procedures such as permutation, augmentation and retrograde; and my experiences using drum-machine samplers in works such as *Fasten Your Seatbelts*. I developed my own ‘rhythmic vocabulary in accordance’ with these ‘norms’.

---

Example 4.11 – Original drum notation and bar structuring at figure 14 of *Hidden Games* and the corresponding orchestrated section from the final score.
Snare Drum:
Flutes, Horns, Trumpets
Snare drum

PITCHES: There are three different parts which move through permutating five note pitch collections limited to notes from the harmonic area (IR1).
For example, the pitches at figure 14 are permutating in this fashion:

<table>
<thead>
<tr>
<th>Fl. 1, Tr. 1, Hn, 1/3</th>
<th>A/B</th>
<th>Bb/A</th>
<th>F</th>
<th>E</th>
<th>C</th>
<th>x4</th>
</tr>
</thead>
<tbody>
<tr>
<td>B/C</td>
<td>A</td>
<td>Bb</td>
<td>F</td>
<td>C/E</td>
<td></td>
<td>x5</td>
</tr>
<tr>
<td>Fl. 2, Tr. 2, Hn. 2</td>
<td>E/F</td>
<td>C</td>
<td>B</td>
<td>A</td>
<td>Bb</td>
<td>x5</td>
</tr>
<tr>
<td>F/Bb</td>
<td>E/F</td>
<td>C</td>
<td>B</td>
<td>A</td>
<td></td>
<td>x4</td>
</tr>
<tr>
<td>Picc, Tr.3, Hn. 4</td>
<td>B/C</td>
<td>A</td>
<td>Bb/A</td>
<td>F/Bb</td>
<td>E/(D)</td>
<td>x4</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>A</td>
<td>Bb</td>
<td>E/F</td>
<td></td>
<td>x4</td>
</tr>
</tbody>
</table>

Kick Drum:
Bass Clarinet, Contrabassoon, Trombones, Bass Guitar, Double basses
Bass drum

PITCHES: Repeating five-note pitch collections limited to notes in the harmonic area (IR1). For example:

<table>
<thead>
<tr>
<th>Bass Guitar and Double basses:</th>
<th>E</th>
<th>Bb</th>
<th>B</th>
<th>Eb</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>AND Contrabassoon (at same time):</td>
<td>B</td>
<td>Eb</td>
<td>A</td>
<td>E</td>
<td>Bb</td>
</tr>
</tbody>
</table>

Hi-hat closed:
Oboe, Clarinets (except bass), Saxes, Bassoons, Violin I and II unison, Viola unison, Vcl. unison
Temple blocks, Cow-bell

PITCHES: The homophonic chords are derived from the inversion hexachord transposition-rotations.

Open hi-hat:
Tuba, Electric Guitar, Rhodes, Marimba, Violin I and II divisi, Viola divisi, Vcl divisi
Crash cymbal

PITCHES: The chords are articulations of the full chord generated from the dodecaphonic transposition-rotation, i.e. chord IR1.
Example 4.13 highlights the chords are transposed according to the intervals of the inversion row (similar processes happen throughout Hidden Games).

Example 4.12 – Orchestration of drum kit constituents at figure 14 of Hidden Games

Example 4.13 – Example of chord transposition according to the intervals of the original inversion row Hidden Games, Rhodes Piano bars 215-217

The first and fourth interval are swapped, I am unsure whether this was a procedural mistake at the time or a musical decision based on the sound of the chord progression.
I also adopted the technique of orchestrating drum-kit solo material to create the initial material for *Broken Society* for large ensemble and three female voices.\(^{63}\) I worked intuitively with the orchestrated drum material in a number of ways including: looping fragments or large-scale sections; thinning or augmenting the orchestration; and superimposing new elements on the basic material.

While creating and manipulating orchestral drum-kit hocket textures is particularly effective for creating the material for a three-minute work like *Broken Society*, I found it was fairly limited for developing larger-scale structures in *Hidden Games*. I reached an impasse because although I had composed some interesting material for harmonic areas IR6, IR7 and IR8 I needed the possibility for more diversity and variation in the texture, the material had become too static. I required a more linear way of conceiving material and therefore decided to use the information from the completed sudoku from the 26\(^{th}\) February edition of the Guardian Newspaper (example 4.14) to create a ‘sudoku fugue’ which was to span the harmonic areas IR6-IR10.

---

\(^{63}\) This piece was composed for the ‘orkest de ereprijs’ and was rehearsed and performed at the ‘International Young Composers Meeting 2010’, The Netherlands.
I assigned a woodwind instrument to each line of the sudoku, the top line being the highest pitched and the bottom the lowest, and determined that each instrument would move through nine different materials corresponding to the nine digits from the left to the right of the sudoku (example 4.15).

Example 4.15 – The nine strata of the sudoku fugue and the designated woodwind instruments

I calculated that in order to fill the harmonic sections IR6-IR10 one unit in the sudoku needed to be seven crotchet beats in length. Therefore where a ‘1’ appears in the sudoku the corresponding material is seven beats in duration and for a ‘9’ it is sixty-three beats long. I composed rhythmic material and limited the pitch materials for each of the nine sections (example 4.16) and wrote the first draft of the woodwind sudoku fugue according to these limitations. The result was an interesting and complex yet somehow coherent passage of music. I had used the number relationships of the sudoku to find a new way of constructing layered music, helping me find a middle ground between direct repetition and constant flux.

---

64 See Appendix 1 for a short example of this sudoku fugue. I also created a structural diagram (example 4.17), which helped me pinpoint moments where two or more of the different layers started blocks of material simultaneously.
SUDOKU RHYTHMIC AND PITCH MATERIALS

Example 4.16 – Sudoku rhythmic and pitch materials for Hidden Games

Sudoku Structural Diagram

Example 4.17 – Sudoku Structural Diagram and the moments of coincidence where particular strata align
I then began to intuitively integrate the orchestral drum-kit hocket material I had previously composed for sections IR6-IR8 with the sudoku fugue material. I soon realised that I had scope for developing the material far further than the initial framework and decided to loop harmonic sections IR6-IR10 (B₁, B², B³, B⁴ in example 4.10). I focused on different aspects of the materials in each sectional loop, making non-systematic compositional decisions about how ideas should be combined, juxtaposed, deleted or extended.

I also superimposed further materials onto the sudoku fugue and orchestral drum-kit hocket ideas. For example at figure 29 I introduce a Rhodes piano part that is derived from cow-bell rhythmic patterns inspired by the rhythmic character, pulsation and energy of Cuban music. I constructed five different rhythmic cells for each time-signature area (example 4.18) that gradually became less coherent and tangibly related to the initial inspiration as I introduce septuplets, quintuplets and syncopation and rotated them (example 4.19). At figure 29 the Rhodes articulates the rhythm of the cow-bell patterns with pitches limited to notes from harmonic area IR9 (example 4.20).

Example 4.18 – ‘Cuban’ patterns for the Rhodes piano
I subsequently utilised another process at figure 30, which controls the register that notes are articulated. I took the number rows generated by the pitch counts in each harmonic area and then rotated these to create a table of numbers (example 4.21). I used these numbers to designate the incidence of bass articulations (example 4.22). Members of the woodwind (and bass guitar) adopt the material with the Rhodes eventually leaving the texture at figure 33 (example 4.23).

---

Example 4.19 – ‘Cuban’ pattern rotation

<table>
<thead>
<tr>
<th>IR 9</th>
<th>11</th>
<th>c</th>
<th>b</th>
<th>d</th>
<th>e</th>
<th>a</th>
<th>Figure 29</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>e</td>
<td>d</td>
<td>a</td>
<td>c</td>
<td>b</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>66 beats</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IR 10</th>
<th>12</th>
<th>a</th>
<th>b</th>
<th>e</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>b</td>
<td>e</td>
<td>c</td>
<td>a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IR 6/7</th>
<th>10</th>
<th>d</th>
<th>c</th>
<th>e</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>a</td>
<td>b</td>
<td>e</td>
<td>d</td>
</tr>
</tbody>
</table>

Example 4.20 – Rhodes at figure 29 of Hidden Games (with the original cow-bell rhythm which is absent in the final texture)

---

Refer to example 4.9.
Bass note articulated at the beginning of each pattern permutation, all others higher register

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Fig</th>
<th>Derived from</th>
<th>Pitch Constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Fig 30</td>
<td>Pattern derived from IR10 area</td>
<td>1 3 4 2 2</td>
</tr>
<tr>
<td>ii</td>
<td></td>
<td></td>
<td>3 4 2 2 1</td>
</tr>
<tr>
<td>iii</td>
<td></td>
<td></td>
<td>4 2 2 1 3</td>
</tr>
<tr>
<td>iv</td>
<td></td>
<td></td>
<td>2 2 1 3 4</td>
</tr>
<tr>
<td>v</td>
<td></td>
<td></td>
<td>1 3 4 2 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Fig 31</th>
<th>Derived from IR6</th>
<th>Pitch Constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fig 31</td>
<td>Pattern derived from IR6</td>
<td>1 4 2 4 1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2 4 1 3 4</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>4 1 3 4 2</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>1 3 4 2 4</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>3 4 2 4 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Fig 32</th>
<th>Derived from IR7</th>
<th>Pitch Constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Pattern derived from IR7</td>
<td>1 1 2 3 1 2 2</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>2 4 1 3 4</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>4 1 3 4 2</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>2 4 1 3 4</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>4 1 3 4 2</td>
</tr>
</tbody>
</table>

Example 4.21 – Registral permutations in Rhodes piano ‘Cuban material’

Example 4.22 – Rhodes part at figure 30 of Hidden Games –
Bass note articulations correlate to rows i-iv in example 4.21
(with the original cow-bell rhythm which is absent in the final texture)
Example 4.23 – Woodwind (+ el. Bass) ‘Cuban’ material parts at figure 33 of Hidden Games
(with the original cow-bell rhythm which is absent in the final texture)

It is important to underline that it is the energy, rhythmic variety and pulsation of Cuban music that influenced the construction of the original cow-bell patterns. The patterns are in many ways inauthentic and I am in no way trying to emulate a salsa sound world. It is unlikely, however, that the disjointed permutating ‘Cuban’ Rhodes and woodwind grooves could exist if I had never played in a salsa band or was unaware of Cuban musicians such as Rubén González. I transformed the original cow-bell patterns into something that is my own through my use of abstraction, re-contextualisation and permutational processes. My attitude towards the use of Cuban rhythmic structures resonates with Steve Reich’s assertion that ‘Non-Western music’ should ‘serve as new
structural models for Western musicians’ and ‘not as [superficial] new models of sound’. 66

My eclectic appropriation and integration of various musical structures in Hidden Games also aligns closely with Ligeti’s acknowledgement of influence from ‘Nancarrow’s music for mechanical piano and the “additive pulsation principle” of sub-Saharan African music’ in his Etudes and Piano Concerto. 67 According to Alastair Williams the ‘diversity of the currents’ in Ligeti’s approach ‘recognizes the limits of Western conceptions of musical material and expands them’ but his ‘aesthetic impulse, if eclectic, is not simply plural because it seeks to integrate all these strands into an organizational logic’. 68 Similarly in Hidden Games I integrate ideas from diverse musical idioms including ‘Cuban’ rhythmic ideas and jazz/funk/jungle/disco drumming patterns, into my own ‘organizational logic’, my ‘labyrinth of processes’ that began with my appropriation of Stravinsky’s transposition-rotation serial techniques.

Although my work reflects eclectic influences I am not interested in creating a pluralist collage of different semantic paradigms, but aim to find my own innovative soundworld by working with diverse materials at a structural level. I am unapologetically concerned with satisfying my own preoccupations for coherence and consistency in musical structures. Musicologists such as Björn Heile might criticise my approach as seeming to ‘hark back to earlier ideals of compositional artistry and authorship, characterised by concepts such as “coherence” and “originality”’, but at bottom coherence and consistency are my principal compositional concerns. 69 This is not to say, however, that the music explained in this chapter is contradictory to Ligeti’s assertion that music

---

68 Alastair Williams, New Music and the Claims of Modernity, 86.
69 Björn Heile, ‘Transcending Quotation’, 143.
should not be ‘normal, well-bred’ or has ‘its tie all neat’. Rather I try to write music that has underlying controls and elements of consistency but is ostensibly confrontational and challenging. The ‘huge interconnected network’ of formal and procedural controls I developed in *Hidden Games*, some of which are outlined in this chapter, helped me to create a framework for my creativity allowing me to integrate eclectic ‘strands’ in a consistent but innovative manner.

---

71 Ligeti describes his Piano Concerto thus in ‘On my Piano Concerto’, 12, quoted in Williams, *New Music and the Claims of Modernity*, 87.
Conclusion

As I mentioned in the introduction to this commentary my portfolio of works represents my compositional response to the stylistic freedom inherent in new music today. Exploring the theme of integration has given me a ‘way in’ or crux on which to base my compositional approach, it has provided a technical and aesthetic framework for me to work within. Constructing frameworks for creativity has been a central concern in composing the works in this portfolio, which is evident in a number of my compositional approaches including: using limitation, extended notations and scores to frame improvisation to allow musicians to bring their creativity to a work without them usurping my overall compositional control; creating score-based frameworks for live-electronics in which electronic sonorities are limited to samples taken from the actual performance and are manipulated through analysis of the live sound; developing complex rules of containment using serial techniques or other process techniques (e.g. sudoku fugue in *Hidden Games*) to create harmonic and structural frameworks within which I can then work intuitively; and developing structural frameworks or processes to work with diverse musical objects such as rhythmic elements idiomatic of musics outside the classical tradition or musical structures generated by my own improvisation.

When composing I create my own set of rules or limitations to work within otherwise I experience the ‘terror’ that Stravinsky ascribes to the realisation that there are ‘an infinitude of possibilities’ or musical pathways I can explore.\(^\text{72}\) My influences are multifarious but my underlying preoccupation is developing musical works that I perceive to be coherent and consistent. My foremost concern therefore is with technical and structural issues, the ‘nuts and bolts’ of composition such as: harmonic and rhythmic construction; process techniques; orchestration; and formal structures.

I think it is important to resist market forces and try to compose music that questions the capitalist ‘X-Factor driven’ cultural status quo. Consequently I try to compose music that is innovative, challenging and endeavours to say something new. I integrate structural elements from diverse musical idioms into my compositional methodologies but I reject relativistic pluralism. This demands critical engagement because as Gordon Downie asserts ‘by using material uncritically, composers risk becoming vehicles for the transmission of ideologies that are embedded and encapsulated…in preformed, off-the-shelf materials’.73 I am part of the modernist tradition in that I am committed to the ‘foundational principle of critique’74 and am preoccupied with musical construction and developing ‘interconnected set[s] of organisational principles’.75 This is not to say that I see myself at the pinnacle of the cultural hierarchy. I simply try to resist cultural commodification by engaging critically with my diverse influences, writing music that is fundamentally concerned with exploring and integrating musical structures in my own innovative, consistent and coherent manner.

74 Björn Heile, The Modernist Legacy: Essays on New Music (Farnham: Ashgate Publishing Limited, 2009), 5.
**Bibliography**


Cox, Christophe and Daniel Warner (eds), *Audio Culture: Readings in Modern Music* (New York: Continuum, 2007).


Downie, Gordon, 'In the very fabric of art', *Weekly Worker*, 801, January 2010, 9.

Ferneyhough, Brian, ed. by James Boros and Richard Toop, *Collected Writings* (London: Routledge, 1995),


Lang, Bernhard, ‘Style and Idea IV’, downloaded at author’s website: <http://members.chello.at/bernhard.lang/publikationen/Bernhard_Lang_Style_and_Idea_IV.pdf>.


Mahnkopf, Claus-Steffen (ed.), *Critical Composition Today* (Hofheim: Wolke Verlag, 2006).


Claudio Spies, 'Notes on Stravinsky’s Variations', *Perspectives of New Music*, 4/1 (1965), 62-74.


Selected Scores


Ligeti, György, *Chamber Concerto* (Mainz: Schott, 1974).


Selected Recordings

Barrett, Richard; *Vanity*; NMC Recordings (NMC D041S); 1996.

Berio, Luciano; *Sequenzas and solo works*; Mode (161); 2006.

Boulez, Pierre; *Pli Selon Pli Livre Pour Cordes*; Sony Classical (SMK 68 335); 1995.

Boulez, Pierre; *Boulez sans Boulez*; Lontano Records (LNT 108); 1995.

Bowden, Chris; *Slightly Askew*; Ninja Records (ZEN CD67); 2002.

Buene, Eivind; *Anatomic Notebook*; Aurora (ACD5038); 2004

Coleman, Steve; *Lucidarium*; Label Bleu (LBLC 6673); 2003.

Coleman, Steve; *The Ascension to Light*; BMG France (LC 000316); 2001.

Coltrane, John; *Live At Birdland*; Impulse (LC 0236); 1996.

Davis, Miles; *The Complete Concert: 1964*; Sony Music Entertainment (CB 821); 1992.

Davis, Miles; *Bitches Brew*; Sony Music Entertainment (C2K 65774); 1999.

Davis, Miles; *Aura*; Sony Music Entertainment (CK 63962); 1989.

Davis, Miles; *Tutu*; Warner Bros. Records (7599-25490-2); 1986.

Debussy, Claude; *Orchestral Music*; Philips Classics (438 742-2); 1993.

Dillon, James; *East 11th Street*; NMC (D004); 1991.

Dusapin, Pascal; *Extenso, Apex, La Melancholia*; Auvidis (MO 782073); 1997.

Emsley, Richard; *Flowforms*; Metier (MSV CD02044); 2002.

Feldman, Morton; *For Samuel Beckett*; CPO (999 647-2); 1999.

Feldman, Morton; *Orchestral works and chamber music*; Col Legno (20506); 2000.

Feldman, Morton; *Coptic Light*; Col Legno (20089); 2004.
Ferneyhough, Brian; *Ferneyhough: Chamber Music*; Metier Sound & Vision (B001P4QC1G); 2008.

Globokar, Vinko; *Fluide: Atemstudie, Ausstrahlungen, Fluide, Hallo! Do you hear me?*; Harmonia Mundi (HMC 90933); 1991.

Gould, Glenn; *Glenn Gould plays Berg, Webern and Schoenberg*; Membran (232560); unknown.

Hancock, Herbie; *V.S.O.P*; Sony Music Entertainment (COL 486569 2); 1976.

Harrison, Lou; *Works by Lou Harrison*; New World Records (80366-2); 1988.

Harvey, Jonathan; *Bhakti*; NMC (D001); 1989.

Ives, Charles; *Orchestral Works*; Sony Music Entertainment (SB3K87746); 2002.

Kagel, Mauricio; *Windrose*; Winter and Winter (910 109-2); 2004.

Kjekstad, Thomas and Lars-Erik ter Jung; *Twitter Machine*; Fabra (FBRCD-01); 2003.

Lachenmann, Helmut; *Chamber Music*; CPO Digital Recording (cpo 999 102-2); 1992.

Lachenmann, Helmut; *Mouvement – Zwei Gefühle – Consolation I & II*; Kairos (0012202KAI); 2001.

Lang, Bernhard; *DW 8 / DW 15 / DW 3*; Col legno (WWE 1CD 20090); 2004.

Lang, Bernhard; *DW 17: Doubles / Schatten II*; Col legno (WWE 1SACD 20613); 2006.

Lang, Bernhard; *DW 14 + DW 9*; Cavalli Records (CCD 452); 2007.

Ligeti, György; *The Ligeti Project 1*; Teldec Classics (8573-83953-2); 2001.

Lindberg, Magnus; *Meet the Composer – Magnus Lindberg*; Finlandia Records (0630-19756-2); 1997.

Lutoslawski, Witold; *Orchestral Works No. 3*; Naxos (8.553423); 1996.

Martland, Steve; *Drill / Babi Yar*; BMG (09026-68397-2); 1995.
Mitterer, Wolfgang; *Radio Fractal / Beat Music*; HAT HUT RECORDS (hatOLOGY 2-606); 2003.

Mitterer, Wolfgang; *Coloured Noise*; Kairos (0012592KAI); 2006.

Mitterer, Wolfgang; *Im Sturm*; Col Legno (WWE 1CD 20278); 2008.

Redgate, Christopher; *Oboe+: Berio and Beyond*; Oboe Classics (CC2015); 2006.

Reveultas, Silvestre; *Sensemayá: Music of Silvestre Revueltas*; Sony Music Entertainment (Sk 60676); 1999.

Reich, Steve; *Sextet/Six Marimbas*; Elektra/Asylum/Nonesuch Records (7559-79138-2); 1986.

Reich, Steve; *City Life – New York Counterpoint – Eight Lines – Violin Phase*; BMG (74321 66459 2); 2002.

Romitelli, Fausto and Paolo Pachini; *An index of metals – Ictus*; Cyprès Records (CYP5322); 2005.

Schaeffer, Pierre; *L’oevre musicale*; Ina C (475592); 1998-2005.

Sharp, Elliot and Bernhard Lang; *War Zones*; Neos (40808); 2008.

Sonanza; *Contemporary Nordic Chamber Music*; Acoustica (ACCD-1010); 1988.

Stravinsky, Igor; *Stravinsky Conducts Stravinsky: The Complete Columbia Recordings*; Sony Music Entertainment (503317 2); 2001.

Stravinsky, Igor; *Stravinsky: The Firebird – Petrushka, Etc.*; EMI (5 85538 2); 2003.

Stockhausen, Karlheinz; *CE: #1; Chöre Für Doris-Drei Lieder-Sonatine-Kreuzspiel*; Stockhausen-Verlag (1); 1991.

Stockhausen, Karlheinz; *Kontakte*; Wergo (B000025R06); 1996.

Stockhausen, Markus; *Harvey: Other Presences*; Sargasso (B001B223WY); 2008.

Tilbury, John; *John Tilbury Plays Samuel Beckett*; Matchless Recordings (MRCDE62); 2005.

Tilbury, John and others; *That Mysterious Forest Below London Bridge*; Matchless Recordings (MRCD70); 2007.
Turnage, Mark-Anthony; *Mark-Anthony Turnage*; Decca Record Company (468 814-2); 2001.

Turnage, Mark-Anthony; *Fractured Lines*; Chandos Records (LC 7038); 2002.

Turnage, Mark-Anthony and John Scofield; *Scorched*; Deutsche Grammophon (474 729-2); 2003.

Various; *Critical Notice*; UPI Bmic; 2006.


Walker, Scott; *Tilt*; Mercury Records (LC 0211); 1995.

Wolf Eyes and Anthony Braxton; *Black Vomit*; Victo (cd099); 2006.

Zappa, Frank; *Sheik Yerbouti*; Zappa Records (B0000009SV); 1979.

Zappa, Frank; *Jazz From Hell*; Zappa Records (B0000009TG); 1995.

Zimmerman, Bernd Alois; *Bernd Alois Zimmerman*; CPO (999 482-2); 1997.
APPENDIX 1

The opening section from the original woodwind sudoku fugue of Hidden Games

THE GRID:

<table>
<thead>
<tr>
<th>SUDOKU FUGUE</th>
<th>Guardian G2, Tuesday 26th February 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1</td>
<td>2 6 1 5 3 8 9 4 7 Piccolo</td>
</tr>
<tr>
<td>Part 2</td>
<td>8 7 9 4 1 6 5 3 2 Bb Clarinet</td>
</tr>
<tr>
<td>Part 3</td>
<td>3 4 5 7 9 2 8 1 6 Oboe 1</td>
</tr>
<tr>
<td>Part 4</td>
<td>6 1 8 2 5 4 7 9 3 Clarinet 1</td>
</tr>
<tr>
<td>Part 5</td>
<td>7 9 2 6 8 3 1 5 4 Oboe 2</td>
</tr>
<tr>
<td>Part 6</td>
<td>5 3 4 9 7 1 2 6 8 Cor Anglais</td>
</tr>
<tr>
<td>Part 7</td>
<td>1 8 7 3 6 9 4 2 5 Bass Clarinet</td>
</tr>
<tr>
<td>Part 8</td>
<td>9 2 3 8 4 5 6 7 1 Bassoon 1</td>
</tr>
<tr>
<td>Part 9</td>
<td>4 5 6 1 2 7 3 8 9 Bassoon 2 &amp; Contrabassoon</td>
</tr>
</tbody>
</table>

THE MUSIC:
Score Contents Page

All scores submitted are contained in this document. A blank page separates the scores.

Chapter 1a

*Jalapeño Slammer* 85

*Fasten Your Seatbelts* 114

Chapter 1b

*again and again* 209

*Interplay* 214

Chapter 2

*Schism* 221

*Horizontal* 242

Chapter 3

*War with Terror* 250

*Jagged Curves and Smooth Cracks* 261

*Suppressing Repression* 279

Chapter 4

*Hidden Games* 307

*Broken Society* 436
Jalapeño Slammer

for Dan Stern’s Woodwork

Benjamin Oliver
2008
Jalapeño Slammer

Instrumentation: (Score is transposed)

Flute
Tenor Saxophone in Bb
Bass Clarinet in Bb
Piano
Double Bass
Drums

Duration: 10’ - 13’

This piece was commissioned by the spnm in 2008, as part of the London Jazz Festival in collaboration with Serious and was premiered at the Vortex Jazz Club in Dalston on 17th November 2008.

Dan Stern’s Woodwork were Dan Stern (tenor saxophone), Rowland Sutherland (flute), Adam Bishop (bass clarinet), Andrew McCormack (piano), Will Collier (bass), and Laurie Lowe (drums).
Jalapeno Slammer
for Dan Stern's Woodwerk

Intro - free
Key clicks, reed and air sounds (whistle tones in flute)
Support the bass solo and interacting with the drums and other winds
Occasional sharp accented attacks combining with other winds

Woodwinds
pp
Create sounds only from inside the piano - glissandi, plucks, hits etc.
Support the bass solo and interacting with the drums and winds

Piano
pp
j = around 60
Very free (solo) - note durations only a guide of gesture and style-
Develop these ideas into a bass improvisation which gradually builds in dynamic and intensity towards the riff
Use slides to join notes

Bass
p
Sparse atmospheric impro - use brushes on cymbals - bow on cymbals?
Some sense of internal rhythm but never clear - density indicated by graphics
Occasional sharp accented attacks which interact with the woodwinds and piano

Drum Kit
pp

A
Rhythmic (in drums) j = 124
repeat if necessary if you want

Woodwinds

Pno.

continue solo until letter B where you join drums in groove

B.

side-stick/rim-shot - follow clave pattern as written

Dr.

mf
Rhythmic - dirty (q = 124)

Steady as a rock

Gradually add some simple hi-hat (closed or open) accents on parts of the clave - only dry sounds

gradually add some simple hi-hat (closed or open) accents on parts of the clave - only dry sounds

Rhythmic - dirty (q = 124)

Steady as a rock

gradually add some simple hi-hat (closed or open) accents on parts of the clave - only dry sounds

gradually add some simple hi-hat (closed or open) accents on parts of the clave - only dry sounds
add more off-beats and syncopations (still keep clave very clear)
Still sidesticks but clave pattern can be taken by bass drum or hi-hat sometimes?

Bussier - full fledged disjointed groove (fill in the gaps?), still based on clave - building
Still sidesticks but clave pattern can be taken by bass drum or hi-hat sometimes?
SAME DISJOINTED/SYNCOPATED GROOVE WITH HARD SNARE!
Straight ahead - crotchets (hard funk) - ride

(Ride - straighter - more interesting than written though!!)
Current measure

Fl.

T. Sax.

B. Cl.

Pno.

B.

Dr.

Straight - simple - loud
Disjointed groove returns - SOLO!
OPEN SOLO AREA 1 (Any Instrument(s))
Double time swing \( \frac{q}{4} = 248 \)

- Fl.
- T. Sax.
- B. Cl.
- Pno.
- Bass
- Dr.

**Chord Symbols**
- F13(#11)
- G13(#11)
- Bm11(b9)
- Cm11(b9)
- F#(b9/#11)
- Ab(b9/#11)

**Text Notes**
- mf Walking Bass - sample - totally what you want to do

**Measure 1**
- Bm\(^{\text{aug}}\)
- Bm\(^{\text{II}}(b9)\)
OPEN SOLO AREA 2 - ENSEMBLE SOLO BUILDING TOWARDS THE D.S.

Return to original feel - = 124

Fl.

T. Sax

B. Cl.

Pno.

Bass

Dr.

repeat ?x

Fm$ A^{13} (b9)$

Gm$ A^{13} (b9)$

Gm$ A^{13} (b9)$

(bass riff)

Fm$ A^{13} (b9)$

Fm$ A^{13} (b9)$

Fm$ A^{13} (b9)$

Fm$ A^{13} (b9)$

Keep solid - do not move away from riff - foundation

Building from clave - develop rhythmic solo based on the grooves from the earlier section - begin with rim clicks and head towards full blown snare - work with full ensemble

p

p

p

p

p - mp

p

p

p

mp

mp

p

(p first time only)

(p first time only)

(p first time only)

(p first time only)

(solo - let bass settle in first)

(bass riff)
Be-bop fast itchy solo joining piano from sax or trumpet - other player join in with solo at some point as it builds

repeat ?x

Drum cue out

D.S. (§)

al Coda
CODA

Fl.

T. Sax

B. Cl.

Pno.

B.

Dr.

solo - optional down the octave

Straight - simple - loud
2nd time - straight fill
Disjointed groove returns - SOLO!
Fasten Your Seatbelts

Ben Oliver
2006-2007
Fasten Your Seatbelts

for:
Clarinet in Bb / Bass Clarinet
Electric Cello
Electric Guitar
Keys (Rhodes, Organ, Piano)

and Electronics (represented by small staves in score)

Duration: 50 minutes

Contents:
Section 1  1
Section 2  14
Section 3  22
Section 4  84
Fasten Your Seatbelts

Programme Note:

Ring modulation + 21 1/16 + multiple cello drum machines + you looking at me? + don’t let the tory chameleon fool you + delay + groove + 22 1/12 + laughter + serialism + improvisation + number plate technology + distorted + logic pro 7 + time + extremes + imperialism + passivity is frustrating + cheap flights + shut up fool + loop pedals + scaffolding + the BBC radiophonic workshop + aleatoricism + alienation + proportion + dirt + betrayal + 11 1/18 + friendship + Roy Keane + technophobia + Miles + Igor + Zappa + Freddie + tradition + I love it when a plan comes together + jazz + 29 1/24 + unity + wah-wah + resistance

= Please Fasten Your Seatbelts.

Ben Oliver, May 2007

First performed by the Ben Oliver Quartet at the Soundwaves Festival, Brighton, June 2007

David Bennett       Clarinet
Jon Cottle          Electric Cello
Arthur Carabott     Electric Guitar
Ben Oliver          Keys/Electronics
**PERFORMANCE DIRECTIONS**

[0.00] Time in prerecorded electronics in minutes and seconds
(this starts from the beginning of section 1 and ignores introduction)

1 - 5 Conducting Flags indicated by fingers of left hand and given by downbeat

↓ ↓ Left hand cue Double-armed downbeat

A Rehearsal Mark

1 Bar Numbers

\[\text{Keep repeating material freely or as indicated - use relative values and folow notated instructions}\]

\[\text{Follow instructions until curved line is finished}\]

Do something

10 Aim to play or attack at this percentage of the time during this gestural area

\[\text{highest note(s) possible}\]
\[\text{lowest note(s) possible}\]
\[\text{cluster chord or collection of pitches}\]
**Introduction**

Melancholy

SOLO - begin very quietly and grow.
Move stealthily and leave space.
Use rows below as a basis for your improvisation.
Play into piano.
Use growling, multiphonics and sub-tones.
Explore areas comprehensively.

**Pitches**

Clarinet in Bb.

Electric Cello

Electric Guitar

Live Keys

Electronics

**SCORE TRANSPOSED**

**FASTEN YOUR SEATBELTS**

Benjamin Oliver, 2006-2007

4-6 minutes

1. pp
2. f
3. mp
4. p

arpeggios

clarinet in Bb.

electric cello

electric guitar

live keys

electronics

col legno top of E string

- interact with clarinet + delay, no distortion

interact with clarinet and cello

glissandi inside pn.

some scraping and plucking - interact with clarinet

sub f

occasional
**Section 1**

**Melancholy**

---

1. **28.2**
   - Legato melodic material - emerging from solo - use subtones interact with the recorded cello and use pitches specified
   - continue solo as before moving to new pitch rows

2. **58.2**
   - Consequences: conducted with distortion!

---

**El. Cello**

- **mf**
- **pp**
- **pp**
- **mp**

**El. Gtr**

- **p**
- **f**

**Live Keys**

**Piano Rattles:**
- **pp** Scraps/Bartok pizz./Col Legno

**Guitar Scraping on the Bridge and Pick Scraping:**

**Acoustic Cello Melodic Material:**

**Acoustic Cello Double Stops:**

**Oscillating Piano Triad:**

**Sub Bass Synth:**

**Piano Rattles Continue:**
- *Sparse pick-up noise*
- *Nervous interjections - work with recorded piano*
- *Hammered harmonics*
IMPROVISE - work independently

IMPROVISE - work with guitar and electronics using the following techniques:
- Scrapes - sparse and ugly
- Quick col legno bursts of sound
- Angry agitated arco - bubbling within aug. 4th pitch span

IMPROVISE - work with cello and electronics using the following techniques:
- Scrapes - sparse and ugly
- Distorted chords using vibrato arm
- Pick-up noise - agitated
- Distorted chords
- Pick-up noise
- Tiny interjections

Rhodes in right hand

Piano:
- Move gradually to:
- With dampener on F string

ACOUSTIC CELLO IMPROVISATION:
- Scrapes/Bartok pizz./Col Legno
- Angry agitated arco (bubbling)

PIANO HAMMERED HARMONICS

LEGATO ACOUSTIC CELLO MELODY DOUBLED AT THE OCTAVE + PIANO CHORDS IN HOMOPHONIC MOVEMENT
change to bass clarinet

PIANO:

high, tender sensitive motives that move arhythmically around the melancholic material
Rhythmic but in your own tempo - vary rhythmic structures creating a very fast bubbling cauldron!

low dirty improvisation centred around low F
Over the approximately three minutes to section 2
very gradually use a wider pitch span (still low), decresendo,
slow dow and add more space (% give indication of space)
- bar 137 should just be long notes (your choices)

Use loop pedal to set up alienating arhythmic loops -
quiet and menacing against the backdrop of distorted recorded guitar solo
the loops here are gestural suggestions - be quiet and alienating!

GUITAR DISTORTION RECORDED SOLO:

(p) cresc.
Pattern 1 - Cello drum kit

(cauldron...)

(alienated loops...)
B. Cl.

El. Cello

El. Gtr

Live Keys

Elec.
(cauldron...)

(alienated loops...)

* quiet aleatoric laugh samples
play in time on cue and with distortion
and then return to loops
Pattern 2 changes:

B. Cl.

El. Cello

El. Gtr

Live Keys

Elec.

aliend loops...
Section 2
Resistance

SECTION 2 TEMPO $\downarrow = 60$

Section 1 material continues at ($\downarrow = 54$)

long low notes - getting becoming slower and quieter till just breath sound
work with the electronics

LOW ARCO SAMPLES AND LAUGHS

Section 1 material continues at ($\downarrow = 54$)
B. Cl.

El. Cello

El. Gtr

Live Keys

Elec.

(long low notes)

(alienated loops)

(low arco samples and laughs)

GUITAR LOOP - 8

PIANO LOOP - 8

(10.57)
Violent Stabs - work with the cello and electric guitar in reaction to piano. Use multiphonics, extreme registers - accents

Violent Stabs with the clarinet and electric guitar in reaction to piano. Use double stops, extremes of register - accents

Violent Stabs with the cello and electric guitar in reaction to piano. Use multiphonics, extreme registers - accents

SOLO - Violent Aggression all over the piano

Gradually calming down to low repeating dyad

(Scrapes/bangs/plucks inside piano and melodic material based on pitch collection)

(piano and melodic material based on pitch collection)

(low arco samples and laughs)

SCREAM CRUSHES IN

CHOMSKY - ‘The Problem with Iraq’

CHOMSKY - ‘Servant of Power Loop’
B. Cl.

El. Cello

El. Gtr

Live Keys

Electronics

change to clarinet

High sparse impro - repetitive and dissonant

mp

High sparse impro - repetitive and dissonant

Melancholy jazz chords

mp with ->

Keys/Organ/Synth material:

organ breaks - held chord 2

to atonal jazz impro

held chord 1

change timbre - tremolo / growl etc.

arco

P adjust volume according to graphic

P adjust volume according to graphic

P adjust volume according to graphic

adjust volume according to graphic

adjust volume according to graphic

(14.29)

(14.53)

200

(15.36)

(15.46)

194

211

213.2

17
change timbre and pitch on this occasion
- tremolo / growl etc. - move around pitch-class A
- irritable and alienating!

Low arco dirt - work with piano

organ breaks again

organ breaks - held chord 3

[16.00] CHOMSKY - 'Pirate'

[16.54] CHOMSKY - 'Resistance'

ring mod. undercurrent
use this material to create your own aleatoric alienating loops constantly shift in nuance - very quiet

use this material to create your own aleatoric alienating loop using pedal - add and subtract as you wish - use pizz / arco / or col legno

use this material to create your own aleatoric alienating loop using pedal - add and subtract as you wish - use scraping / harmonics / normal picking

-p-Tender dissonant chords

multiple layered loops

+ pitch shifter - 1 semitone
Transition to SECTION 3

(19.34) 272.2
gradual accel...

(20.19) 285

(20.46) 177

\( \frac{d}{dt} = 145 \)

Cl.

El.

Cello

El.

Gtr

Live

Keys

Interject with ring-mod organ ideas
based on upcoming entry of organ
in electronics

(Beast loops)

(Synth loop)

(Full arco samples)

(arco sample)
SECTION 3
Mania

\( \text{(\( \cdot \) = 145)} \)

\( \text{B. Cl.} \)

\( \text{Live Keys} \)

\( \text{Live Keys} \)

\( \text{Organ 22 - 1/8 - with pitch shift -1} \)

\( \text{pp} \)

\( \text{mp} \)

\( \text{ART: Conduct and ignore keys part if necessary} \)
Live keys

E. Cello
B. Cl.

Wurli  5
Org. 2
Wurli 1 - 4 bars of 4/4

Wurli 3 - 2 bars of 4/4
pitchless muted - mute wah-wah - do not have to stay at constant semi-quavers - groove with cello drum kits
tone centre Ab9(#11) - very rhythmic - as you go forward begin to add notes - create your own groove
gradual accel...to bar 653
Use pitches for improv - vary timing - gradually move away from pitches, become staccato and attacking till completed manic...
You are not the feature - support the cello

[29.15]

[29.34]

IMPROVISED SOLO - Use the following boxed material as basis - work in short loops, scrub and wail - use repetition and be dirty as hell!

Fast semi-quaver impro in Ab minor

change to piano

Staccato manic impro all over piano
Loop 2 - set up with pedal (stop LOOP 1)

then return to:

\[ \text{Ab9(11)} \]

more rhythmically fragmented, vary registers and pause on extreme pitches

Highest dissonant chords possible - get a crick in your neck from bending so far down the cello - saw!

MANIA - at top of clarinet range

use multiphonics and growling

fff

MANIA - Hammer-on as fast as possible at highest pitches possible

fff

MANIA - Hammer as fast as possible at extreme height of piano

fff

4 seconds

4 seconds

4 seconds

4 seconds

4 seconds
gradual rit. to bar 712

gradually calm down - move down in pitch and augment notes

gradually return to staccato tone-row material - sparser than before the mania and augmenting towards the molto vibrato melodic material at 718

gradually introduce fragments of this material amongst feedback:

gradually calm down - move down in pitch, decrescendo and augment notes
any long notes now molto vibrato - move tone-row pitches one octave lower

quiet itchy improvisation based on pitches - use chords and single notes - interact with clarinet
Play this tone row material - keep repeating with variation - try and keep relative note values but do not play in time - repeat many times (gradual descrescendo) - should be melancholy

mf molto vibrato - legato - repetitive

Jon lead simultaneous sparse attacks - descrescendo
IMPROVISE FREELY
AVOID DEFINITE PITCHES
EXCEPT FOR PLUCKED STRINGS
DROP LIGHTER IN PIANO
SECTION 4
Calm but unnerving

(34.21) (34.27) (34.53)

Cl.

El. Cello

El. Gtr

Live Piano

Elec.

RECORDED PIANO TONE ROW:

PIANO - Harmonics and low clusters + Scrapses

Guitar glissandi
PLAY QUIET UNDERCURRENT MATERIAL
based on the boxed ideas below:

col legno / pizz.
slow and sustained
- clean - legato

SET-UP VERY QUIET ALIENATED LOOPS
Very much in the background - use material in boxes as basis

with whammy bar
slow and sustained
like piano (accel)

RECORDED PIANO TONE ROW 2 - with freedom:

CHOMSKY 'Resistance'

Section 1 reversed - guitar moans, piano loops,
delay feedback
oscillate frantically around central pitch-class - be unnerving and use different timbres.

PIANO - tone row chords introduce chords (with ring mod)

CHOMSKY - Democracy loop

(reversed section 1 materials)
CONTINUE WITH PREVIOUS IDEAS BUT ADD OCCASIONAL:

col legno top of E string
- interact with clarinet
+ delay, no distortion

PIANO - tone row chords proper

(reversed section 1 materials)
Add tongue slaps

React to Electronic crescendos - slowly build

React to Electronic crescendos - slowly build

Ring mod gtr.

Section 1 reversed - agitated cello section
Loud Ring Mod Fall

Just tongue slaps, key clicks, breath sounds and agitated low material
few true notes if any

\[ mp \]

80

IMPROVISE - work with guitar and electronics using the following techniques

- Scapes sparse and ugly
- Quick col legno
- Bursts of sound
- Angry agitated arco - bubbling within aug. 4th pitch span

\[ mp \]

50

LOUD RING-MOD FALL

- reversed opening chords

Looped ending
5  \( \frac{2}{3} \) \( \frac{4}{3} \)

- ringshifted export

RECORDED ACOUSTIC CELLO:

RECORDED LEGATO ACOUSTIC CELLO MELODY DOUBLED AT THE OCTAVE + PIANO CHORDS IN HOMOPHONIC MOVEMENT

SCREAM CRUSH SAMPLES:

IMPRO

El. Cello

Elec.
‘Till so many strokes and cries since he was last seen that perhaps he would not be seen again. Then so many cries since the strikes were last heard that perhaps they would not be heard again. Then such silence since the cries were last heard that perhaps even they would not be heard again. Perhaps thus the end. Unless no more than a mere lull. Then all as before. The strokes and cries as before and he as before now there now gone now there again now gone again. Then the lull again. Then all as before again. So again and again. And patience till the one true end to time and grief and self and second self his own.’

Stirrings Still Part I (end), Samuel Beckett
First performance:

Benjamin Oliver (Piano and live electronics) at the ‘Beckett and Music Symposium’, University of Sussex, 26th February 2009

Duration:

15-20 minutes

Electronic requirements:

MAC or PC with MaxMSP 5
MaxMSP patch (available from the composer)
Microphone + soundcard
n.b. Check loudness peak and trough in analysis patch in order to establish levels for the scale object in the analysis patch
Two octave midi keyboard required – patch designed for an Edirol PCR-M1
Two or more speakers and mixing disk

Piano preparation:

Masking tape placed on strings near to hammers between Ab2 and B4 of a grand piano
Two soft beaters required for the performance

Score instructions for electronics:

Midi note instruction  [   ]
Ctrl ? – Controllers 1-8 on midi keyboard
QUERTY keyboard instruction (  )
R: = Record
P: = Poly trigger area

Midi keyboard mapping:

[Eb1] Buffer ‘live’ record start and stop
[Gb1] Granulator piano control – pitch to attacks
[G1] Granulator piano control – pitch interpolates
[Ab1] Granulator piano control – pitch/loudness attacks
[Bb1] Granulator piano control – loudness interpolates
[B1] Granulator volume controlled by loudness
[C2] Switches granulator piano control off
[D2] Bonk poly trigger ON/OFF
[E2] PSpeed: = Poly speed controlled by piano pitch
[Fb2] Gizmo Main out on
[Ab2] Granulator speed preset 10
[B2] Delay 1 ON
[C2] Delay 2 ON

Ctrl 1: bonk~ record trigger level = bonk~ record (level)
Ctrl 2: bonk~ playback trigger level = bonk~ play (level)
Ctrl 3: Poly/Gizmo level
Ctrl 4: Granulator return level
Ctrl 5: Granulator level
Ctrl 6: Main out level
Ctrl 8: Delay amount

QUERTY keyboard mapping:

(F1-F8) Set bonk trigger messages to specific soundfiles 1-9
(2) Clear all information from the recording coil
(3) Begin/End sfplay recording at start and end of the piece
(SPACE) Record the next soundfile

Pre-performance set-up:

Check soundcard is activated and record paths for Sound files 1-5
Clear all information - (2) Set; bonk~ record 20-25 bonk~ play 30-35
Poly playback level – 120 Playback speed control on [E2]
Reverbs on preset 1 FFT – all on full
Reverb poly sends main out on
Set levels for FFT outs (Ctrl 3)

Granulator (open and all windows active on):
Select entire file Playing Preset 1 Main out ON
Granulator threshold high – 80 (Ctrl 4)
Grains Preset 1 Select high in prism Volume medium (Ctrl 5)

MAIN OUT around 120 (Ctrl 6)
Prime

Rotation 1

123456

Rotation 2

Rotation 3

Rotation 4

Rotation 5

531642

654321
again and again

R.H. - improvise using single-note rows within range specified and rhythms if useful

2-4'

Pn.  

\( f \) attacks / \( pp \) in general

L.H. - improvise with felt beater within range specified - ghost some notes of tone row in R.H. at first sporadic and then more rhythmic with occasional hits - finish with 'stirring' on strings without pedal

Start recording - mouse or (3)

R: soundfile 1

2'

Pn.  

\( f \) attacks / \( mp \) in general

Trigger poly play-back with high attacked notes from single note rows

Answer with continued stirring and hits in L.H. and row material in middle of piano with R.H.

L.H. -

(SPACEx), (F1), [E2 if not already on!]

R: Soundfile 2 (E1)  
P: 1 (F1)  
PSpeed: ON - [E2]  
Rev: ON

3

Pn.  

\( p / mp \) restless permutating ideas derived from chords

gradually become more animated and both hands join (record buffer 'live')

Work with granulator still triggering poly with sharp attacks

fff with stick triggers reversed poly from areas 2 or 1

(SPACEx), (F2), Ctrl 2 - Up (50) [Gb2]

R: Soundfile 3 (E1P: 1/2 (F1/F2)  
Add gizmos  
Start [Eb1]  
Stop [Gb1] or [Gb1]  
Record buffer 'live' - Granulator starts automatically (PS 1)  
granulator controlled by pitch of piano - interpolating or triggered

5-6'

Pn.  

return to area 1 sonorities using chords and then rows 5/6 to begin with - 'stirring' stick in L.H. then added more sparse now and working with granulator let poly triggered sonorities slowly die away

SPACEx, [Gb1]  
fff x 10-15

[Ctrl 3]  
volume controlled granulator

[Ctrl 4]

[Ctrl 6]

[Gb1]  
interpolating

[f] to nothing to lead to natural diminuendo

Benjamin Oliver, 2008-2009
Interplay
for cor anglais and electronics

Benjamin Oliver
2009
Interplay

for:

Cor Anglais
Live Electronics

Score is transposed

Electronic requirements:

MAC or PC with MaxMSP 5
MaxMSP patch (available from the composer)
Microphone + soundcard
n.b. Check loudness peak and trough in analysis patch in order to establish levels for the scale object in the analysis patch
Two or more speakers and mixing disk

Score instructions for electronics:

QUERTY keyboard instruction ( )
R: = Record in next soundfile
B: = Bank of samples for poly trigger
Sp: = Speed setting for poly
LIVE/POLY = Reverb/Gizmo Settings for live or triggered sounds in poly

First performance:

Anna Durance (cor anglais)
Benjamin Oliver (live electronics)
at the 'University of Sussex Music Department Postgraduate Day’, University of Sussex, 3rd June 2009

Duration:

8-10 minutes
Interplay
for cor anglais and electronics

Very free

Benjamin Oliver, 2009

Cor Anglais

1. Cor anglais nod
2. Electronics thumbs-up

Electronics

Preset 1
VST Presets

R1 (Record)
R2 (Space)
B1 (B+Q); Sp: 1 (J)

LIVE: ON 135/
ANNA

R3 (Space)

R4 (Space) B2 (W)

B3 (E); Sp: 2 (K)

LIVE: OFF 135/
POLY: ON 1356/24

Still fairly free \( \dot{q} \) = circa 66

change gizmo/FFT speed settings as you see fit...

POLY: remains ON 123456/24

BENJAMIN
C. A. Elec.

Very free

B4; Sp: 1/2 (J/K) change gizmo/FFT speed settings as you see fit...

Still fairly free $\approx$ circa 66

FFT speed: 10-100 (free) R6 (SPACE) POLY: remains ON 1357 (free) B5 (T): Sp: 2 (K)
Very free

Still fairly free $q = \text{circa 66}$

change gizmo/FFT speed settings as you see fit... gradually bring texture away
C. A. Elec.

ff mp--- mf --- p --- pp--- mf

B1-6: Sp: 2

f --- ff --- ff --- p

change gizmo/FFT speed settings as you see fit...

f --- p --- ff --- p --- f

C. A. Elec.

p --- ff --- p

TURN OFF FFT WHEN SILENT
Schism

for violin, bass clarinet and piano

Benjamin Oliver
2007
Schism

**Instrumentation:**  (Score is transposed)

- Violin
- Bass Clarinet in Bb
- Piano

**Duration:** 8’
Schism

schism, n. – Division of a community into factions...

The Concise Oxford Dictionary

_Schism_ has been developed from the foundations of my own piano improvisation. I generated the musical material by improvising using a midi-keyboard into Logic Pro and then using Sibelius software to create a coherent score for live performance. The three instrumentalists are treated as individual entities, more often than not threading through the musical texture in their own individual manner (moments of coincidence between the different instruments therefore take on added importance).

There is a real focus on linear development in _Schism_, reflecting my intention to confront the vertical (principally harmonic) starting point which characterises much of my work. I am currently fighting my penchant for Stravinsky-influenced block structuring, with the formal development of this work being generated by the shifting textural densities rather than block juxtaposition. The textural densities of the work were devised before I recorded any of the improvisation helping to create, I hope, a real sense of development in the work without a ‘sectional’ focus.

Ben Oliver, October 2007
Schism

\( j = 112 \)

- Violin:
  - \( pp \)
  - \( p \)
  - \( mp \)

- Bass Clarinet in B:
  - \( pp \)
  - mysterious

- Piano:
  - \( pp \)

- Vln.:
  - \( f \)
  - \( p \)
  - \( mf \)

- B. Cl.:
  - \( p \)
  - \( f \)

- Pno.:

Benjamin Oliver, 2007
B. Cl.

B. Cl.

B. Cl.

Vln.

Vln.

Pno.

Pno.

8

85

H

manic!
always semitone trill

f

sub p

sub f

sul pont. - almost crushed

heel - rough

85

92
M

Vln.

B. Cl.

Pno.

N

Vln.

B. Cl.

Pno.

belligerent

(fff) to conclusion
Horizontal

for flute, guitar and violoncello

Benjamin Oliver
2008
**Instrumentation:**

Flute  
Guitar  
Violoncello

**Duration:** 5’

*Horizontal* was written for workshops at the Royal Academy of Music by the Manson Ensemble in January and March 2008.
Fragile and sombre $j = 56$

for flute, guitar and ‘cello

Benjamin Oliver, 2007

Flute

- open sound - minimal vibrato if any
- sustained as long as possible with vibrato
- bottom E string detuned to D

Guitar

- pizz. sustained as long as possible with vibrato

Violoncello

- more focused sound
- return to open sound - minimal vibrato if any

A
open sound - minimal vibrato

Fl.

Gr.

Vc.

Fl.

Gr.

Vc.
War with terror
for mixed ensemble and soprano soloist

Benjamin Oliver
2007
War with terror

wīg wiþ egesa (Anglo-saxon from Beowulf)  

war with terror (translation – Charley Hellier)

(text should be sung in English as spelt phonetically in the score)

Instrumentation:  

(Score is transposed)

Piccolo  
Flute  
Clarinet in Bb  
Soprano Saxophone in Bb  
Alto Saxophone in Eb  
Trumpet in Bb  
Horn in F  
Trombone 1  
Trombone 2  
Tuba  
Electric Guitar  
Bass Guitar  
Piano  
Tubular Bells  

Soprano Soloist (with microphone)

Duration: 3 minutes

Composed for 'de ereprijs orkest' for a workshop at the University of Sussex in May 2007
War with terror

Piccolo
Flute
Clarinet in B
Soprano Saxophone in B
Alto Saxophone in E
Tuba
Trumpet in B
Trombone 1
Trumpet 2
Bass Guitar
Piano
Electric Guitar
Tubular Bells
Soprano soloist
with microphone

= 60
Jagged Curves and Smooth Cracks

for flute, oboe, ‘cello and piano

Benjamin Oliver
2007
Jagged Curves and Smooth Cracks

for:

Flute
Oboe
‘Cello
Piano

Duration: 7 minutes

Premiered by the LS6 Ensemble:

Anna Thomas – flute
Anna Durance – oboe
Karen Davies – ‘cello
Ben Oliver – piano

at St. Alfege Church, Greenwich, April 2007
Jagged Curves and Smooth Cracks

Belligerent $\cdot = 90$

Flute

Oboe

Violoncello

Piano

3

Fl.

Ob.

Vc.

Pho.

5

Fl.

Ob.

Vc.

Pho.
Jagged ($j = \frac{3}{4}$)
Suppressing Repression

for Bass Clarinet, Trumpet, Violin, Piano, Cello and Percussion (2)

Benjamin Oliver
Suppressing Repression

Instrumentation:

Bass Clarinet in Bb
Trumpet in Bb
Violin
Piano
Cello
Percussion (2 players)
  Percussion 1: Marimba, Snare Drum and Crash Cymbal (large)
  Percussion 2: Tam-tam, 2 Gongs (large and small), Woodblock, 2 Tom-toms

Duration: 7’
B. Cl.  

Tpt.  

Vln.  

Pno.  

Vc.  

Perc. 1  

Perc. 2  

Gongs/Tam-tam/Woodblock  

with marimba - spikey  

with trumpet - spikey  

mp espress.  

loco  

solo  

solo  

MARIMBA:  

p with trumpet - spikey
Hidden Games
for large orchestra

Benjamin Oliver
2008-2009
Instrumentation (Score in C):

Piccolo
2 Flutes (2nd doubling piccolo)
2 Oboes
Cor Anglais
2 Clarinets in Bb
Eb Clarinet
Bass Clarinet in Bb
Alto Saxophone
Tenor Saxophone
2 Bassoons
Contrabassoon

4 Horns
3 Trumpets
2 Trombones
Bass Trombone
Tuba

Percussion (8 players):

5 Timpani, Snare Drum, Bass Drum, Crash Cymbal, Maracas, Castanets, Tambourine, 2 Bongos, 2 Temple Blocks, 4 Tom-toms, Cow Bell, Glockenspiel, Marimba

Rhodes Piano
Electric Guitar
Bass Guitar

Strings (12-18. 12-18. 8-12. 6-10. 4-6.)

Duration: 35 minutes
Hidden Games

Incessantly $= 62 / \measuredangle = 124$

Benjamin Oliver, 2008-2009
Broken Society
for large ensemble

Benjamin Oliver
2009
**Instrumentation** (Score in C):

Piccolo 1  
Piccolo 2  
Clarinet in Bb  
Soprano Saxophone in Bb  
Alto Saxophone in Eb  
Horn in F  
Trumpet in Bb  
Trombone 1  
Trombone 2  
Tuba  

Piano  
Electric Guitar  
Electric Bass Guitar  

Drums  

Notation:

![Drum Kit](image)

Soprano 1  
Soprano 2  
Alto  

Singers should be amplified

**Text** (suggestions and translation by Charley Hellier):

**Anglo-saxon:** Neawis brocen  
**Phonetic:** Ne – ah –wist bro – cen  
**Translation:** Broken society

**Duration:** 3 minutes

**Composed for orkest de ereprijs for the Young Composers Meeting 2010**
Broken society

$\frac{j}{132}$

Benjamin Oliver, 2009

Piccolo 1

Piccolo 2

Clarinet in B

Soprano Saxophone

Alto Saxophone

Horn in F

Trumpet in B

Trombone 1

Trombone 2

Tuba

Piano

Electric Guitar

Bass Guitar

Drum Kit

Soprano 1

Soprano 2

Alto

Ne - ah - wist Ne - ah - wist bro - cen
Picc. 1

Picc. 2

Cl

S. Sax

A. Sax

Hn

Tpt

glissandi as slow as possible - breath whenever required

Tbn. 1

Tbn. 2

Tba

Pro.

E. Gtr

Bass

Dr

S. 1

S. 2

A.

with distortion

Ne - ah - wist

Ne - ah - wist

Ne - ah - wist

Ne - ah - wist

Ne - ah - wist

Ne - ah - wist