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**Portfolio of Compositions:**  
**Systematic composition of cross-genre hybrid music**

Volume II: Exegesis

A thesis

submitted **in fulfilment**

of the requirements for the degree

of

**Doctor of Philosophy in Music**

at

**The University of Waikato**

by

**Jeremy Mayall**



THE UNIVERSITY OF  
**WAIKATO**  
*Te Whare Wānanga o Waikato*

**2015**

I declare that the research presented here is my own original work and has not been submitted to any other institution for the award of a degree.

Signed .....

Date .....

## Abstract

The research focus of this PhD thesis is the development of a new technique for composing original musical compositions in which elements from different musical genres are hybridised. The innovative aspect of achieving balanced hybridity is the development of a systematic approach to selecting and synthesising or hybridising key musical elements across a range of different genres.

The major component of this submission is a portfolio of nine original works with attached CD/DVD recordings.

1. *Tracking Forward* for viola, backing track and video
2. *The Long White Cloud* for chamber band and electronics
3. *'Colorless green ideas sleep furiously'* for orchestra
4. *Push for Miles* for electric bass and backing track
5. *Norse Suite* for viola and cello
6. *The Foggy Field* a studio construction
7. *Into the Nocturnal Sunshine* for flute, viola, cello, drums and electronics
8. *One Night, New Breath* for taonga puoro, viola, drums and electronics
9. *Sketches of an Intergalactic Earworm* for piano trio and boombox

The accompanying documentation clarifies, and contextualises the creation and presentation of these works; and illuminates the aesthetic underpinnings and compositional techniques developed and utilised as a part of this hybrid-genre compositional approach.

The structure of the supporting exegesis is in two parts: the methodology of practice-based research, and reflective investigation. Part One (Chapters 1 and 2) is an introductory overview; an observation of the existing literature and related work, relevant creative practice in the composer's previous work; and the compositional methodology – including an explanation of the genre matrix. Part Two (Chapters 3 to 12) analyses the use of genre, the balance of hybridity, and relevant compositional techniques utilised in the development of each individual piece.



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#### Notes about the thesis:

All spelling has been standardised to New Zealand English. This includes all quotations from other texts. The only time this is not the case is for the spelling of the word colorless in the title of the piece ‘Colorless green ideas sleep furiously’.

As Maori language is an official language of New Zealand, all Maori words appear in standard font without italics.

Citations in the text of this thesis refer to footnotes using the short title convention.

Recordings of all the compositions in the portfolio are included on CDs inserted inside Volume I: Scores, along with a DVD of live performance videos for the compositions, where available.

## Additional Supporting Items

(Relevant audio examples are annotated at specific points in the analytical text)

### CD 1 – Supporting Audio Examples – Track Listing

1. Audio example 1. *Tracking Forward (TF)*: Granular viola chord
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3. Audio example 3. *TF*: Final percussive pattern
4. Audio example 4. *The Long White Cloud (TLWC)*: Opening piano loop
5. Audio example 5. *TLWC*: Marimba with harp phasing
6. Audio example 6. *TLWC*: Tui glitch manipulation
7. Audio example 7. *TLWC*: Guitar, bass and drums groove
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15. Audio example 15. *TFF*: Rhythm backing section
16. Audio example 16. *TFF*: Sampled boys choir
17. Audio example 17. *Into the Nocturnal Sunshine (ItNS)*: Glitch percussion
18. Audio example 18. *ItNS*: Rhythm section
19. Audio example 19. *ItNS*: Climax section backing
20. Audio example 20. *ItNS*: Half time backing, no drums
21. Audio example 21. *Sketches of an Intergalactic Earworm*: Transformed vocals

[ CD IS LOCATED INSIDE BACK COVER ]

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## **Part One: Background and Methodology**

### **Chapter One: Introduction and Key Concepts**

#### **Finding the Research Problem**

This research has its genesis in ongoing work as a musician, producer and composer, in various musical genres: contemporary classical music composition; jazz, blues and funk band performance; DJ-ing hip hop music and turntablism; film, dance and theatre music composition; producing pop songs, folk albums and electronic dance music; and experimenting with field recordings and sound manipulation to create sound art and electroacoustic music. Because these different worlds seldom interacted, the composer wore ‘a different hat’ for every new project, assuming genre-specific techniques, technologies and musical elements.

Exploration of a combination of these divergent areas of interest and expertise into new musical forms gave rise to an intuitive sense of the potential for genre crossing: writing music in one area, and subconsciously importing musical elements or technologies from others. Composing film music in an established realm where pop songs and sound design meet contemporary classical works provided an ideal space to explore these ideas. Drawing equally from film score narrative and a diversity of musical experience, both technical skills and compositional voice were further refined.

The intuitive response to genre crossing was realised in such works as *Symphony No.1* for orchestra and turntables,<sup>1</sup> *Electric Bass Concerto* for electric bass and orchestra,<sup>2</sup> and *Fanfare for a New Generation* for orchestra, drum kit, turntables, theremin and rapper,<sup>3</sup> drawing on other genres.<sup>4</sup>

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<sup>1</sup> The first orchestral symphony to include modern hip hop turntablism as part of the orchestral texture. Part of an orchestral reading by the Auckland Philharmonia Orchestra and New Zealand Symphony Orchestra before premiere performance by the Wellington Youth Orchestra in 2005.

<sup>2</sup> Part of an orchestral reading by the New Zealand Symphony Orchestra, featuring Nick Tipping as electric bass soloist.

<sup>3</sup> Originally composed as part of the Auckland Philharmonia Orchestra’s ‘Remix the Orchestra’ programme. Re-orchestrated by Kenneth Young, and performed live by the APO in 2012 at the Auckland Town Hall.

<sup>4</sup> Hip hop, jazz, and hip hop respectively.

From these experiences, the realisation grew that a more systematic method for combining genres in the composition of new works would be useful, providing the means with which to control some of the intuitive elements that had informed previous works. The design and exploration of a systematic method for genre combination would create both new compositional tools and assist the development of a more consistent compositional voice.

### **Contextual Background**

Contemporary composers who work in different genres, across acoustic and electronic instruments, require divergent executant skills necessitating knowledge of different musical genres, together with techniques and technologies for their realisation. Technology permits immediate online access of different musics from any time and place. Accordingly, composers may readily be inspired by multiple genres in an individual piece, adopting or adapting ideas and processes from other sources, either as a simple stylistic influence, or juxtaposing genres within a single work.

No existing rules or systems for the composition of cross-genre<sup>5</sup> musics have been determined. The creation of a system to explore concepts, techniques and structures would enable a composer to engage fully in hybrid genre composition. Currently, composers approach this boundary-crossing field largely intuitively, combining influences either consciously or subconsciously, to support their own compositional voice in the resultant composition.

This intuitive approach is typically acknowledged by the composer and may be presented as a unique response to a specific artist, musical work, or genre. Intuition and influence should be not removed from a system for hybrid composition, but rather be clarified to determine a system to guide genre use in the compositional process, thus leading to the likelihood of a more balanced combination.

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<sup>5</sup> Cross-genre music is often also referred to as: multi-style; fusion; polystylism; eclecticism; stylistic pluralism. A more detailed exploration of the definitions of these terms can be found in the section on hybridity, p.10

## Contextual Basis for this Research

The composer is ... constantly on the horns of the same dilemma, caught in the same dialectic – the great models and an unknown future. He cannot take off into the unknown. When people tell me, “I am taking off into the unknown and ignoring the past”, it is complete nonsense. (Boulez)<sup>6</sup>

Artistic originality and its relationship to tradition remains a critical issue that every artist must consider. The classic elucidation of this idea is T.S. Eliot’s essay ‘Tradition and the Individual Talent’ where Eliot asserts that:

No poet, no artist of any art, has his complete meaning alone. His significance, his appreciation is the appreciation of his relation to the dead poets and artists. You cannot value him alone; you must set him, for contrast and comparison, among the dead.<sup>7</sup>

This observation can be extrapolated to include living artists whose work is current. Every artistic work exists within a context, or perhaps multiple contexts, not a vacuum. As Eliot further observed, new works of art must not conform exactly to past traditions; rather, they must relate to the repertoire, and diverge from it.<sup>8</sup> The question remains: can artistically valid innovation be achieved by contextualising a new work within multiple existing genres or styles?

Boulez observed in 1968 that there may be a viable way forward:

What we need today is to rediscover aesthetic and technical problems in relation to each other, which has hitherto been extremely difficult in practice. Is this possible for a single individual? I do not think that it is. I think that musical vocabulary tends to appropriate new territories but can do this only by means of a common effort, by working together.<sup>9</sup>

During the half century since Boulez made this observation, various approaches have been attempted: polystylism, fusion, eclecticism, crossover, stylistic pluralism, and world music.<sup>10</sup> Does space remain for an innovative approach, a common effort, working together? Might a consciously systematic method of working across genres provide that innovative approach?

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<sup>6</sup> Boulez, Pierre. *Orientations: Collected Writings*, trans. Martin Cooper, ed. Jean-Jacques Nattiez, London & Boston: Faber and Faber, 1986, p.454

<sup>7</sup> Eliot, T.S. ‘Tradition and the Individual Talent’ in *Perspecta*, Vol. 19 (1982), pp. 36-42: The MIT Press, p.37

<sup>8</sup> loc. cit.

<sup>9</sup> Boulez (1986), p.455

<sup>10</sup> For examples: Emmerson (2000 & 2007); Neill (2002); Williams (2011); Brackett (2002); Born & Hesmondhalgh (2000).

## **Hypothesis and Research Questions**

The contextual background informs the primary research question: how can a contemporary New Zealand composer navigate and hybridise selected musical elements from different musical genres into artistically credible new works? One possible answer to this question is proposed in the creative work contained in the portfolio component of this thesis.<sup>11</sup>

As mentioned above, previous experience with hybrid genre music composition has been purely intuitive. Having reaching the limits of intuition, it became evident that the creation of a systematic method of genre hybridisation would ideally enable the identification and quantification of musical genre elements, and formalise a balance between the constituent genres.

In answering the primary research question, the following may also need to be addressed:

- How can balanced hybrids be created when some of their key elements appear not to be compatible?
- How can the individual genre elements be organised to aim for a sense of balance between the constituent parts?
- Which compositional techniques, tools and technologies will best suit the selected genres?
- How to deal with text/narrative? Popular music styles are often based on text; art music is often not overtly narrative or even programmatic.
- Which conventions of notation and scoring will be appropriate for each separate ensemble and genre combination?

## **Exploring the Main Research Question**

The opening statement of the research question refers to the ‘contemporary New Zealand composer’: for this portfolio-centred research, the work of New Zealand composer Douglas Lilburn is especially relevant where, in his electroacoustic compositions, “the intention was to uncover the inner, spiritual values of natural sound and thereby develop an awareness of place.”<sup>12</sup>

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<sup>11</sup> More details about the original compositions will be discussed in Chapter Two, and the compositional analysis in Part Two of the thesis.

<sup>12</sup> Lodge, Martin. CD Liner notes for *New Zealand Sonic Art III*. Hamilton: University of Waikato, 2002.

Lilburn elaborated his concept of the New Zealand composer in two key talks: ‘A Search for Tradition’ and ‘A Search for a Language’, claiming that New Zealanders “stand outside the music of the great classical masters, however much we may reverence or be moved by it”<sup>13</sup> and that “there are parts of our personalities and conditions of living here at this present time, that cannot be identified with this music.”<sup>14</sup> He further asserts

our musical materials are now taken piecemeal from many European, American and Oriental sources, increasingly so as travel, radio and recording and good local performers make these sounds more readily accessible to us.<sup>15</sup>

Such accessibility may direct New Zealand composers towards eclecticism by “listening to as much as he can of everything, studying the technique of it and absorbing as much of it as seems to fit his own personality.”<sup>16</sup> Absorbing other musical traditions and reflecting them through an “awareness of [the] place”<sup>17</sup> the composer lives in, relates to the compositional process and creative focus of the compositions in this portfolio.

Since Lilburn’s experiments with environmental sound, “studio machines have been humanly integrated with acoustic instruments”<sup>18</sup> and adopted by many New Zealand composers.<sup>19</sup> This approach, together with pre-recorded studio manipulations and live musical performance, is expressed in much of the creative portfolio. The music of the New Zealand composer can be regarded as a dialogue between pre-recorded sound and acoustic sound, and between the various musical genres that inform our cultural identity.

New Zealand classical music is to a certain extent about a dialogue with Western European art music on one hand and the music of indigenous cultures on the other. Between those two dialogues lies the essential confrontation with the landscape.<sup>20</sup>

The use of indigenous New Zealand sound, as well as taonga puoro,<sup>21</sup> and reflections on New Zealand landscape all inform the creative output of this thesis.

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<sup>13</sup> Lilburn, Douglas. *A Search for Tradition; A Search for a Language*. Wellington: Lilburn Trust, 2011, p.19

<sup>14</sup> *ibid.* p.20

<sup>15</sup> *ibid.* p.61

<sup>16</sup> *ibid.* p.41

<sup>17</sup> Lodge (2002)

<sup>18</sup> Lodge (2002)

<sup>19</sup> Examples of which can be heard on *New Zealand Sonic Art III*, as well as in Richard Nunns ongoing work.

<sup>20</sup> Yeoman, William. ‘Music of the Antipodes’ in *Gramophone*, March 2013, p.63

<sup>21</sup> Taonga puoro are the traditional musical instruments of the Maori people of New Zealand. Taonga puoro were revived over the past thirty years by Hirini Melbourne, Richard Nunns and Brian Flintoff.



An analogy to the cross-genre hybridity explored in this thesis exists in the braided river landscapes of New Zealand's South Island. Composer and musicologist Martin Lodge recently proposed these rivers as the most apt metaphor for understanding directions in New Zealand music overall, noting that braided rivers have "broad shingle beds through which flow many smaller channels. These channels continually change direction, split and recombine as the river runs towards the sea."<sup>22</sup> Each composition in the portfolio may be perceived to reflect the broad shingle beds, and the individual genres the "related but individual channels, which sometimes flow independently, sometimes converge and sometimes separate."<sup>23</sup>

The second part of the research question aims to determine whether hybridisation of Western European music genres can be created beyond mere juxtaposition or superposition. The portfolio compositions aim to create music with balanced syntheses of genres by navigating and hybridising selected musical elements in each. The composer's previous experience in cross-genre music suggests that in order to create balanced hybrid music it is necessary to develop a systematic method to formalise use of individual musical elements from within each genre.

Historically, composers have developed genres through ongoing discourse with identifiable audiences.<sup>24</sup> While this research is focussed only on the compositional process using a systematic method of creating hybrid genre music, it would be unwise to completely ignore the role of the audience in genre recognition and development. So while this thesis will not directly reference any audience surveys, or rely on the feedback of listeners in the creation of the music,<sup>25</sup> the selected genre components will be recognisable musical elements from familiar genres. These recognisable elements will allow the genre discourse to continue as a listener can connect with some of those elements, even in an extended, hybrid context. This combination of elements will essentially create an assimilated 'language', where the elements of known musical languages (genres) are used as a

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<sup>22</sup> Lodge, Martin 'Music historiography as a braided river: the case of New Zealand' in Kurkela, Vesa and Markus Mantere (eds) *Critical music historiography: probing canons, ideologies and institutions*. Farnham: Ashgate 2015. Currently in press, page numbers not yet available

<sup>23</sup> *ibid.*

<sup>24</sup> Genre development through discourse between musicians and audiences is discussed in: Negus (1999); Lena & Peterson (2008); Walser (1993). Lena (2012) is focussed on this relationship.

<sup>25</sup> Apart from feedback from the PhD supervisors and performing musicians, of course.

basis for communication in a new context. New hybrid genres that are a balanced synthesis of existing genres are the aim.

This approach to the construction of a ‘musical language’ from familiar elements is similar to the origins of the English language, albeit less gradual and organic. Historically, English developed from the fusion of closely related Old English dialects, brought to the eastern coast of Great Britain by Anglo-Saxon settlers by the 5th century. Also, a significant number of English words are constructed from Latin roots as used by the church and other intellectuals; and the Viking invasions contributed further language influences from Old Norse. The Norman conquest of England in the 11th century gave rise to heavy borrowings from Norman French. This tradition of taking specific words and re-using them in a new context has continued into the development of Modern English, which has not only assimilated words from other European languages, but from all over the world.<sup>26</sup> This approach to language allows the creator to borrow these specific elements and then create a new context and approach for them.

The thinking of Pierre Boulez has further informed the contextual approach to this research. The compositional process developed through creating the portfolio is

concerned quite as much with synthesis as with discovery . . . to synthesising the great creative currents that have made their appearance since the end of the last century . . . I think of it rather as simply an indispensable starting point from which to embark, with a minimum of intellectual guarantees, on new voyages of discovery, which may very well lead to the reconsidering on all, or part, of our Western musical tradition.<sup>27</sup>

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<sup>26</sup> This is an extremely condensed glance at the development of the English language. While parallels between the creation of English and my hybrid approach to music are important to mention, full exploration of these parallels is beyond the scope of this thesis. For history of the English language see: Bragg, Melvyn. *The Adventure of English: 500AD to 2000: the Biography of a Language*. Canada: Hodder & Stoughton, 2003

<sup>27</sup> Boulez (1986), p.177

## Thesis Overview

The remaining sections in Chapter One constitute a literature review discussing hybridity, genre, style, and general musical examples from the existing repertoire that inform the portfolio compositions. Chapter Two examines the methodology informed by Chapter One, with particular regard to the construction of a systematic method for hybrid genre composition, along with the techniques and technologies that inform the compositional process.

The remaining chapters constitute a musical analysis of the portfolio, and reflections on the compositional process, the practice-based implementation of the methodology, and literature relevant to the specific pieces.

## Theoretical Position

Genres do not develop *ex nihilo*;<sup>28</sup> they are developed through the discourses of musicians and listeners as an adaption of, or reaction to, existing genres. These discourses and subsequent developments progress through ‘streams’<sup>29</sup> that run from meta-genre to genre to sub-genre. Such an idea is congruent with Meyer’s observation that “most changes in the history of Western music have involved the devising of new strategies for the realization of existing rules, rather than the invention of new rules.”<sup>30</sup> Genre discourse is central to artistic and cultural growth because, as Derrida noted, “every text participates in one or several genres, there is no genre-less text.”<sup>31</sup> The portfolio compositions use and experiment with genres familiar to the composer.

The international music scene influences New Zealand composers through modern communication technology’s instantly available information, inspiration and ideas. New musical approaches, accessible from recordings and scores or transcriptions may be adapted, transformed, and multi-layered, sometimes

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<sup>28</sup> Both Robert Walser and Franco Fabbri discuss the origin of genres in popular music. For example, Fabbri observes, “a new genre is not born in an empty space but in a musical system that is already structured.” Fabbri, Franco. ‘A theory of musical genres: Two applications’ in *Popular Music Perspectives: Papers from the First International Conference on Popular Music Research, June 1981* (ed. D. Horn & P. Tagg). Gothenburg & Exeter: IASPM, 1982, p.60

<sup>29</sup> Genre streams are discussed in depth in: Ennis, Philip H. *The Seventh Stream: The emergence of Rockroll in American Popular Music*. Hanover & London: Wesleyan University Press, 1992

<sup>30</sup> Meyer, Leonard B. *Style and Music: Theory, History, and Ideology*. Chicago & London: The University of Chicago Press, 1989, p.20

<sup>31</sup> Derrida, Jacques. ‘The Law of Genre’, in *Critical Inquiry*, Vol.7, No.1 (Autumn 1980) pp55-81: University of Chicago Press, p.65

subconsciously, giving rise to a unique compositional voice through layered influence, performance practice and refinement. Such intuitive influence informs the interpretation and implementation of individual genre elements selected for use in any new composition; it is seen both generically, with regard to ‘feel’, ‘groove’ and ‘style’ and specifically through stylistic and direct quotation.<sup>32</sup>

The portfolio compositions utilise genres from Western European popular and art music genres, hybridising their elements with others directly from the New Zealand soundscape,<sup>33</sup> creating a uniquely hybrid New Zealand compositional voice. To balance the hybridity, the purely intuitive approach must be superseded in favour of a systematic method for combining genre elements into a hybrid genre system compiled from chosen elements of the aesthetics, techniques<sup>34</sup> and tools<sup>35</sup> of each base genre.

Such a compositional method has, at its base, a link to postmodernist compositional strategies. As a term, postmodernism, much like genre, resists rigorous definition. However, Jonathon D. Kramer’s list of characteristics assists a definition of postmodern music:

- 1) is not simply a repudiation of modernism or its continuation, but has aspects of both a break and an extension
- 2) is, on some level and in some way, ironic
- 3) does not respect boundaries between sonorities and procedures of the past and of the present
- 4) challenges barriers between “high” and “low” styles
- 5) shows disdain for the unquestioned value of structural unity
- 6) questions the mutual exclusivity of elitist and populist values
- 7) avoids totalising forms (e.g. does not want entire pieces to be tonal or serial or cast in a prescribed formal mould)
- 8) considers music not as autonomous but as relevant to cultural, social and political contexts
- 9) includes quotations of or references to music of many traditions and cultures
- 10) considers technology not only as a way to preserve and transmit music but also as deeply implicated in the production and essence of music
- 11) embraces contradictions
- 12) distrusts binary oppositions
- 13) includes fragments and discontinuities

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<sup>32</sup> There will be more in-depth coverage of the use of quotation in the specific compositional analysis chapters for each piece.

<sup>33</sup> The use of traditional Maori instruments (taonga puoro) through collaboration with performer Richard Nunns, and field recordings of indigenous birds and soundscapes

<sup>34</sup> Techniques include scales, harmony, structure, and performance techniques.

<sup>35</sup> Tools include sound sources, instruments, amplification, effects and recordings.

- 14) encompasses pluralism and eclecticism
- 15) presents multiple meanings and multiple temporalities
- 16) locates meaning and even structure in listeners, more than in scores, performances or composers<sup>36</sup>

This list also serves to identify characteristics which typify postmodernist compositional practice. If one accepts these points, artistic practice may be more precisely defined. The systematic method of hybrid genre composition, the compositional approach, and realisation of the various pieces in this portfolio, may be partially defined through combinations of points 3, 4, 6, 8, 9, 10, 11, 12, 13, 14 and 16. This supports the claim that the compositional framework for hybrid genre composition in this portfolio is, in essence, postmodern.

### Hybridity

Hybridity is a term generally used in reference to things of mixed ancestry.<sup>37</sup> In music composition, hybridity may describe the combination of elements and sources where genre conventions are still present, but no one genre dominates.<sup>38</sup> The principle of hybridity is at the core of this research, enabling possible genre combination through both juxtaposition and synthesis in composition.

Writing primarily about the early nineteenth century, Jeffery Kallberg points out that musical hybrids are not a new phenomenon.<sup>39</sup>

Composers often combined genres within a single work, a type of generic interaction that has a great tendency to promote change. Sometimes they merely alluded to a different genre in passing, leaving a short recollection of relatively minor significance in the piece. At other times they made more substantial reference to a foreign genre, so that a genuine mixture resulted.<sup>40</sup>

Kallberg further explains: “Generic mixture has long been employed to expand the range of possibilities in a genre, to communicate the unknown through the known.”<sup>41</sup> This idea is central to the research question addressed through the

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<sup>36</sup> Kramer, Jonathon D. ‘The Nature and Origins of Musical Postmodernism’ in *Postmodern*

*Music/Postmodern Thought*, (ed. Judy Lochhead and Joseph Auner) New York: Routledge, 2002 p.16

<sup>37</sup> "hybridity." Collins English Dictionary - Complete & Unabridged 10th Edition. HarperCollins Publishers. 14 Nov. 2013. <<http://dictionary.reference.com/browse/hybridity>>

<sup>38</sup> Kallberg, Jeffery. ‘The Rhetoric of Genre: Chopin’s Nocturne in G Minor’ in *19<sup>th</sup>-Century Music*, Vol. 11, No. 3 (Spring 1988), pp. 238-261: University of California Press, p.245

<sup>39</sup> This idea is also discussed in: Webb (1992); and, Ivashkin (2002)

<sup>40</sup> Kallberg (1988), p.245 – this essay discusses genre mixing in the work of Chopin, Mozart and Beethoven

<sup>41</sup> Kallberg (1988), p.245

portfolio compositions: how might a systematic mixing of known genre elements be formed into new, balanced hybrid music?

When any composer works within a genre, selection of which conventions to employ and which to ignore subtly alters the way in which that genre will be perceived. Every work will add to in some way, and thus alter, the genre to which it belongs.<sup>42</sup> There is often an intuitive play involving expectations of, and departures from, any given genre. The systematic method of genre hybridity explored in the present research offers an alternative that is more consciously-determined. An unexpected genre combination may provide a certain newness when presented in the hybrid work. For example, the familiar sound of the muted jazz trumpet when deconstructed within a compositional framework of electro-acoustic sound manipulation and electronic dance music (EDM) rhythms, creates a new musical idiolect<sup>43</sup> in a new context.<sup>44</sup>

Salman Rushdie comments on how combining sources in *The Satanic Verses* creates newness:

*The Satanic Verses* celebrates hybridity, impurity, intermingling, the transformation that comes of new and unexpected combinations of human beings, cultures, ideas, politics, movies, songs. It rejoices in mongrelisation and fears the absolutism of the pure. *Mélange*, hotchpotch, a bit of this and a bit of that is *how newness enters the world*.<sup>45</sup>

Similarly, the selection and intermingling transformation of key generic elements will enable a composer to create a new hybrid musical voice.

Hybridity, together with stylistic pluralism, polystylism, eclecticism and fusion are terms suggesting the combination of different genres within a single musical composition. The differences between, and boundaries around, these terms, if there are any, seem fluid and ill-defined. A comparable vagueness surrounds the terms genre and style.

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<sup>42</sup> Kallberg (1988), p.245-246

<sup>43</sup> Musical idiolect is discussed in detail in: Pareyon, Gabriel. *On Musical Self-Similarity: Intersemiosis as Synecdoche and Analogy*. Imatra: International Semiotics Institute, 2011. p.192. 'A musical idiolect is the set of peculiarities that characterize an individual as *musical*' (emphasis in original)

<sup>44</sup> See Chapter Eight: *The Foggy Field*, p.185

<sup>45</sup> Rushdie, Salman. *Imaginary Homelands*, London: Granta, 1991, p.394 (emphasis in original text)

Russian composer Alfred Schnittke (1934-98) coined the term polystylism. He presented his thoughts primarily in the form of polystylistic compositions, but also wrote a number of essays on the topic. In his 'Polystylistic Tendencies in Modern Music' (1971), Schnittke divides polystylism into two categories: quotation and allusion. Quotations range from micro elements of an alien style to exact or reworked quotations by way of: adaptation, using one's own musical language to retell an alien musical text; technique, reproducing the forms, rhythms and textures of other eras or traditions; and 'polystylistic hybrids' which may contain elements from various styles.<sup>46</sup> Allusion, "manifests itself in the use of subtle hints and unfulfilled promises that hover on the brink of quotation but do not actually cross it."<sup>47</sup> He also suggests that "sometimes the interpenetration of elements from styles of an individual composer and an alien style may be so organic that it crosses the boundary between quotation and allusion."<sup>48</sup>

Schnittke acknowledges that there has always been a polystylistic tendency in music, the difference being "the polystylistic method has become a conscious device."<sup>49</sup> Composers use this technique to create various effects,

whether it be the shock effect of a clashing collage of music from different times, a flexible glide through phases of musical history, or the use of allusions so subtle that they seem accidental.<sup>50</sup>

Schnittke has no clear idea of the difference between polystylism and eclecticism: "We do not know where the boundary lies between an eclectic or polystylistic method, or between the polystylistic method and direct plagiarism."<sup>51</sup> It seems that the eclectic and polystylistic composer may be one and the same.

John Webb defines stylistic pluralism as "any type of stylistic manipulation, be it Prokofiev's use of classical elements in the First Symphony, or the incongruous foxtrots in Maxwell Davies's *St. Thomas Wake*."<sup>52</sup> Polystylism, he says, "is a subset of stylistic pluralism. Styles are combined disruptively, in a way that exploits their incongruity."<sup>53</sup> He points out that before polystylism in the

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<sup>46</sup> Ivashkin, Alexander (ed.). *A Schnittke Reader*. Bloomington: Indiana University Press, 2002, p.87-88

<sup>47</sup> *ibid.* p.88

<sup>48</sup> *loc. cit.*

<sup>49</sup> *ibid.* p.89

<sup>50</sup> *loc. cit.*

<sup>51</sup> *loc. cit.*

<sup>52</sup> Webb, John. 'Schnittke in Context' in *TEMPO*, New Series, No.182, Russian Issue (Sep. 1992): Cambridge University Press, p.19

<sup>53</sup> *loc. cit.*

twentieth century, usually any use of a foreign style would be seamlessly integrated into the composer's own work. One could extrapolate this seamless integration to eclecticism.<sup>54</sup>

In 'Where Next? New Music, New Musicology'<sup>55</sup> Simon Emmerson suggests that there are differences between polystylism, eclecticism and hybrid which may be interpreted as a continuum based on compositional practice and intent. Moving from appropriation: "quotation and reference of [sic] a variety of musical genres with little attempt at integration into existing practice";<sup>56</sup> to polystylism "in which a central traditional practice 'plays with' other genres and styles"<sup>57</sup> often through the means of "juxtaposition and superposition of different musical styles [to create] a kind of cultural tension"<sup>58</sup>; to eclecticism, "a music not alluding to but drawing on the experience of other genres – often born of personal practice";<sup>59</sup> to hybridity where "it may be more than simply combination-interpenetration and may involve strong forces of attraction or repulsion – what is rejected may be as important as what is accepted."<sup>60</sup>

Emmerson further discusses eclecticism:

Many of today's younger composers do not 'play at a distance with' the styles and musics they hear, it is their primary practice. The world has always been (for them) a mix of musics – if any practices are dominant this is transitory.<sup>61</sup>

The composer may be attempting simply to bring together (maybe to integrate, maybe not) the various components, not playing with any of the elements as iconic of something else, just as 'material'.<sup>62</sup>

These ideas on the compositional practice of eclecticism align strongly with the idea of hybridisation in this research without being quite identical: the genres selected for inclusion in the various pieces in the portfolio are those the composer has previously experienced both as a listener and a composer.

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<sup>54</sup> Eclecticism would seem to be an appropriate term here as it allows for a different approach to polystylism, but would also come under the umbrella heading of 'stylistic pluralism'. As Schnittke was also using the term eclecticism in his discussions of polystylism, it would make sense that this is a workable use of the term.

<sup>55</sup> Emmerson, Simon. 'Where next? New music, new musicology' in *EMS: Electroacoustic Music Studies Network*. Leicester, UK: De Montfort University, 2007. Web. Accessed: 19 July 2010. <[http://www.ems-network.org/IMG/pdf\\_EmmersonEMS07.pdf](http://www.ems-network.org/IMG/pdf_EmmersonEMS07.pdf)>

<sup>56</sup> *ibid.* p.1

<sup>57</sup> *ibid.* p.5

<sup>58</sup> *ibid.* p.1

<sup>59</sup> *ibid.* p.2

<sup>60</sup> *ibid.* p.5

<sup>61</sup> *ibid.* p.2

<sup>62</sup> *loc. cit.*



In much of the literature on ‘hybrid music’ this term is associated more specifically with popular music ‘cross-over’ and ‘world music’ and is linked to discussions of commercialism and authenticity, along with concerns around the reuse of ‘ethnic music’ in a foreign context.<sup>63</sup> Hjunu Park explains that:

Musicians are blending together musical elements from everywhere and adding to them the musical possibilities afforded by new technologies . . . The process of hybridity is not one of absolute free choice but one of constant compromise between what might be desired creatively and what will be accepted commercially.<sup>64</sup>

This awareness of commercial acceptance to music is often part of the process of working in the realms of ‘popular’ music.

On the face of it, there might appear to be considerably less pressure to conform within the realm of popular music than in the realm of modern art music, more incentive to innovate, to create hybrid musics, to experiment along the border lines between genres, and indeed a great deal of such experimentation has been done. But as any popular musician can testify, the pressure to conform in the world of popular music comes from a different direction – not from the academic imperative of upholding a tradition of supposed structural sophistication and intellectual validity, but from the need to make music that is ‘commercial’.<sup>65</sup>

Denied the full creative freedom they desire, many composers make compromises thus raising questions of authenticity. The music composed for this portfolio is free of commercial endeavour and therefore not directly concerned with these issues. The compositions draw on genres from Western European traditions, effectively avoiding cross-cultural issues.<sup>66</sup> The hybridised elements are drawn from genre materials with which the composer is familiar both as a composer and as a listener, thereby establishing authenticity out of personal experience.

In his exploration of ‘hybrid tendencies in electroacoustic music’,<sup>67</sup> Simon Waters is aiming to create hybrid music through sampling, by way of pure sound

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<sup>63</sup> These ideas and concerns are discussed in detail in: Taylor (1997); and, Born and Hesmondhalgh (2000).

<sup>64</sup> Frith, Simon. ‘The Discourse of World Music’ in *Western Music and Its Others* (ed. Born, Georgina & Hesmondhalgh, David.) Berkeley & Los Angeles: University of California Press, 2000. pp. 305-322. P.309

<sup>65</sup> Tamm, Eric. *Brian Eno: His Music and the Vertical Color of Sound*. 1988. Web. Accessed: 29 October 2013, <<http://www.ericetamm.com/tammeno.html>> p.5

<sup>66</sup> The only cross-cultural element in the portfolio is the inclusion of taonga puoro – but through the performances by renowned taonga puoro expert Dr Richard Nunns, any potential cross-cultural issues are immediately addressed.

<sup>67</sup> Waters, Simon. ‘Beyond the acousmatic: hybrid tendencies in electroacoustic music’ in *Music, electronic media and culture*. (ed. S. Emmerson), England: Ashgate Publishing, 2000

manipulation with no clear links to the historical and cultural background of the source material. For Waters, boundaries have been broken down

between media, between disciplines, between knowledge systems, between styles and genres, between so-called serious and popular arts. A process of hybridization is at work. This inevitably leads many of our concerns to be about the nature of reuse and recontextualisation: about taking something associated with one genre, one historical time frame, one culture and putting it in another.<sup>68</sup>

While the research in this portfolio abstracts specific musical elements from chosen genres and synthesises them in a new context, the genre elements retain certain links with the source out of respect for the original genre conventions.

Stylistic pluralism, polystylism and eclecticism describe juxtaposition of genres or styles within a single piece. They are impossible to define precisely because of conflicting ‘intention/reception’<sup>69</sup> tensions. The intention of the composer may differ from listener reception, and so “intentionality may be important to us in unravelling the differences”.<sup>70</sup> ‘Hybrid music’ can be described as a continuation and variation of these terms for cross-genre music. Given the research focus in this portfolio on the systematic composition of ‘hybrid music’ it is essential to clarify its meaning in the context of this research.

For the purposes of this portfolio, hybrid music is that created through the selection and systematically planned synthesis of multiple genre sources to create an equal balance between constituent blended parts.

Put in terms of culinary metaphor, whereas stylistic pluralism, polystylism or eclecticism resemble tossed salad, hybridity is slow-cooked gumbo.<sup>71</sup> Individual salad ingredients are either eaten together or easily separated; but gumbo ingredients are interfused and separating them will destroy the dish. The present portfolio compositions are influenced by relevant repertoire from within and across selected genres, as well as from compositions expressing similar

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<sup>68</sup> *ibid.* p.57

<sup>69</sup> Landy, Leigh. ‘The Intention/Reception Project’ in *Analytical Methods of Electroacoustic Music* (ed. Mary Simoni), New York: Routledge, 2006, pp.29-53

<sup>70</sup> Emerson (2007), p.3

<sup>71</sup> Williams, Justin A. ‘Jazz/Hip-Hop Hybridities And The Recording Studio’ in *Journal on the Art of Record Production*, Issue 5, Conference Papers, (July 2011). Web. Accessed: 13 November 2013, <<http://arpjournal.com/1177/jazzhip-hop-hybridities-and-the-recording-studio/>>, page numbers not available.

instrumentation. They reflect the definition of 'hybrid music' given above, and aim at a conscious, systematic and balanced synthesis of genres.

Kallberg observes that "composers have often turned to generic hybrids at times when their personal styles were undergoing significant changes."<sup>72</sup> Hybridity is a logical step in the present composer's personal journey; having worked within and around genre constraints of contemporary art, film, and pop musics, the next obvious step for me was to fuse these musics, unifying their influences and experience in a series of calculatedly hybrid works. Rather than continuing in an improvisatory and freely imagined vein, a more methodical and self-aware approach is taken.

### **Genre: Definition and Purpose**

Genre, style and, to a lesser extent, form, are often used interchangeably and their musicological application varies accordingly. It is, therefore, important to clarify their meanings.<sup>73</sup>

#### What is Genre in Music?

The little child is permitted to label its drawing "This is a cow-this is a horse" and so on. This protects the child. It saves it from the sorrow and wrong of hearing its cows and its horses criticized as kangaroos and work-benches. (Mark Twain)<sup>74</sup>

Genre is

derived from French and Latin, means 'kind' or 'genus'. Genus in turn means 'a class', 'kind', or 'sort', with the accompanying expansion in logical usage of being a class of like objects or ideas, having several subordinate classes or species.<sup>75</sup>

The term genre emerged in the mid-nineteenth century as "new forms of popular culture were beginning to emerge, including what became known as genre fiction

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<sup>72</sup> Kallberg (1988), p.245

<sup>73</sup> The selection of 'genre' as the key term in this study is because it is a term whose standard definition most clearly links to understandings of 'type'. Unfortunately due to the limited space available, this review will require all-too-brief summaries of some representative scholars and their use of the terms 'genre' and 'style'.

<sup>74</sup> Frith, Simon. *Performing Rites: on the value of popular music*. USA: Harvard University Press, 1996, p.75

<sup>75</sup> Harris, Trudier. 'Genre' in *The Journal of American Folklore*, Vol. 108, No. 430 (Autumn, 1995), American Folklore Society, p.509

and genre painting.”<sup>76</sup> Ultimately, genre attached to various music forms, “and it should be clear that generic categories underpin all forms of culture.”<sup>77</sup> While texts on genre serve literary and filmic perspectives, scholarly writing about genre in music is sparse, particularly with regard to composition.<sup>78</sup>

Genre has implications for “how, where, and with whom, people make and experience music.”<sup>79</sup> Genres are central to how record companies work, to record stores, musicians, listeners, and ways of “categorizing popular music so as to create a connection between musical styles, producers, musicians and consumers.”<sup>80</sup> In the music industry, genre labels align artists with audiences, describing “not just who listeners are, but what this music means to them.”<sup>81</sup> Genre remains essential to how we discover music; it “affects how we think, create, and talk about music (consciously or unconsciously), even when we use it as a site of resistance.”<sup>82</sup>

Genre also facilitates discussion of rhythmic and melodic variation, musical meaning, communication, and the functions of ritual in musical tradition.<sup>83</sup> With genre’s importance in the classification and experience of music, it seems odd there is not more scholarly writing addressing genre-based textual analysis in popular music. Musicological descriptions of genre, and its role in the compositional process, often lack discussions of the “conventional tools derived from the study of more traditional/classical forms of music: harmony, melody, beat, rhythm and the lyric.”<sup>84</sup> Defining and writing about genre is difficult in part because

genres do not consist of essential, unvarying characteristics, but rather exist as a group of stylistic tendencies, codes, conventions and expectations that become meaningful in relation to one another at a particular moment in time.<sup>85</sup>

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<sup>76</sup> Holt, Fabian. *Genre in Popular Music*. Chicago & London: University of Chicago Press, 2007, p.2

<sup>77</sup> Holt (2007), p.2

<sup>78</sup> Frith (1996); Shuker (2001); Negus (1996) and Holt (2007) all discuss this. Holt said: ‘It is more difficult to establish useful genre theories for music than for other art forms, largely due to the difference in forms of production; Music is not referential – it does not have the precision of iconic representation that film has.’ From: Holt (2007), p.2

<sup>79</sup> Holt (2007), p.2

<sup>80</sup> Brackett, David. ‘(In search of) musical meaning: genres, categories and crossover’ in *Popular Music Studies* (ed. D. Hesmondhalgh & K. Negus) Great Britain: Arnold Publishers, 2002, p.66

<sup>81</sup> Frith (1996), p.75

<sup>82</sup> Williams (2011)

<sup>83</sup> Holt (2007), p.2

<sup>84</sup> Shuker, Roy. *Understanding Popular Music*. London & New York: Routledge, 1994, p.26

<sup>85</sup> Brackett (2002), p. 67

## Separating Genre and Style

Allan F. Moore points out that “in media and cultural studies generally, genre appears to have some kind of methodological priority, while in musicology priority is often assumed for style.”<sup>86</sup> Musicologist Carl Dahlhaus views genres as emerging from the replication of certain elements, principally text type, social function, scoring, form, and aesthetic character, in a group of works.<sup>87</sup> For Dahlhaus, genre mediates between the intentions of the composer and the expectations of the social group to whom the genre is directed.<sup>88</sup> He equates titles of works with statements on genre,<sup>89</sup> so when avant-garde composers began to use titles removed from genre precedents, Dahlhaus believes they had “completed the process of rejecting genre”.<sup>90</sup> Jeffery Kallberg states that Dahlhaus typically focuses on genre through the

conceptions of composers . . . emphasizing the constituent elements of genre and ignoring for the most part both the effects these elements created, and the reasons for the presence of the elements in the first place . . . genre acts as little more than a mono-tonal backdrop against which the more colourful play of individual genius might take place. This does not so much distort genre as undervalue it. What needs to be restored . . . is the more extensive range of functions that genre performs in both the composer's and the listener's experience of a musical work.<sup>91</sup>

Franco Fabbri explains<sup>92</sup> that

in most musicological literature which has tackled the problem of genres . . . formal and technical rules seem to be the only ones taken into consideration, to the point where genre, style and form become synonymous.<sup>93</sup>

Fabbri separates these terms, defining genre as “a set of musical events (real or possible) whose course is governed by a definite set of socially accepted rules”<sup>94</sup>: consisting of five subsets: formal and technical, semiotic, behavioural, social and

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<sup>86</sup> Moore (2001), p.433

<sup>87</sup> Dahlhaus discusses genre in his: *Esthetics of Music* (trans. William Austin); and, *Foundations of Music History* (trans. J.B. Robinson).

<sup>88</sup> There is a detailed study, and critique, of Dahlhaus's view of genre in: Kallberg (1988);

<sup>89</sup> *ibid.* p.242

<sup>90</sup> Gelbart, Matthew. ‘Speaking of music in the Romantic era: dynamic and resistant aspects of musical genre’ in *Speaking of Music: Addressing the Sonorous* (ed. Keith Chapin and Andrew H. Clark) New York: Fordham University Press, 2013, p.140

<sup>91</sup> Kallberg (1988), p.242

<sup>92</sup> In a much-cited popular music study on ‘A Theory of Musical Genres’ from 1982

<sup>93</sup> Fabbri, Franco. ‘A theory of musical genres: Two applications’ in *Popular Music Perspectives: Papers from the First International Conference on Popular Music Research, June 1981*. (ed. D. Horn & P. Tagg) Gothenburg & Exeter: IASPM, 1982, p.55

<sup>94</sup> *ibid.* p.52

ideological, and commercial and juridical.<sup>95</sup> These subsets include musical sounds and noise; musical time; musical elements such as melody and harmony; levels of complexity; gestural, such as dance, posture, movement; dress; semiotics; sociological function; community.<sup>96</sup>

Fabbri further explains how each genre uses and addresses the importance of these rules:

No specific hierarchical order is given to the rules presented here. On the other hand, in the description of each single genre some rules are more important, and a few much more important than others, to the point where these others can sometimes be considered marginal and ignored.<sup>97</sup>

These genre rules apply equally, in different arrangements, to popular and art music:

In any case the formal and technical rules, on a compositional level, play a major role in all musical genres, not only in the so called 'cultivated' ones. There are rules which have a written code, in theoretical treatises or teaching manuals, and others, no less important, which are passed on by oral tradition or through model works.<sup>98</sup>

Fabbri further discusses how genres help give the audience clear codes as to which elements of any piece of music are significant. Genre conventions give an immediate clue to the importance of the

choice between 'musical sounds' and 'noise', of note systems, of the conception of musical time, of the importance to be given to various elements (melodic, harmonic, rhythmic), of the level of complexity that an entire musical system, or a single genre is prepared to admit.<sup>99</sup>

For this doctoral research, these conventions inform the selection of the genre elements that form the basis of the final compositions. The composer's conscious awareness of genre conventions in the creation of hybrid music helps to formalise a sense of balance in the genre synthesis. So, while audience interpretation of the music contained in the portfolio doesn't form part of the research, these conventions are still relevant to the use of genre in the composition of hybrid music.

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<sup>95</sup> *ibid.* pp.54-59

<sup>96</sup> Fabbri (1982), pp.52-62

<sup>97</sup> *ibid.* p.55

<sup>98</sup> *loc. cit.*

<sup>99</sup> *ibid.* p.56

Frith, Holt, Moore, Middleton, Fornäs, Tagg, Beard & Gloag, McLeod, Hamm, Brackett, and Negus all refer to Fabbri's definition, most acknowledging Fabbri's view on genre in popular music as an important workable definition. Moore suggests that the 'influential context' of Fabbri's early definition has "had important consequences, among them the subsequent use of 'genre' rather than style as the dominant category within popular music studies."<sup>100</sup> Drawing on Fabbri, Frith suggests consideration of a genre as a combination of sound, performing and packaging conventions, and embodied values.<sup>101</sup> Negus asserts that Fabbri's definition, though insightful, is overtly deterministic and relatively static, emphasizing constraints in terms of 'walls' surrounding individual genres, rather than possibilities.<sup>102</sup> His 'set of rules' defines existing genres rather than offering a field of inquiry into the creation of new ones. This thesis proposes constructive use of genre elements from Fabbri's 'constraints', taking genre-specific elements and reworking them into a new context between and across genre boundaries.

Other musicologists examine concepts of genre with reference to specific works demonstrating genre conventions, exploring methods for the manipulation of genre within the compositional process, and the developing role of context in genre. Kallberg contends that while musical analysis may "provide factual information about a term [and] classify it, [it] does not explain its meaning . . . Meaning, in short, must emerge from the context of the term."<sup>103</sup> In their study of popular music genres, Borthwick and Moy consider each genre with regard to historical antecedents, social contexts, visual aesthetics, and musical traits.<sup>104</sup> Pascall also discusses context through four categories of genre difference and development: the description and analysis of the music itself; the performance site; the performing forces; and a definable expressive code.<sup>105</sup> These four categories are useful tools in an analytical approach towards the use of genre in composition.

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<sup>100</sup> Moore (2001), p.433

<sup>101</sup> Frith (1996), p.94

<sup>102</sup> Negus, Keith. *Music Genres and Corporate Cultures*. London & New York: Routledge, 1999 p.26

<sup>103</sup> Kallberg (1988), p.243

<sup>104</sup> Borthwick, Stuart and Ron Moy, *Popular Music Genres: An Introduction*. Edinburgh: Edinburgh University Press, 2004, pp.2-3

<sup>105</sup> Pascall, Robert. 'Genre and the Finale of Brahms's Fourth Symphony' in *Music Analysis*, Vol. 8, No.3 (Oct 1989), Blackwell Publishing, pp.234-235

As genre in music is defined and developed through a discourse between composer and listener, the repetition and layering of individual elements facilitate this discourse. Without repetition of elements there would be no pattern on which a genre contract could develop:

The repetition units that define a genre, as opposed to a stylistic norm or a formal schema, extend beyond musical materials into the social domain so that a genre is dependent for its definition on context, function and community validation and not simply on formal and technical regulations.<sup>106</sup>

It takes a number of repetitive elements or traits to create a working idea of any specific genre:

No single trait defines a genre, but we can take a range of traits, each of which can function as a sign for that genre, as representing a horizon of generic expectations against which to compare interpretations of individual works.<sup>107</sup>

As specific genre definitions develop through this composer-listener discourse, different parties at different times will hold different views on conventions defining that genre.

How then, does style relate to genre? Meyer opens his *Style and Music* thus:

Style is a replication of patterning, whether in human behaviour or in the artefacts produced by human behaviour, that results from a series of choices made within some set of constraints.<sup>108</sup>

This has similarities to Fabbri's definition of genre, where "Fabbri's rule-bound events appear to be none other than Meyer's constrained choices".<sup>109</sup>

Meyer's view on style analysis is that it can be used to 'discover and formulate the rules and strategies'<sup>110</sup> that create definable characteristics in any set of works. The set will always have shared characteristics, but the basis for selection may be quite varied. Sets may include:

- a. The works of a single composer

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<sup>106</sup> Samson, Jim. 'Chopin and Genre' in *Music Analysis*, Vol. 8, No. 3 (Oct., 1989), pp. 213-231: Blackwell Publishing, p.213

<sup>107</sup> Galand, Joel. 'Form, Genre, and Style in the Eighteenth-Century Rondo' in *Music Theory Spectrum*, Vol.17, No.1 (Spring 1995), University of California Press on behalf of the Society for Music Theory, p.51

<sup>108</sup> Meyer (1989), p.3

<sup>109</sup> Moore (2001), p.433

<sup>110</sup> Meyer (1989), p.38



- b. Works by a group of composers, usually, but not necessarily, written during a given time period and in the same culture
- c. Works written in the same geographical area or national tradition
- d. Works written in a particular genre such as opera, lied, chamber music, tone poems
- e. Works written for some socially defined segment of a culture, perhaps transcending cultural or geographical boundaries, such as folk music and popular music
- f. Works written for a utilitarian purpose such as liturgical or military music
- g. Works written over a considerable period of time in the same extended cultural area
- h. The music of a whole civilization or some segment thereof <sup>111</sup>

Usage of the term style ranges broadly, from a set of traits defining the work of a single composer to the music of an entire civilization.

The descriptions and definitions discussed above, suggest substitution of style for genre, or vice-versa, while maintaining a usable set of characteristics and classifications. Some musicologists have suggested a hierarchical relationship between the terms, where style and form are subservient to genre. Fabbri, Frith and Walser posit a similar hierarchy between genre and style, where style addresses multiple sets of conventions within any single genre. Samson states:

With style and form a transitional moment may be characterized as an interpenetration of old and new. With genre, which seeks by definition to categorise musical experience, to close or finalise it, there will be no such interpenetration of old and new, but rather a choice to be made between them. <sup>112</sup>

Further to this, Moore describes three types of relationships between the terms:

- 1. Broadly cover the same ground, but sometimes with different nuances
- 2. Cover the same ground but the relationship is a nested one, so that style pertains only to a portion of that ground
- 3. The terms have different areas of reference <sup>113</sup>

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<sup>111</sup> Meyer (1989), p.38

<sup>112</sup> Samson (1989), p.215

<sup>113</sup> Moore (2001), p.433

Moore preferred the third relationship because he believed that it would allow scholars to “communicate unambiguously and on an equal footing.”<sup>114</sup>

Moore further discusses how style and genre are similarly concerned with categorical distinctions, but an essential difference lies in their scope.<sup>115</sup> Here, style is a factor of personality and refers to “the identifiable characteristics of a composer’s music, which are recognizably similar from one work to another”;<sup>116</sup> whereas genre is always collective, musically and socially: “a person can have his or her own style, but not genre.”<sup>117</sup> Moore developed four ways of distinguishing style from genre:

- 1) Style refers to articulation of gestures; genre refers to their identity and context
- 2) Genre pertains to the ‘aesthetic’; style to the ‘poietic’
- 3) Genre is normally socially constrained; style emphasises the technical features, eliminating the social
- 4) Style operates hierarchically from the global to the local. Genre also operates hierarchically, but distinguishes ‘sub-genres’, which cover an entire genre territory, from ‘sub-styles’, which do not.<sup>118</sup>

Clearly, the genre/style relationship can be confused and potentially prove confusing: contradictory arguments suggest that each is subsumed within the other, with both terms having connections to extra-musical elements.

For the practical purposes of this research, genre is deemed to be collective and style deemed to be individual. This view embraces conventions that permit a genre to cross style boundaries. Genre patterns and elements may thus be appropriated from their original musical contexts and imported into a new hybrid context expressive of a composer’s individual style. This stylistic manipulation of genre conventions at the individual level is not typically indiscriminate; the choices are informed by various desires and conditions, which may expand or contradict genre expectations.

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<sup>114</sup> loc. cit.

<sup>115</sup> Moore (2001): The entire paper is dealing directly with this issue.

<sup>116</sup> David Cope, cited in Moore (2001), p.435

<sup>117</sup> Holt (2007), p.3

<sup>118</sup> Moore (2001), pp.441-442

## Genre in Composition

Genre is a factor that can influence both how a composer writes a piece and how an audience perceives it. A ‘generic contract’<sup>119</sup> develops between composer and listener.

The composer agrees to use some of the conventions, patterns, and gestures of a genre, and the listener consents to interpret some aspects of the piece in a way conditioned by this genre.<sup>120</sup>

This contract is signified to the audience in multiple ways such as “title, meter, tempo, and characteristic opening gestures”<sup>121</sup> and may also include what cannot appear.

Composers, performers, and listeners learn these conventions, patterns, gestures and elements of a genre, mostly through “experience in performing and listening rather than of explicit formal instruction in music theory, history or composition.”<sup>122</sup> Knowledge of the chosen genres is usually developed internally, without conscious thought, and is then brought into play throughout performance.

Even when a composer invents a new rule or, more commonly, discovers a novel strategy for realizing some existing rule . . . he or she finds a relationship that works, but may be unable to explain why it does so.<sup>123</sup>

While genre provides a foundation for musical creation, it is not mandatory to stay strictly within genre boundaries. “A composer can choose to write in a certain genre in order to challenge its attributes instead of to demonstrate an allegiance to them.”<sup>124</sup> Negus proposes three different views<sup>125</sup> on genre in composers: ‘Genericists’ who fit their musical practice into a specific genre and stay within this,<sup>126</sup> ‘Pastichists’ who recognize when a new genre has become popular and use it alongside their other genre choices; and ‘Synthesists’ who “draw on elements of an emerging generic style, but blend them in such a way as to create a new distinct musical identity.”<sup>127</sup> The portfolio compositions reflect the ‘synthesist’

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<sup>119</sup> This idea of ‘generic contract’ is comprehensively explored by Kallberg (1988), but also is discussed by Dubrow (1982), Moore (2001), Samson (1989), Hamm (1994), and Micznik (1994)

<sup>120</sup> Kallberg (1988), p.243

<sup>121</sup> loc. cit.

<sup>122</sup> Meyer (1989) p.10

<sup>123</sup> loc. cit.

<sup>124</sup> Kallberg (1988) p.244

<sup>125</sup> These views are discussed in more detail in: Negus, Keith. *Popular Music in Theory: an introduction*. Hanover & London: Wesleyan University Press, 1996, pp.145-146

<sup>126</sup> The Genericists fit readily into Fabbri’s definition of genre advanced in ‘A theory of musical genres’

<sup>127</sup> Negus (1996), p.146

approach, drawing on elements from a number of established genres and blending them, through a systematic method, to create new hybrid genres.

Pascall suggests four methods for genre development in composition: conformity by acceptance of conventions; evolution by modification through development of conventions; combination of existent features with imported features by supplementing the conventions; assembling existing features into a new genre by marrying the conventions.<sup>128</sup> The notion of ‘marrying the conventions’ is essentially the focus of hybrid genre composition. The creation of a hybridity table<sup>129</sup> provides a systematic method for this assembly of selected existing generic features.

While musical genres also contain elements that address social, cultural, and political ideas, this thesis focuses on the musical elements of genre. The systematic method for creating hybrid genre music proposed by this thesis is purely a tool for musical composition, and so deals only with those things that contribute to the musical or sonic qualities of that genre. This use of genres as a compositional tool is related to Eno’s interest

in the sound of the music, in the engineering point of view, in what the music can teach him as a composer, if a “political” meaning of music is important to Eno at all, it is restricted to the local level of interaction between musicians and between musicians and audience.<sup>130</sup>

### The Use of Genre in this Thesis

For the purposes of this research, genre refers to the organisation of musical elements in a collective sense. Each genre name refers to a specific set of musical events including: musical sounds and noise; musical time; musical elements such as melody and harmony; levels of complexity; and musical gestures. The elemental definition of each genre derives from: texts and musical examples in genre specific research; awareness of performance traditions; and the composer’s experience in the chosen genres. This research will not address social, cultural or semiotic explorations of genre; rather, it focuses entirely on the creation of music from specific musical elements. Any use of the term ‘style’ refers to the work of

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<sup>128</sup> Pascall (1989), p.236

<sup>129</sup> The hybridity table created for this thesis is discussed in detail in Chapter Two, pp.53-56

<sup>130</sup> Tamm (1988), p.35

specific individuals, not in a ‘genre’ sense; for example, *Push for Miles*<sup>131</sup> includes an improvisational section where the performer is instructed to play in the ‘style’ of Marcus Miller. Here, style refers specifically to Miller’s playing technique, sound, and the ‘riffs’ he would perform.

Following this distinction, the portfolio pieces are consistent in style, being the work of one composer. The juxtaposition and synthesis of chosen musical genre elements systematically shape the hybrid nature of each composition.

Particular genre labels are typically applied in broad, ‘umbrella’, fashion. Such classification is deemed necessary because recently developed genres have been generated as sub-genres from established genres.<sup>132</sup> The distinction between these new sub-genres is so minute that it requires acute listening to identify the single specific elements separating one sub-type from the other. It is, therefore, cumbersome to dwell on specific intricacies and differences when a holistic approach to key genre-signifiers is more beneficial to this composition method.

Defining individual genres relies, in part, on an individual’s interpretation, so genre names used in this portfolio, and their specific musical elements, are subjectively based on the composer’s interpretation. These genre definitions are developed through synthesising musical experience, listening to existing music, and from reading relevant musicological texts.

### **Previous Genre Crossings**

Genre crossing is not a new idea. Composers have often combined genres within a single work and this type of generic interaction tends to promote change.

Sometimes they merely alluded to a different genre in passing, leaving a short recollection of relatively minor significance in the piece. At other times they made more substantial reference to a foreign genre, so that a genuine mixture resulted.<sup>133</sup>

This section briefly explores variations in cross-genre music. The lists presented are not exhaustive, but aim to cover a cross-section of composer-musicians who

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<sup>131</sup> More information about *Push for Miles* can be found in Chapter Six, pp.148-159

<sup>132</sup> For example: Fornäs (1995); Lena & Peterson (2008); McLeod (2001); Neill (2002). Ennis (1992) discusses the continual development of genre and sub-genre through the concept of streams.

<sup>133</sup> Kallberg (1988), p.245

have worked in this field. Full exploration and discussion of all the creative output in this field is beyond the scope of this thesis, but it is relevant to showcase some of the artistic precedents that inform the stylistic impulse for the creative work in this portfolio.

It is important to note that although cross-genre music is not unknown, a *systematic* compositional approach, attempting to create balanced genre hybrid music, is a new concept. From the literature, including CD liner notes and video interviews, it would seem that the majority of cross-genre music has been, and continues to be, created intuitively: genre elements have been developed experimentally or included subconsciously, rather than purposefully and specifically composed as cross-genre music.

### Fusion Genres

The most common aspect of generic crossover is expressed as ‘fusion’ genres, based in one dominant genre, with additional ‘flavour’ elements from others.

Clear examples include:

- progressive rock
- jazz fusion
- experimental music
- Third Stream

Progressive rock practitioners intend rock to be “listening music”.<sup>134</sup> There was “an attitude of art-music ‘seriousness’ – critics often called it pretentiousness – that many of these musicians brought to their music making.”<sup>135</sup> Progressive rock music explores expanded musical structures and harmonies drawing additional genre elements from classical, jazz and world music.<sup>136</sup>

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<sup>134</sup> Covach, John. "Progressive Rock, 'Close to the Edge,' and the Boundaries of Style", in *Understanding Rock: Essays in Musical Analysis*. Ed. John Covach & Graeme M. Boone. New York: Oxford University Press, 1997, p.3

<sup>135</sup> *ibid.* p.4

<sup>136</sup> Discussed in Covach (1997) and Anderton (2010)

Artist	Album	Record Label	Year of Release
King Crimson	<i>In the Court of the Crimson King</i>	Island	1969
Yes	<i>Close to the Edge</i>	Atlantic	1972
Genesis	<i>Selling England by the Pound</i>	Charisma	1973
Pink Floyd	<i>Dark Side of the Moon</i>	Capitol	1973
Rush	<i>2112</i>	Anthem	1976
Dream Theater [sic]	<i>Metropolis pt.2: Scenes from a Memory</i>	Elektra	1999
Muse	<i>Origin of Symmetry</i>	Taste	2001

Table 1. Progressive rock selected discography

Jazz fusion is a genre label describing various combinations of jazz with other genres. Initially this term applied to jazz combined with rock, but has since included fusions with electronica, funk, blues, hip hop and dance music.<sup>137</sup> One key jazz-fusion work is Miles Davis' *Bitches Brew*. Lester Bangs' 1969 review of this album concluded:

I believe there is a new music in the air, a total art which knows no boundaries or categories, a new school run by geniuses indifferent to fashion.<sup>138</sup>

Artist	Album	Record Label	Year of Release
Miles Davis	<i>Bitches Brew</i>	Columbia	1970
Weather Report	<i>Weather Report</i>	Columbia	1971
Mahavishnu Orchestra	<i>The Inner Mounting Flame</i>	Columbia	1971
Herbie Hancock	<i>Headhunters</i>	Columbia	1973
Return to Forever	<i>Light as a Feather</i>	Polydor	1973
Jeff Beck	<i>Blow by Blow</i>	Epic	1975
John Scofield	<i>Loud Jazz</i>	Gramavision	1988
Jaga Jazzist	<i>What we must</i>	NinjaTune	2005

Table 2. Jazz fusion selected discography

The last two musical fusions for consideration clearly demonstrate crossover between the popular and art music worlds. The term 'experimental' is a genre prefix describing music challenging boundaries or definitions within specific genres, or combining disparate styles.<sup>139</sup> The primary genre focuses of selected certain exponents of 'experimental' music are:

- Frank Zappa: avant-garde, jazz, rock and classical<sup>140</sup>
- Brian Eno: rock, minimalism, soundscapes, pop and generative music<sup>141</sup>

<sup>137</sup> Discussed in Holt (2007); and Fellezs, Kevin. *Birds of Fire: Jazz, Rock, Funk, and the Creation of Fusion*. Durham & London: Duke University Press, 2011

<sup>138</sup> Quoted in: Holt (2007), p.99

<sup>139</sup> Discussed in detail in: Nyman (1999) and Demers (2010)

<sup>140</sup> Frank Zappa also completed a commission from Pierre Boulez: *A Perfect Stranger*.

<sup>141</sup> Tamm (1988)

- John Zorn: jazz, rock, hardcore punk, classical, contemporary classical music, klezmer, film, cartoon, popular, and improvised music – often presented in a collage-type manner<sup>142</sup>
- Aphex Twin: ambient, electronica, industrial, acousmatic, IDM<sup>143</sup>
- Christian Marclay: visual art, plunderphonics, noise, turntablism<sup>144</sup>

Artist	Album	Record Label	Year of Release
Frank Zappa	<i>Freak Out!</i>	Verve	1966
Frank Zappa	<i>Joe's Garage</i>	Zappa Records	1979
Brian Eno	<i>Discreet Music</i>	EG	1975
John Zorn	<i>Spillane</i>	Elektra Nonesuch	1987
Aphex Twin	<i>Selected Ambient Works 85-92</i>	Apollo	1992
Christian Marclay	<i>Record without a Cover</i>	Recycled Records	1985

Table 3. Experimental selected discography<sup>145</sup>

Third Stream music sits between jazz and classical traditions rather than combining the two. Ideally, a Third Stream composer is proficient in both jazz and classical music, and improvisation should be an important characteristic. Schuller defined Third Stream as “a new genre of music located about halfway between jazz and classical music”.<sup>146</sup> Charles Mingus’s final work, *Epitaph*, is considered by Schuller to be a groundbreaking example of Third Stream music: “It’s uncategorizable. It has nothing to do anymore with “jazz” or “classical” music, or anything. It’s just Mingus.”<sup>147</sup>

Artist	Album	Record Label	Year
Stan Kenton	<i>The Innovations Orchestra</i>	Capitol	1951
Modern Jazz Quartet	<i>Third Stream Music</i>	Atlantic	1960
Gunther Schuller and John Lewis	<i>Jazz Abstractions</i>	Atlantic Records	1962
Charles Mingus	<i>Epitaph</i>	Columbia	1990
Gunther Schuller	<i>Birth of the Third Stream</i> <sup>148</sup>	Columbia/Sony	1996
Yitzhak Yedid	<i>Myth of the Cave</i>	Between the Lines	2002

Table 4. Third Stream selected discography

<sup>142</sup> Milkowski, Bill. ‘John Zorn: One Future, Two Views’ in *Jazz Times*. March 2000, <<http://jazztimes.com/articles/20521-john-zorn-one-future-two-views>>

<sup>143</sup> Demers, Joanna. *Listening Through The Noise: The Aesthetics of Experimental Electronic Music*. Oxford & New York: Oxford University Press, 2010

<sup>144</sup> *ibid.*

<sup>145</sup> The order here is not chronological – but relates to the discussion in the paragraph above.

<sup>146</sup> Schuller, Gunther. *Musings: The Musical Words of Gunther Schuller*. Oxford & New York: Oxford University Press, 1986, p.114

<sup>147</sup> Schuller was the conductor of the premiere performance of this piece. Quote from a Boston Phoenix Review taken from <<http://mingusmingusmingus.com/mingus-bands/epitaph>>

<sup>148</sup> *Birth of the Third Stream* is a compilation of two earlier recordings that Schuller was involved in by Columbia Records: *Music for Brass* (1957) and *Modern Jazz Concert* (1958)



While the portfolio compositions draw on some of these fusion genres, they exhibit one fundamental difference between fusion genres and hybrid music: hybrid music strives for a conscious, balanced and equal use of all contributing genres, which fusion genres have not sought.

### Popular Composing Classical

There are numerous precedents for popular music composers writing in a ‘classical’ style. Their reasons for this genre change include escape from harmonic limitations, challenging the expectations of record companies, or merely doing something different.<sup>149</sup> Elvis Costello said of his ballet, *Il Sogno*, he was

not attempting to depart completely from recognizable forms or propose some entirely unprecedented musical language just because this is a new composition . . . These cues have the edges, angles that I go looking for in rock-and-roll, but the way they are achieved is utterly different.<sup>150</sup>

Steve Nieve’s opera *Welcome to the Voice* “lives on the juxtaposition of men who have rough, untrained voices, coming from jazz or rock, with women who have classically trained voices.”<sup>151</sup> The inclusion of different sounds from popular music in art music is also apparent in works by Duke Ellington, Jon Lord, and The Knife.

Artist	Title	Live Performance ensemble (p) or Record Label (l)	Year
Elvis Costello	<i>Il Sogno</i>	Deutsche Grammophon (l)	2004
Steve Nieve	<i>Welcome to the Voice</i>	Deutsche Grammophon (l)	2007
The Knife, Mt. Sims and Planningtorock	<i>Tomorrow, in a Year</i>	Rabid (l) (Commissioned by Hotel Pro Forma)	2010
Jonny Greenwood	<i>Popcorn Superhet Receiver</i>	BBC Concert Orchestra (p)	2005
Duke Ellington	<i>Black, Brown and Beige</i>	Columbia (l)	1958
Jon Lord	<i>Concerto for Group and Orchestra</i>	Deep Purple and Royal Philharmonic Orchestra (p)	1969

Table 5. Popular composing classical selected works

### Classical Appropriation

Appropriation is the basis of most musical exchange<sup>152</sup> and is apparent in the works of many art music composers. Mozart’s *The Magic Flute* fuses high and

<sup>149</sup> Toop, David. *Ocean of Sound: Aether talk, ambient sound and imaginary worlds*. London: Serpent’s Tail, 1995, p.85

<sup>150</sup> From the CD liner notes: Elvis Costello, *Il Sogno*. Deutsche Grammophon, 2004

<sup>151</sup> From the CD liner notes: Steve Nieve, *Welcome to the Voice*. Deutsche Grammophon, 2007

<sup>152</sup> Emmerson (2007), p.1

popular elements,<sup>153</sup> because Mozart wanted his music to be popular.<sup>154</sup> Chopin regularly included elements from different genres in a single work, blurring their edges, allowing them to blend and interpenetrate.<sup>155</sup> Kurt Weill's collaboration with Bertolt Brecht, *The Seven Deadly Sins*, is a 'ballet chanté' or sung ballet, fusing the traditions of opera and ballet. Neoclassicists, such as Hindemith in *Mathis der Maler* and Stravinsky in *Pulcinella*, use ideas and styles from both classical and baroque periods. Stravinsky was no stranger to appropriation,<sup>156</sup> frequently appropriating folk music, as did Bartók, Kodály, Falla and Vaughan Williams.<sup>157</sup>

While Third Stream music sought to create a new genre between jazz and classical, various classical composers have "taken aspects of jazz and other popular forms (straightened out) into their technique";<sup>158</sup> for example, Stravinsky's *Ragtime* and *Piano Rag Music*,

piles syncopation upon syncopation until the underlying beat almost disappears, submerging in lumpish and inelegant cleverness the clarity and grace which marks the best ragtime melody.<sup>159</sup>

Other composers who draw on jazz music include<sup>160</sup>

Artist	Title	Year
Claude Debussy	<i>Golliwogs Cakewalk</i>	1908
Igor Stravinsky	<i>Piano Rag Music</i>	1919
Darius Milhaud	<i>La Creation du Monde</i>	1923
George Gershwin	<i>Rhapsody in Blue</i>	1924
Ernst Krenek	<i>Jonny spielt auf</i>	1927
George Gershwin	<i>Porgy and Bess</i>	1935
Aaron Copland	<i>Clarinet Concerto</i>	1949
Leonard Bernstein	<i>West Side Story</i>	1957

Table 6. Classical jazz appropriation selected works

<sup>153</sup> Middleton, Richard. 'Musical Belongings: Western Music and Its Low-Other' in *Western Music and Its Others*. (ed. G. Born & D. Hesmondhalgh) Berkeley, Los Angeles & London: University of California Press, 2000, pp.62-66

<sup>154</sup> Christopher Small looks at and discusses how Mozart was very pleased that much of the music was re-arranged for dances and other entertainments. Small, Christopher. *Music of the Common Tongue: Survival and Celebration in Afro-American Music*. London & New York: John Calder & Riverrun Press, 1987, p.348

<sup>155</sup> Samson (1989), p.229

<sup>156</sup> "Stravinsky's appropriation of the past was a genuine artistic engagement, seeking to create modern works by reconstructing or accommodating past styles in a way that maintained his own integrity and identity in the history of music." Hyde, Martha M. 'Stravinsky's neoclassicism' in *The Cambridge Companion to Stravinsky* (ed. Jonathan Cross). Cambridge: Cambridge University Press, 2003, p.98

This can be related to the often-quoted remark: "A good composer does not imitate; he steals." – sources for this quote seem impossible to find, but it does echo the sentiment expressed by T.S Eliot when he said: "Immature poets imitate; mature poets steal; bad poets deface what they take, and good poets make it into something better, or at least something different." Eliot, T.S. 'Phillip Massinger' in *The Sacred Wood: Essays on Poetry and Criticism*. New York: Bartleby.com. 2000. Paragraph 5

<<http://www.bartleby.com/200/sw11.html>>

<sup>157</sup> Use of folk music in classical music is covered in detail in: Born and Hesmondhalgh (2000)

<sup>158</sup> Emerson (2007), p.1

<sup>159</sup> *ibid.* p.273

<sup>160</sup> The influence of jazz on classical is covered in more depth in the texts by: Small (1987); Born & Hesmondhalgh (2000); and, Middleton (2000).

There are numerous examples of current ‘classical’ composers who create work with an eclectic approach, drawing equally from musical elements and traditions of both classical and popular music, including:

Artist	Title	Year of premiere
Steven Mackey	<i>Physical Property</i>	1993
Michael Daugherty	<i>Metropolis Symphony</i>	1994
Thomas Adès	<i>Asyla</i>	1999
John Psathas	<i>Omnifenix</i>	2000
Gabriel Prokofiev	<i>Concerto for Turntables and Orchestra</i>	2007
Judd Greenstein	<i>What they don't like (for Chuck D)</i>	2007
Nils Frahm	<i>Said and Done</i>	2009
Mark-Anthony Turnage	<i>Hammered Out</i>	2010
Mason Bates	<i>Mothership</i>	2011
Ólafur Arnalds	<i>Near Light</i>	2011

Table 7. Current classical appropriation selected works

### Non-Western Influences

Numerous cross-genre works fuse Western musical traditions with non-Western traditions through experimentation across cultures.<sup>161</sup> The Beatles, Debussy, Satie, Varèse and Ives,<sup>162</sup> and the minimalists, all took inspiration from non-Western culture. Dance music has also been influenced by world music and non-Western global pop.<sup>163</sup> Given that the compositions in the thesis portfolio derive from Western musical traditions,<sup>164</sup> non-Western influence is not directly a relevant field of interest.

### Transcription and Orchestration

The concept of genre crossing may also be explored through transcription and orchestration of existing works by different performers in different genres. The cartoon music of Carl Stalling is full of genre switching transcriptions<sup>165</sup> where:

All genres of music are *equal* – no *one* is inherently better than the others . . . all are embraced, chewed up and spit out in a format closer to Burroughs’ cut ups, or Godard’s film editing of the ’60s, than to anything happening in the ’40s.<sup>166</sup>

<sup>161</sup> Cross-cultural fusions are discussed in: Born & Hesmondhalgh (2000); Taylor (1997)

<sup>162</sup> Discussed by Georgina Born in both: *Rationalizing Culture: IRCAM, Boulez and the Institutionalization of the Musical Avant-Garde* and *Western Music and Its Others*.

<sup>163</sup> World music and global pop covered in detail in: Taylor (1997)

<sup>164</sup> The only element of non-Western music found in the compositional elements of this portfolio is in the use of indigenous New Zealand Maori music and taonga puoro. Use of these musical elements results from direct contact with performer specialists in this music tradition, and they have provided the necessary guidance in the compositional approach. The analysis of the specific pieces to utilise these elements contains discussion about how these elements were used.

<sup>165</sup> The Kronos Quartet, and the duo of Bobby McFerrin & Yo-Yo Ma have both recorded different versions of *Purple Haze* by Jimi Hendrix. Jacques Loussier has built a career on jazz interpretations of the works of Bach (*Goldberg Variations*) and Vivaldi (*The Four Seasons*).

<sup>166</sup> CD liner notes to the Warner Bros. album *The Carl Stalling Project: Music from Warner Bros. Cartoons, 1936-1958*. Notes by John Zorn. 1990

Re-orchestrating popular music for performance with an orchestra has become common. Arguably the most well known example is the *S&M* recording by Metallica and the San Francisco Symphony featuring arrangements by Michael Kamen. Orchestrations of popular work occur regularly in New Zealand, examples of which offer direction on what does and does not work for combined genre forces. This portfolio does not include orchestration and transcription of existing works.

<b>Band</b>	<b>Title</b>	<b>Orchestra</b>	<b>Year</b>
Metallica (arr. Michael Kamen)	<i>S&amp;M</i>	San Francisco Symphony	1999
Split Enz (arr. Eddie Rayner)	<i>ENZSO</i>	New Zealand Symphony Orchestra	1996
Salmonella Dub (arr. Tom Rainey)	<i>Feel the Seasons Change</i>	New Zealand Symphony Orchestra	2008
Little Bushman (arr. John Psathas)	<i>Live in Concert with NZSO</i>	New Zealand Symphony Orchestra	2008
Serj Tankian (arr. John Psathas)	<i>Elect the Dead Symphony</i>	Auckland Philharmonia Orchestra	2009
Various Artists (arr. Kenneth Young)	<i>REMIX the Orchestra</i>	Auckland Philharmonia Orchestra	2013
Sir Mix-a-Lot (arr. Gabriel Prokofiev)	<i>Baby Got Back</i>	Seattle Symphony Orchestra	2014

*Table 8. Orchestral transcriptions selected examples*

### Film Music

Film scores encompass an enormous variety of music genres, depending on the nature of the films they accompany; many draw on Western classical music, and increasingly from jazz, rock, pop, electronica, blues, ambient music, together with ethnic and world music styles. Since the 1950s, a growing number of scores have included electronic elements; currently, many feature a hybrid of orchestral and electronic instruments.

Improvements in digital technology and audio sampling enable digital imitation of live instrumental performance. Many scores are created and performed wholly by the composers themselves and may include various electronic noises, found-sound, and audio manipulation within more traditionally orchestrated textures. These same ideas and approaches can apply to film scoring technique, television shows and video games.

Composer	Film	Company	Year of Release
Hans Zimmer	<i>Dark Knight Rises</i>	Warner Bros.	2012
Hans Zimmer	<i>Sherlock Holmes</i>	Warner Bros.	2009
Brian Transeau (BT)	<i>Stealth</i>	Columbia	2005
Amon Tobin	<i>Tom Clancy's Splinter Cell: Chaos Theory</i>	Ubisoft	2005
Michael Giacchino	<i>Lost</i>	ABC	2004-2010

Table 9. Modern genre crossing film/television scores selected works

A previous generation of film scoring composers such as Henry Mancini and Ennio Morricone recognised the innovatory potential in genre combination and utilised cross-genre references in their work.

There was a time when the lines separating Pop, Jazz, Rock, Folk, Country, Latin and Rhythm and Blues were clearly defined. These lines are being crossed with increased frequency . . . That which is far out today becomes commonplace tomorrow. The truly professional writer must keep up with the ever shifting scene.<sup>167</sup>

### Sampling, Mash-up and Collage

Sampling technology is a significant tool in the development of new genres. Sample-based ‘montage genres’ select sounds from a variety of recorded genre sources, layering them to create something new. This “juxtaposition and superposition of different musical styles create[s] a kind of ‘cultural tension’, which often replace[s] other kinds of musical tension.”<sup>168</sup> One extreme example of this tension through layering became known as *plunderphonics*.<sup>169</sup> Many of the more recent popular musics<sup>170</sup> have sampling as a key element. Hip hop, for example, is largely built around the sounds found on records in the DJ’s crate. Based on the concept of ‘the break’,<sup>171</sup> hip hop is created through the manipulation and rearranging of sounds from funk, soul, jazz and electronica.<sup>172</sup>

<sup>167</sup> Mancini, Henry. *Sounds and Scores: A practical guide to professional orchestration*. (2<sup>nd</sup> ed.) USA: Northridge Music, Inc. 1967, p.243

<sup>168</sup> Emmerson (2007), p.1

<sup>169</sup> A detailed discussion of plunderphonics can be read in: Cutler, Chris. ‘Plunderphonics’ in *Music, electronic media and culture*. (ed. S. Emmerson) England: Ashgate Publishing, 2000

<sup>170</sup> Electronic dance Music (+ sub-genres), and hip hop for example.

<sup>171</sup> ‘The break’ is where all elements of a song, except for the percussion, disappear – a short drum solo. Different to a ‘breakdown’ where the track is deconstructed to minimal elements and then gradually reconstructed: “Breaks are for the drummer; breakdowns are for hands in the air.” - Brewster, Bill and Broughton, Frank. *How to DJ Right: The Art and Science of Playing Records*, New York: Grove Press. 2003, p.79

<sup>172</sup> There are a number of texts that look at sampling in hip hop including work by: Demers (2010); Shuker (2003); Beadle (1993); Cox & Warner (2004); Bennett (2001); Borthwick & Moy (2004); McLeod (2001); and Fornäs (1995).

Another recent development in cross-genre music, again from the DJ world, is a ‘mash-up’ where a DJ takes the vocals from one song and the accompaniment from another (often of different genres) and by syncing the tempos of each track creates a type of new hybrid song. These ‘mash-up’ mixes rely on the effective use of juxtaposition and clever mixing. The prevalence of internet-based file sharing technologies, and websites such as YouTube and SoundCloud, disseminate the developing ‘mash-up’ techniques. Now tools like Ableton and various controllerism<sup>173</sup> DJ techniques have created mash-ups beyond simple juxtaposition of tempo-matched tracks to become original collage works.

‘Collage’ music is not restricted to modern DJ-influenced music cultures. Early electroacoustic works were created as audio collages. In the 1960s, composers such as Luciano Berio, George Rochberg and Karlheinz Stockhausen utilised sampling as a form of musical borrowing to create their collage works.

Whereas serial composers looked inward, tinkering with ever more intricate operation, composers of collage works looked out at a vast realm beyond the row, one full of, among the infinite array of sounds, the music of Beethoven, the novels of Beckett, and the noises of a Chinese market. Tantalized by that vista, many composers left the confines of the row and ventured into that space.<sup>174</sup>

These composers used various terms to describe collage works:<sup>175</sup> Rochberg devised *ars combinatoria* in which “unaltered pieces of the past and present butt up against each other”;<sup>176</sup> Berio described ‘interrelationships’ which “reached out to and connected a diverse collection of seemingly unrelated elements”;<sup>177</sup> Stockhausen’s offering was ‘intermodulation’ which “allowed the composer to connect two sounds by blending them into one”.<sup>178</sup> These different techniques take the aesthetic approach towards collage and re-work them to suit the composer’s artistic aims; a similar reworking can be found in the portfolio compositions.

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<sup>173</sup> Controllerism is a term that describes the use of MIDI Controller units in the live performance of sample-based music. There is an ever-growing array of various MIDI Controllers available – and the various techniques and technologies are regularly reviewed online by websites like <www.djtechttools.com> and <www.controllerism.com>

<sup>174</sup> Metzger, David. *Quotation and Cultural Meaning in Twentieth-Century Music*. Cambridge & New York: Cambridge University Press, 2007, p.110

<sup>175</sup> Metzger (2007) covers these different terms and their use in the writing and compositions of these three composers in the chapter ‘The promise of the past’, pp.108-159

<sup>176</sup> *ibid.* p.117

<sup>177</sup> *ibid.* p.129

<sup>178</sup> *ibid.* p.141

## Exploration Between Genres

The conceptual thrust of this thesis relies on determining workable definitions of genre and style, and the concepts of hybridity and genre synthesis. The core of the creative work in the portfolio reflects not only a synthesis of popular music genres, but also a balance between the worlds of popular and art music.

### ‘Popular Art Music’?

The relationship between ‘art’ musics and vernacular (or ‘popular’) musics in Western society is complex and has a long history. From engagement and synthesis to incomprehension and antagonism, this relationship has reflected larger social trends - themselves the product of economic and technological change.<sup>179</sup>

Broad differences are perceived to exist between art and popular music – the high and the low. Although locations, audiences and general practices of both categories differ, it is education which determines the major difference, through learning, making and performing music. Art music discourse is generally organised around traditional notions of musical scholarship. Competence in art music is based on

a sophisticated knowledge of the codes of representation, a knowledge that allows [one] to savour questions of form, genre, school, and so on. The pleasure is highly mediated and readily articulated in exegeses and judgments.<sup>180</sup>

Conversely, in popular music, musical education and performance practice is generally removed from traditional ideas of scholarship, and is instead developed through experimentation with instruments and copying recordings: “this means that in most popular music genres music-making emerges from obsessive music listening; a certain sort of fandom is built into the process.”<sup>181</sup> The vernacular musician often revels in the lack of music education, seen as a constraint to authenticity and creativity.

Aesthetically, art and popular music are seen to differ significantly. The word ‘popular’ is often linked with generic ideas and is perceived to be of lesser quality because it “appeals to so many by virtue of being, simplistic, schematic, and

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<sup>179</sup> Emerson, Simon. ‘From Dance! To “Dance”: Distance and Digits’ in *Computer Music Journal*, Vol. 25, No. 1 (Spring 2001), pp. 13-20: The MIT Press, p.13

<sup>180</sup> Born, Georgina. *Rationalizing Culture: IRCAM, Boulez and the Institutionalization of the Musical Avant-Garde*. Berkeley, Los Angeles & London: University of California Press, 1995, p.28

<sup>181</sup> Frith (1996), p.55

repetitive.”<sup>182</sup> But it is difficult to argue that such popular music recordings as *Sgt. Pepper’s Lonely Hearts Club Band*<sup>183</sup> or *Pet Sounds*<sup>184</sup> are simplistic or generic. Ranking art is not limited to differences between art and popular music; there are different levels of perceived aesthetic value in each of those individual categories.

Young consumers of rock music today distinguish many genres just within electronic pop music: jungle, house, deep house, tech house, drum and bass, ambient, breakbeat, downtempo, trance, and they do so to embrace some and reject others. They regard some forms of pop music as superior and ultra-sophisticated and other forms as being beneath contempt . . . So, relative to classical music and its audience, all pop genres may seem low art, whereas to fans of electronica, mainstream rock may seem hopelessly naïve and common compared to their music.<sup>185</sup>

In Western theories of aesthetics, artistic impulse can be summarised under four categories: “mimetic (art as a reflection of life), functional (art in the service of society), emotional (art that affects members of society), and formalist (art that embodies beauty and skill in its form).”<sup>186</sup> While these clearly apply to ‘art’ music, ‘popular’ music also reflects these aesthetic impulses.

Many aesthetically important properties – such as narrational, representational, and expressive ones, or others such as unity in diversity – are common to many genres, periods, or styles.<sup>187</sup>

The other perceived differences between popular and art music lie in the arenas of movement, notation and musicianship. While popular and art music may differ in each of these arenas they are not necessarily definitively distinct. With regard to movement, popular music is generally perceived to be more connected to dance and the body than art music, but it is not difficult to find examples of rhythmic, dance-based art music. The notion of movement providing a difference in music is essentially linked to its presentation.

Of course, rock music that is written to be danced to is danced to when it is played at dances, but this is how people respond to dance music at dances, and it is how they always have done.<sup>188</sup>

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<sup>182</sup> Swirski, Peter. *From Lowbrow to Nobrow*. Montreal & Kingston: McGill-Queen’s University Press, 2005, p.29

<sup>183</sup> The Beatles, *Sgt. Pepper’s Lonely Hearts Club Band*. Parlophone, 1967

<sup>184</sup> The Beach Boys, *Pet Sounds*. Capitol, 1966

<sup>185</sup> Fisher, John A. ‘High Art versus Low Art’ in *Routledge Companion to Aesthetics*. 2<sup>nd</sup> ed. (eds. B. Gaut & D. Lopes) London: Routledge Press, 2005, p.530

<sup>186</sup> Swirski (2005), p.30

<sup>187</sup> Davies, Stephen. ‘Rock versus Classical Music’ in *The Journal of Aesthetics and Art Criticism*, Vol. 57, No.2, Aesthetics and Popular Culture (Spring, 1999), Wiley, p.203

<sup>188</sup> *ibid.* p.197



With regard to notation, popular music generally uses little or none, whereas art music is often precisely notated. Discussions on the use of notation focus on freedom. Lack of notation in popular music may be a “barrier to the preservation of a performance or interpretation in all its subtle details”,<sup>189</sup> but there are many rock groups who accurately recreate recordings in live performance. In art music, notation may specify every element of performance, but there are “interpretive niceties”<sup>190</sup> which remain part of a performance from notation.

Musicianship displays the qualities of virtuosity, natural talent, interpretation, and visceral reaction. Obvious differences exist between art and popular music with regard to score reading and improvisational abilities, but the essence of musicality in both popular and art music “depends for its successful performance on inflections and articulations that are controlled by the performer”,<sup>191</sup> whether they are reading from a score or not.

All music, classical as much as other kinds, produces a visceral response in those who are familiar with, and who enjoy, its style and idiom. This reaction usually is unselfconscious but it is not thereby non-cognitive.<sup>192</sup>

Despite their perceived differences, similarities exist between pop and art music. Both use imitation as a source of individual creativity, crafting ways of recreating what has already been done. This use of imitation can be both implicit and explicit in the musical outputs of composer and musicians in both areas of music. Other similarities exist on some basic harmonic levels, some rhythmic ideas, and in the use of technology. The differences and similarities between these areas of music are explored and addressed through the systematic method of genre hybrid composition developed in this portfolio.

The ideas of the hybrid music proposed in this research address the synthesis of the different compositional approaches and techniques found in art and popular musics. The musician Frank Zappa is one artist of the late twentieth century who repeatedly addressed this interface.

The sense of a hybrid practice on Zappa’s part, one in which the exigencies of “art” music, whose basic essence is always notated

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<sup>189</sup> *ibid.* p.198

<sup>190</sup> *loc. cit*

<sup>191</sup> *ibid.* p.201

<sup>192</sup> *ibid.* p.197

and which always approaches a more or less definitive form, co-exist with those of more “popular” idioms, constantly under revision according to the demands and influences of performance situations, where the idea of definitive form may be chimerical or simply irrelevant.<sup>193</sup>

Thus, the idea of hybridity moves beyond both the manipulation of any specific set of musical patterns, and contrasting compositional and performance practices. The portfolio aims to address these contrasting compositional and performance practices within the context of hybrid genre music.

The blending of popular and art music into a cross-genre hybrid offers an opportunity to present familiar musical elements in new contexts.

As music is heard and played differently or in new circumstances, it is not surprising that various kinds of crossover take place between ‘high’ music traditions and ‘popular’ music. This kind of formal hybridization has the effect of changing our ideas and connotations of particular musical styles.<sup>194</sup>

This blending of traditions may help “to ‘de-museumise’ – in a certain sense, to popularise – all of the arts which have in their increasing institutionalisation become increasingly isolated from broad constituencies.”<sup>195</sup> Cross-genre hybrids address the combination of these musics, exploring a postmodernist aim to create music that

seeks to blur, if not totally dissolve the traditional oppositions and boundaries between the aesthetic and the commercial, between art and the market, and between high and low culture.<sup>196</sup>

The portfolio compositions present an exploration of this idea: the creation of popular art music.

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<sup>193</sup> Jonathan W. Bernard, "The Musical World(s?) of Frank Zappa: Some Observations of His "Crossover" Pieces," in *Expression in Pop-Rock Music: Critical and Analytical Essays*, 2nd ed., (ed. Walter Everett) New York: Routledge, 2008, pp.160-161

<sup>194</sup> Durant, Alan. 'Improvisation in the Political Economy of Music' in *Music and the Politics of Culture*. (ed. C. Norris) Great Britain & New York: St. Martin's Press, 1989, p.254

<sup>195</sup> Garnett, Guy E. 'The Aesthetics of Interactive Computer Music' in *Computer Music Journal*, Vol. 25, No.1 (Spring 2001), The MIT Press, p.30

<sup>196</sup> Shuker (1994), p.28

## Genre-crossing and Genre-busting

Nowhere are genre boundaries more fluid than in popular music. Just as it is impossible to point to a perfectly exemplary Haydn symphony, one that fulfils the “norms” in every respect, pieces within a popular genre rarely correspond slavishly to general criteria. Moreover, musicians are ceaselessly creating new fusions and extensions of popular genres.<sup>197</sup>

Genre development is in a constant state of flux. When any new genre is created, practitioners often create further sub-genres, expanding, developing and adapting previous iterations. Changes of genre come about

not through the gradual transformation of complex entities but through the permutation and recombination of more or less discrete, separable traits or clusters of traits. And the traits involved may come . . . from sources of disparate stylistic and cultural provenance.<sup>198</sup>

Genre synthesis or hybridity may be a conscious choice, using and recombining or recontextualising simpler parts from a more complex whole. Cross-genre hybrids are created through the deliberate separation of individual elements, which are then reworked into new hybrid forms.

Because genre boundaries are fluid they may overlap and be viewed differently in different contexts.

A given musical text may belong to more than one genre simultaneously, either due to context under consideration, or because the text presents a synthesis that exceeds contemporary comprehension of generic boundaries.<sup>199</sup>

Musical genres are steadily crossing these fluid boundaries that develop and transform as genres intersect.<sup>200</sup> When genre boundaries are broken down

a process of hybridization is at work. This inevitably leads to many concerns about the nature of reuse and recontextualisation: about taking something associated with one genre, one historical time frame, one culture and putting it in another.<sup>201</sup>

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<sup>197</sup> Walser, Robert. *Running with the Devil: Power, Gender, and Madness in Heavy Metal Music*. Hanover: University Press of New England, 1993, p.27

<sup>198</sup> Meyer (1989) pp.17, 20

<sup>199</sup> Brackett, David. ‘(In search of) musical meaning: genres, categories and crossover’ in *Popular Music Studies* (ed. D. Hesmondhalgh & K. Negus) Great Britain: Arnold Publishers, 2002, p.67

<sup>200</sup> Fluid genre boundaries are discussed in detail: Frith (1996); Shuker (2001); Holt (2007); and, Negus (1999).

<sup>201</sup> Waters, Simon. ‘Beyond the acousmatic: hybrid tendencies in electroacoustic music’ in *Music, electronic media and culture*. (ed. S. Emmerson) England: Ashgate Publishing, 2000, p.57

Music which exists between genres will challenge thinking about genre itself, providing new ways to create. Fabian Holt considers music between genres to involve: decentred models of genre; music having qualities defying categorical fixity; spaces between genres as valid sites of musical inquiry; spaces as significant for transformation; and connections unfolding across borders *ad infinitum*.<sup>202</sup> The works in this portfolio are intended to test these propositions by synthesising music whose character and identity reflect the ‘space’ between genres.

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<sup>202</sup> A more detailed description is available in: Holt (2007), pp.159-160

## **Chapter Two: Application of Method to Theory**

The first half of this chapter discusses the methodology, including: the composition portfolio; the subsequent reflective analytical approach for the original compositions; the tradition of composition as research and the creative process; the technique of composition; and an examination of musical borrowing. The second half of this chapter explores the techniques and technologies involved in the compositional process: an introduction to the hybridity table as a systematic compositional method developed for the portfolio; the use of sound, technology, and the recording studio in the compositional process; the role of improvisation; and the selection of performers.

### **Introduction to the Methodology**

This portfolio constitutes creative practice-based research. Two complementary methodologies are used: one creative and the other analytical. The creative component is a portfolio of original musical compositions, and is accompanied by this written dissertation, providing analytical insight into the musical compositions.

The research output is an original contribution, both in the composition of new music, and in creating and utilising a systematic compositional method to create a balanced synthesis of genres beyond collage or juxtaposition. The key to establishing this balance is through the development of the ‘hybridity table’<sup>203</sup> as a tool to bring the selected musical elements of each genre into a pre-planned balance. This allows the composer to craft the genre balance of each piece before composing, guiding the compositional process toward the creation of balanced hybrid music.

### **Original Compositions**

The compositions in this portfolio aim to blend musical materials and techniques in a systematic way thereby enabling the combination of apparently incompatible compositional elements. Ideally, this serves as a catalyst for a unique musical voice to develop, through experiments in hybridisation. The compositional

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<sup>203</sup> Discussed later in this chapter, pp.53-56

approach utilised in the creation of this portfolio draws on: the composer's previous genre experience; musical analysis of appropriate repertoire; and, music production knowledge of the specific genres used. By extrapolation, the composer may then assess the necessary musical, aesthetic and sonic elements for use in the composition by way of a hybrid genre study. This study provides a compositional framework to identify key techniques and tools necessary for the creation of new hybrid genre music.

Each work in the portfolio responds to the research questions from a slightly different artistic angle, systematically using different key genre elements within a consistent hybridity table. The compositions thus created provide possible answers to the research questions. They are written to utilise genre-specific live performers along with readily available technology, and synthesize selected musical genres including:

- Western popular music from 1920-2010
- Western European classical 'art' music
- sound art
- traditional New Zealand Maori taonga puoro

The portfolio contains the following works:

1. *Tracking Forward* for viola, backing track and video
2. *The Long White Cloud* for flute, viola, cello, trumpet, keyboard, guitar, bass, drums, electronics, turntables, taonga puoro and backing track
3. *'Colorless green ideas sleep furiously'*<sup>204</sup> for orchestra
4. *Push for Miles* for electric bass and backing track
5. *Norse Suite* for viola and cello
6. *The Foggy Field* a studio construction
7. *Into the Nocturnal Sunshine* for flute, viola, cello, drums, electronics and backing track
8. *One Night, New Breath* structured improvisation for taonga puoro, viola, drums, turntables and electronics
9. *Sketches of an Intergalactic Earworm* for piano, violin, cello and boombox

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<sup>204</sup> "Colorless green ideas sleep furiously" is a sentence composed by Noam Chomsky in his 1957 *Syntactic Structures* as an example of a sentence that is grammatically correct, but semantically nonsensical. Thus the American English spelling is maintained.

The primary research method in this creative practice-based portfolio is informed by a tradition of composing<sup>205</sup> which outlines the compositional process from conception to completion. In doing so, elements of intuitive compositional action may be consciously combined with a systematic method of genre synthesis. This informs the development of compositions through generative creative practice. The compositional process also involves a range of musical and production techniques, tools and technologies more fully described in the analytical section. The portfolio includes scores, audio CDs and DVDs of recordings/performances of the works.

### **Analysis of Compositions**

The secondary research method applied to the portfolio entails analytical commentaries on the compositions. In his *Poetics of Music*, Igor Stravinsky discusses the importance of introspective reflection as a tool for uncovering both the workings of the compositional process and how the compositional voice is developed across a range of musical works.<sup>206</sup> Introspective reflection is a vital tool for the composer-researcher because it informs the structure of analytical commentary. It makes an important contribution to both the listener's and the reader's perception of each piece, enhancing awareness of various processes used in the composition of hybrid music.

Guided by this introspective reflection, the analytical commentary examines: the creative impulses behind each work; the use of the hybridity table; key compositional techniques; the integration of intuition into the conscious compositional process; the solution of technical demands; the role of technology; the awareness of genre traditions; and the use of improvisation. The analysis will show how these various elements have been used in each composition, providing an additional means of addressing the research questions beyond the compositions themselves.

Each composition is analysed, addressing the important features, with particular emphasis on the technical elements of composition,<sup>207</sup> and the hybrid genre

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<sup>205</sup> The idea of the 'tradition of composing' is covered in detail on page 45 of this chapter.

<sup>206</sup> Stravinsky, Igor. *Poetics of Music in the form of six lessons*. New York: Vintage Books, 1947, p.50

<sup>207</sup> Pitch organisation, structure, motivic development, use of technology

perspective.<sup>208</sup> An additional reflective element in the analytical commentaries explores relevant compositional decisions and difficulties, together with any musical compromises and revisions. Because much of the portfolio was written for specific performers, these reflective discussions will explore the relationship between the composer and performer, and how writing for specific performers informed the compositional process.<sup>209</sup>

While performance is important in the interpretation of any musical work, particularly in this type of hybrid genre music where performance, interpretation and improvisation are key elements, this thesis focuses on composition, not on recorded or performed outcomes. The recordings on CD and DVD were captured in a live performance setting,<sup>210</sup> are indicative of the piece and not intended to be the definitive ‘studio-recording’ version of the work.

### **Tradition of Composition**

There is a tradition of composers preparing for and creating new works in specific circumstances.<sup>211</sup> Along with the notation-specific approach of placing notes on the stave, the composition process may involve: studying relevant repertoire from the past; investigating the technical possibilities of particular instruments, ensembles or technologies; developing solutions to notation issues; and working collaboratively with specialist performers, producers and other technical experts to create new and communicative artistic outcomes.

Composition is the synthesis of all other musical disciplines – the ultimate unity, and the keystone. It puts together all the theories or techniques that make up the essence of music, its performance, and its study from a historical point of view.<sup>212</sup>

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<sup>208</sup> Exploring internal genre layers, sonic choices, production techniques, genre synthesis and use of the hybridity table.

<sup>209</sup> A further discussion of writing for specific performers and unique ensembles will be discussed later in this chapter, p.68

<sup>210</sup> Except: *Colorless green ideas sleep furiously* – MIDI sample-based mock-up; *The Foggy Field* – a studio-based composition; the ‘Rolling Stock’ (standalone film) version of *Tracking Forward* is a final studio recording.

<sup>211</sup> This approach is crafted to suit the individual composer, and is based on concepts of compositional training in specific genres. Contemporary ‘classical’ composition is often learned through advanced study with established composers – these composition classes teach various approaches and traditions in composition.

<sup>212</sup> Brindle, Reginald Smith. *Musical Composition*. Oxford & New York: Oxford University Press, 1986, pp.1-2



This portfolio intends to maintain proven tradition, tailored as appropriate to the particular needs of each composition.

Invention cannot exist in the abstract, it originates in contact with music of the past, be it only the recent past; it exists through reflection on its direct or indirect antecedents.<sup>213</sup>

Every composer lives in a particular cultural environment and develops from a unique artistic soil. This is reflected in their compositional approach and witnessed in their compositional output. It also means that certain musical patterns, modes of thinking and working will be ingrained and others learned, while others again may be modified through conscious reflection and investigative work and thinking. The composition process applied in this research is directed by the hybridity table, which synthesises ingrained, learned and modified modes of thinking into a new creative approach.

The most obvious element of composition tradition is the creative process a person adopts to generate a creative product.<sup>214</sup> This process may include collecting ideas, selecting and rejecting, problem solving and verifying the final creative product. Two key theorists in this area are Wallas and Webster. Wallas' theory, one of the earliest in the field, postulates movement of the creative process through four stages: preparation – knowledge in field of study; incubation – development of ideas after a period of time spent away from the problem; illumination – finding a solution to the problem, or generating a creative idea for the composition; verification – the idea is put into practice and the feasibility, musicality and creativity of the generated idea is tested in the context of the piece.<sup>215</sup>

Webster's *Model of Creative Thinking in Music* features five cyclic parts of the creative process between intention and output, (fig. 1) in which creative thinking is driven by the need to solve a problem.

In the arts, the problem is more a “force” in the creator that inspires or drives the creative spirit. In music, the response to this force is

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<sup>213</sup> Boulez, Pierre. ‘Technology and the Composer’ in *Leonardo* vol.1, no.1 (Winter 1978), p.59

<sup>214</sup> There are number of other scholars who have explored this area, but a detailed study of the creative process is outside of the scope of this doctoral research.

<sup>215</sup> This concept originally comes from: Wallas, Graham. *The Art of Thought*. But as the original source could not be located, this theory is discussed in: Herrmann, Ned. *The Creative Brain*. Lake Lure, N.C.: Brain Books, 1989.

embodied in (a) composition, (b) performance/improvisation and (c) listening and analysis.<sup>216</sup>

The creative practice-based research of this thesis rests within the tradition of composition and the creative process; the research output, in this case the portfolio, uses the research methodology of composition and creativity to provide one solution to the research question, ‘how can a contemporary New Zealand composer navigate and systematically hybridise selected musical elements from different musical genres into artistically credible new works?’

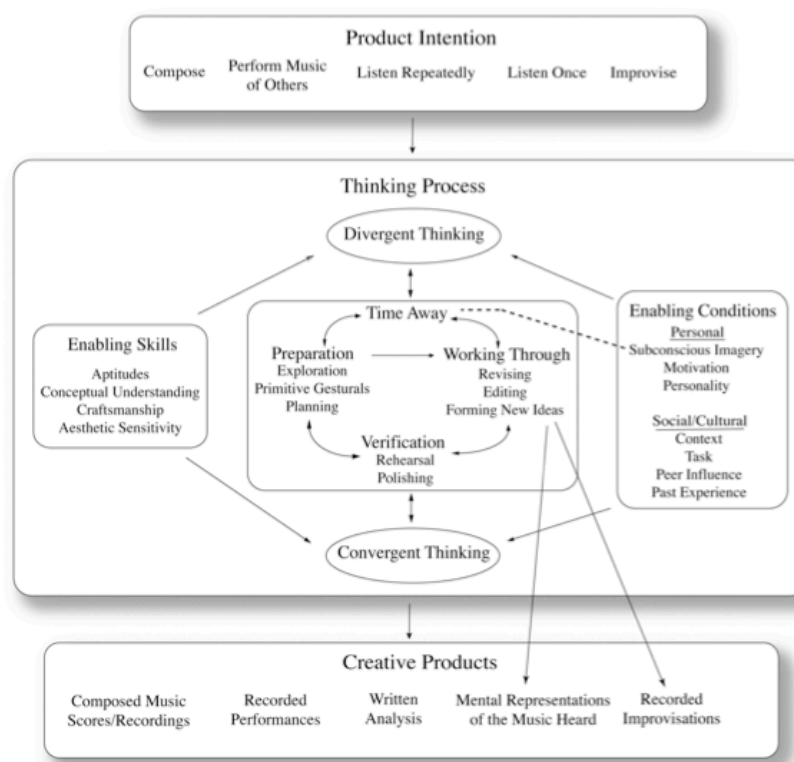


Figure 1. Webster's model of creative thinking process in music<sup>217</sup>

Informed by this process, the creative process for this thesis is:

1. Creation of a hybridity table with selected elements from each genre listed. These elements will be selected through critical listening to genre repertoire, previous experience in the selected genres and reading genre-specific literature.
2. Decisions about treatment of the musical elements: juxtaposition or synthesis. The methods for synthesis are composition specific.
3. Address the different aesthetics within each chosen genre, and determine how these will be combined.

<sup>216</sup> Webster, Peter R. 'Creative Thinking in Music: Advancing a Model'. *Creativity in Music Education*. n.d. Web. Accessed: 24 November 2013, <<http://www.peterrwebster.com/pubs/WillinghamBook.pdf>> p.13

<sup>217</sup> *ibid.* p.12

4. Selection of composition techniques and technologies. This includes: organization of pitch and harmony, use of rhythm, timbres, effects, notation systems, levels of improvisation, and performance values.
5. Composition of the music using the tools, guidelines and systems discovered in steps 1 – 4. This includes further study of relevant repertoire and discussion with the specific performers required for each piece.
6. Performance, with recording, of each piece.

### **Compositional Technique**

Compositional techniques are chosen specifically to suit the performers, genres and structures for each piece. This includes choices regarding extended techniques, technological requirements, pitch organization, and forms. Specific compositional techniques are discussed and elaborated on in subsequent analysis chapters. The nature of hybrid composition also suggests a blurring of traditional ideas of specific roles. In a hybrid genre composition the roles of composer, performer, producer, engineer and improviser are fluid. While not all hybrid compositions necessitate combination of all roles identified above, the hybrid music composer must be adaptable and multi-skilled to assume these roles, where necessary, to suit the hybrid composition.<sup>218</sup>

As with selection of specific techniques, the choice of performers is inexorably linked to specific genres. In most cases, performers specialise in certain genres; they develop and refine techniques for working within genre conventions; they are familiar with the repertoire and relevant musical gestures; they express an individual style and timbre appropriate to performance in that genre world. For these reasons, then, the music in this portfolio has been written for, and with guidance from, the specific performers of respective pieces.<sup>219</sup>

The choice of genres, performers and ensemble size also dictates choice of notation system, and the level of improvisatory input.

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<sup>218</sup> This idea of the composer as producer/performer/improviser is addressed in sections on: 'Sound, Idiolect and the Producer', p.56; 'Electronics and Rhythm', p.61; 'The Recording Studio as a Compositional Tool', p.62; and, 'Improvisation and Performance', p.64

<sup>219</sup> Selection and involvement of specific performers is discussed in 'A unique ensemble', p.68

The larger the musical group, the more there is a need for a kind of mutual subordination of individual voices. But that subordination can be one that we choose.<sup>220</sup>

Any improvisational elements are structured to guide performers towards the intended compositional goal, whether to embrace their performance practice and culture or to circumvent or rearrange learned performance practice.<sup>221</sup>

### **Musical Borrowing**

If we examined all music that borrowed in some way from its predecessors, we would be examining all music.<sup>222</sup>

One of the central considerations at the core of any hybrid music is musical borrowing. Specific genre elements and sonic characterisations are crucial in the systematic compositional process; without drawing on the musical traditions and repertoire of selected genres it would be impossible for the composer to address the generic contract central to engagement with any specific genre.

In this portfolio new hybrid genre music has not been created by extracting abstract genre principles, then formulating the new hybrid genre from those; rather, specific genre elements and characteristic features of the chosen genres are selected and recombined in a systematic way. This means that while the individual elements may be familiar, the resultant sound created will be new. The familiarity of certain genre elements will, at times, reach the point of cliché, where the musical element becomes an excessively clear representation of a musical genre, which is then placed in new contexts to take on a new meaning.

Musical borrowing<sup>223</sup> is used here as an umbrella term for quotation, stylistic allusion, genre cliché and audio sampling. In general, borrowed material is altered to fit a new context, thus transforming the original identity. Musical borrowing therefore has two distinct parts:

- 1) The original, prior to any alterations

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<sup>220</sup> Benson, Bruce Ellis. *The Improvisation of Musical Dialogue: A Phenomenology of Music*. Cambridge & New York: Cambridge University Press, 2003, p.176

<sup>221</sup> Improvisation and the compositional process is discussed in 'Improvisation and Performance', p.64

<sup>222</sup> Burkholder, J. Peter. 'The Uses of Existing Music: Musical Borrowing as a Field' in *Notes*, Second Series, Vol. 50, No. 3 (Mar. 1994), Music Library Association, p.863

<sup>223</sup> Musical Borrowing as an umbrella term is discussed in Burkholder (1994), pp.861-862

- 2) The transformation, involving “any alterations made to the original as well as the changed form it assumes in its new context.”<sup>224</sup>

An unprecedented awareness of music from the past and from other cultures developed during the twentieth century.<sup>225</sup> For many composers, exposure to other musics, consciously and subconsciously, informs their output. From such musical awareness “quotation became a prevalent, if not indispensable, gesture for musicians in confronting the spectrum of music surrounding them.”<sup>226</sup> The creative work in this portfolio consciously draws on music from the past, systematically developing musical links across various genres. The goal in the composition of hybrid music in this creative-research context is the conscious inclusion of specific elements from selected genres in the creation of new music. Therefore, this research relies on transparency with regard to musical borrowing.

In the creative output of this thesis the main forms of musical borrowing are: genre allusion; use of principal structural elements<sup>227</sup> from various genres; and the abstraction of genre clichés. Therefore the musical borrowing in the portfolio compositions is most often abstracted and generalised, relating directly to the perception of selected core genres, rather than specific references to single works.<sup>228</sup>

As previously discussed,<sup>229</sup> one of the aims in this research is to determine a method by which the composer moves beyond subconscious, intuitive genre fusion, establishing a systematic extension of the composer’s technique and further developing the compositional voice. This move from a subconscious to a more conscious compositional approach may be developed through the musical borrowing essential to hybrid genre music. Conscious borrowing means the role of music editor acquires significant importance in the composer’s toolbox. It becomes critical to determine which elements are appropriate to the overall musical integrity of the new work, and how these disparate elements can be

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<sup>224</sup> Metzger (2003), p.6

<sup>225</sup> Since conditions in music in the early years of the current century are much the same as those in the last years of the 20th, similar processes of quotation in composition may be expected at present.

<sup>226</sup> Metzger (2003), pp.3-4

<sup>227</sup> For example tonal harmony, beat driven metrical patterns, high rates of repetition, popular song structures, and harmonic fields from contemporary classical music.

<sup>228</sup> There are a couple moments of direct, but transformed, quotation contained in the portfolio. Examples of this will be explored in the compositional analysis of the specific pieces.

<sup>229</sup> This is discussed in the ‘Finding the Research Problem’ section in Chapter One, p.1

effectively combined with the unique musical material composed specifically for the new music.

Conscious musical borrowing enables the composer to produce hybrid music through intra-genre dialogue which is highlighted by tropes<sup>230</sup> in the genre construction. In this context the term trope refers to the figurative use of a word or expression; or, a common or overused theme or device.<sup>231</sup> A trope “twists words away from their usual meanings”.<sup>232</sup> Musical tropes act as signifiers of a genre, but are also transformed by their new context. Their systematic positioning within the hybrid texture renders them readily recognisable as genre signifiers, and as active new elements referring to their new musical context within each piece. They can also be used to create inter-textual relationships between genres as well as between specific pieces if the musical borrowing is more direct.

Careful, considered use of musical borrowing in new music composition provides the composer with additional tools to make the familiar seem unfamiliar. Many composers have drawn from elements they found interesting or appealing,<sup>233</sup> and by unique compositional means these familiar musical elements are transformed into new music. The portfolio pieces are composed with a discernable link to the music and genre traditions of music which has directly influenced or intrigued the composer. Selecting specific genres, based on musical traditions, sonic elements or instrumental choices, the composer directly addresses the musics that have influenced the development of his compositional voice.

As previously discussed in the sampling, mash-up and collage section,<sup>234</sup> audio sampling as musical borrowing by direct quotation is not a new idea. The collage works of Rochberg,<sup>235</sup> Berio,<sup>236</sup> and Stockhausen<sup>237</sup> developed individual

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<sup>230</sup> In this musical context, the term trope can be used to represent familiar, readily identifiable genre elements such as the muted trumpet in jazz, the distorted guitar in rock, and the harpsichord in baroque music. Trope is similar in use to cliché but not necessarily pejorative.

<sup>231</sup> "Trope." Merriam-Webster.com. Merriam-Webster, n.d. Web. 25 Oct. 2013. <<http://www.merriam-webster.com/dictionary/trope>>

<sup>232</sup> Wales, Katie. *A Dictionary of Stylistics*. London: Longman, 1989, p.468

<sup>233</sup> Discussed in section on 'Previous Genre Crossings' in Chapter One, pp.26-36

<sup>234</sup> Discussed in section on 'Previous Genre Crossings' in Chapter One, p.34

<sup>235</sup> Rochberg's *ars combinatoria* – “unaltered pieces of the past and present butt up against each other” – Metzger (2003), p.117

<sup>236</sup> Berio's 'interrelationships' – “a diverse collection of seemingly unrelated elements” - Metzger (2003), p.129

<sup>237</sup> Stockhausen's “intermodulation... connect[s] two sounds by blending them into one” - Metzger (2003), p.141

approaches to the combination of sounds. The method of hybrid music composition in this portfolio extrapolates from these three ideas, offering a new approach to this expanded field of musical resources. Stockhausen's experiments with intermodulation explored how

apparently incompatible phenomena can be reciprocally modulated with each other in a way far transcending mere coexistence with and against each other; this procedure heralds the unity of a world, which will maintain differences intact and at the same time will enable a total effect of higher unity to be produced.<sup>238</sup>

An individual approach towards the combination of incompatible sounds can be found in the sonic and aesthetic combinations in this portfolio of compositions.

Inspired by the ideas of Berio, Rochberg and Stockhausen, the portfolio pieces express, in varying degrees, different techniques for musical collage, which have been adapted to suit the systematic hybrid method, thus achieving a blended and balanced hybridity. The systematic hybrid method for cross-genre synthesis, through combining acoustic instruments with electronics sounds and the technology of the recording studio, provides the composer with a means of “controlling the limitless sonic terrain”<sup>239</sup> that becomes available when composing with conscious musical borrowing.

The combination of acoustic instruments and sound-design relies on music production technology as part of the compositional process. Such technology enables sampling to bring new dimensions to quotation and transformation, where any sound can be captured and manipulated, often beyond recognition.<sup>240</sup> Musical sampling, particularly in popular music, brings with it judgement of authenticity, creativity and theft based on the extent of the sampled material and the nature of the transformation.

The use of sampling in the portfolio pieces is examined in four different ways:

- 1) use of single note instrument samples available in many keyboards, and sample-based instrumental plug-ins

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<sup>238</sup> Worner, Karl H. *Stockhausen: Life and Work*. London: Faber and Faber, 1973, p.140

<sup>239</sup> Metzger (2003), p.111

<sup>240</sup> Metzger (2003), p.164

- 2) sampling and manipulation of found-sound, such as birds, water, rain
- 3) vocal samples from online interviews, edited to become part of the sonic texture
- 4) recordings of original live performances, created specifically for this portfolio, manipulated and re-arranged in the studio as part of the compositional process<sup>241</sup>

The use of sampling in the portfolio pieces moves beyond typical judgements on authenticity, creativity and theft; and aesthetics of the use of sampling technology are ideally focussed on sonic design elements and the transformative manipulations of original sound recordings made specifically for the project.

### **Hybridity Table**

The principal challenge in creating hybrid music is to integrate diverse genre elements into a coherent, blended and balanced musical whole, because in many cases important elements from different genres do not gel readily with each other. To facilitate hybridisation, and genuine balancing of possibly conflicting musical elements, an algorithmic table based on key genre elements was developed. The resultant clarity offered by the hybridity table directs the creation of poly-genre hybrids towards equilibrium between the selected genre elements in each piece. To do this, a taxonomy of elements within a genre needed to be found, and then the relative weight of each genre element calculated. This taxonomy and the hybridity table were both developed as the compositional process proceeded.

The structure of each composition is generated by the hybridity table and based on genre comparison. Using the table, it is possible to outline the elements, aesthetics and ancestry of the source material essential in the creation of a unique hybrid.

The genre comparison process consists of:

1. Filling the hybridity table with key genre elements, determined from relevant genre literature and critical listening to genre repertoire.
2. Selecting elements for juxtaposition or case-specific synthesis.
3. Addressing aesthetic and cultural considerations within respective genres.

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<sup>241</sup> Examples of all of these methods of sampling can be found in the piece-by-piece analysis section.



The musical elements selected to guide the genre comparisons in the hybridity table were refined through trial and error during the composition and research process. The initial design of the hybridity table explored fewer musical elements, but as pieces were written and reworked it became clear when a necessary element wasn't addressed. Consequently, the hybridity table was developed through a cyclic process of creative action, review, definition and further re-application. The final hybridity table layout has subsequently been applied to the compositions as part of the analysis.

The genre elements addressed on the left-hand side of the hybridity table are: compositional construction (method of scoring/notation, use of improvisation, loops etc); form; tempo; musical freedom (both in interpretation and construction); complexity; harmony; sonic design; use of technology; rhythm; meaning; gesture; purpose; musical material (use of repetition, motivic development); dynamics; pitch; ensemble. These elements have been chosen to address the key elements of a genre and are developed from Fabbri's original definition of genre.<sup>242</sup>

Selection of required elements is important in the creation of hybridity. The selection and definition of genre elements informs the entire compositional process.

All art presupposes a work of selection. Usually when I set to work my goal is not definite. If I were asked what I wanted at this stage of the creative process, I should be hard pressed to say. But I should always give an exact answer when asked what I did *not* want.<sup>243</sup>

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<sup>242</sup> Fabbri's definition as covered in the 'Genre' section of Chapter One - "a set of musical events (real or possible) whose course is governed by a definite set of socially accepted rules". The 'set' of rules is comprised of five subsets: formal and technical rules, semiotic rules, behavioural rules, social and ideological rules, and commercial and juridical rules. These rules include musical sounds and noise; musical time; musical elements (melody, harmony etc); levels of complexity; gestural (dance, posture, movement); dress; semiotics; sociological function; community

<sup>243</sup> Stravinsky (1947), p.70

## Guide to the Hybridity Table

Source Genres and their individual elements					Genre elements for Hybrid Use		
Meta Genre	GENRE 1	GENRE 2	GENRE 3	GENRE 4	Hybrid Genre		
Sub Genre	SubGenre1	SubGenre2	SubGenre3	SubGenre4	Juxtaposed elements	Synthesised elements	Other use of elements
	<p><b>ALL THE SPECIFIC GENRE ELEMENT DESCRIPTIONS GO IN THE CORRESPONDING COLUMN FOR THAT GENRE.</b></p> <p><i>This side of the table gives short descriptions of each genre element to be considered for inclusion in the composition. The details in the cells on this side of the table are drawn from relevant literature and musical repertoire for the respective genres</i></p> <p>↓ ↓ ↓ ↓</p>				<p><i>This side of the table forms the basis for the new hybrid genre music. There will typically be a single response for each row – describing treatment of genre elements will be treated.</i></p> <p><i>In some cases it might be necessary to combine multiple layers – some elements juxtaposed while others are synthesized, so there will be multiple responses per row.</i></p> <p><i>The table is adaptable to suit.</i></p>		
Construction	Description of musical construction – use of notation, technology, improvisation				Details in this column will describe how any of the genre elements will be juxtaposed in the piece. ↓	Details in this column will contain a description of how the corresponding genre elements in the relevant row will be synthesized. ↓	Details in this column will highlight: use of a single genre element, or an alternate style of synthesis ↓
Form	Description of the typical forms/structures used in the genre.						
Tempo	Description of how tempo is controlled and used.						
Freedom	Description of performance freedom – use of improvisation and interpretation						
Complexity	Description of complexity: in terms of virtuosity, harmonic density, and difficulty.						
Harmony	Description of use of harmony: tonality, harmonic progressions, modality, pitch class.						
sonic design	Description of sound elements: acoustic instruments, effects, studio-construction						
technology	Use of technology and score.						
rhythm	Description of rhythmic device, rhythmic complexity and sense of groove.						
meaning	Absolute or programme						
gesture	Description of gestural range in the music.						
purpose	Presentation and use for the music.						
material	Discussing the sense of balance, and shape – use of repetition.						
dynamic	Description of dynamic range						
Pitch	Description of specific methods of pitch organisation in melodic elements.						
ensemble	Description of forces/sound sources utilised						

Each row contains the details corresponding to that genre element. The left hand side explains the original source genres. The right side is the selected elements and how they will be hybridised.

Table 10. Hybridity table guide

The hybridity table is used as a compositional tool to guide the composer through the hybridity balance. Each source genre element is described on the left of the solid black line, and the compositional use of these elements on the right, either as juxtaposition, synthesis or some other use of elements. The right side thus facilitates a systematic approach to the hybrid music composition. The process of composition continues to draw on traditional compositional methods and allows for intuition and spontaneous invention.

The flexibility inherent in the design of this systematic approach to composition permits differing applications to different works in different situations, balancing the genre elements both as a pre-compositional planning tool and as a reference point during the compositional process. This could be considered a form of algorithmic composition; although algorithmic composition often informs the micro decisions relating to specific pitches and musical details. Here, the algorithm is the hybridity table which informs the macro structure and textural elements of the piece, rather than micro musical elements. The focus is on the interrelationship of parts rather than on the structuring of each specific element.

### **‘Sound’, Idiolect and the Producer**

The concept of a ‘sound’ in the sense of stylistic choice, and the ability to capture and mould it, have grown in importance as recording technology has become increasingly complex.<sup>244</sup>

‘Sound’ is a key element in genre distinction and is arguably the easiest to distinguish; for example, music with distorted guitars will most likely be some part of the rock meta-genre.<sup>245</sup> Musical genres can be influenced and adapted simply by changing the characteristics of the musical instruments used, and their performance practice.<sup>246</sup> The link between sound and musical genre is very important in hip-hop and electronic dance music – “new sounds and rhythms play

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<sup>244</sup> Moorefield, Virgil. *The Producer as Composer: Shaping the Sounds of Popular Music*. Massachusetts: The MIT Press, 2010, p.xiii

<sup>245</sup> Talking about guitars in rock music - “Anytime this sound is musically dominant, the song is arguably either metal or hard rock; any performance that lacks it cannot be included in the genre.” Walser (1993), p.41

<sup>246</sup> Théberge, Paul. *Any Sound You Can Imagine: Making music/consuming technology* Hanover & London: Wesleyan University Press, 1997, p.198

a large role in defining the unique sound of each new genre or subgenre.”<sup>247</sup> A specific drum machine sound can define an entire sub-genre.<sup>248</sup>

One of the interesting things about pop music is that you can quite often identify a record from a fifth of a second of it. You hear the briefest snatch of sound and know, ‘Oh, that’s ‘Good Vibrations’, or whatever. A fact of almost any successful pop record is that its sound is more of a characteristic than its melody or its chord structure or anything else. The sound is the thing that you recognize.<sup>249</sup>

Because sounds are distinctive within genres, many composers address ‘sound’ in the composition process. If a sound is sufficiently interesting, it may well influence the shape and texture of the composition, supplanting the role of melodic shape in thematic material.<sup>250</sup> Here, ‘sound’ refers more to timbre and texture of a musical voice, and the production techniques used in the process of recording, than merely to its physical properties.<sup>251</sup>

This notion of sound is a form of *musical idiolect*, where, in linguistic terms, idiolect is understood to be a variety of language unique to an individual. Thus a musical idiolect is:

The set of peculiarities that characterize an individual as musical. By extension, it is the way each individual experiences aspects of a musical tradition, and—also—the individual modes of musical creativity and expression. It is a particular way of musically ‘speaking’; a fingerprint that can be identified with a specific psychological, cultural and ecological coordination. Since there are not two identical individuals, neither there are two identical idiolects.<sup>252</sup>

As hybrid music develops, it synthesizes a number of musical idiolects. At the meta level the musical idiolect presented is that of the composer, but once inside the composition, especially when improvisation is required, the musical idiolects

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<sup>247</sup> *ibid*, p.196

<sup>248</sup> The Roland 808 drum machine has a sound that has become synonymous with certain subgenres of hip-hop and techno - particularly due to the sound of the Kick Drum. More information on the 808 can be found in Nelson George’s mini-documentary ‘All Hail the Beat’ – Fast Forward Films: <<http://www.focusforwardfilms.com/films/32/all-hail-the-beat> >

<sup>249</sup> Brian Eno, as quoted in: Wicke, Peter. ‘The Art of Phonography: Sound, Technology and Music’ in *The Ashgate Research Companion to Popular Musicology*. Ed. Derek B. Scott, England: Ashgate Publishing Limited, 2009, p.150

<sup>250</sup> Discussed in Théberge (1997)

<sup>251</sup> For example: The ‘Motown’ sound, the Phil Spector ‘Wall of Sound’, etc. Covered in Moorefield (2010) and Holt (2007)

<sup>252</sup> Pareyon (2011), p.192

of the performers take over, together with any specific genre idiolects or tropes being utilised in the hybrid texture. When composing hybrid music, it is essential that the composer is aware of these layered idiolects, or layers of sound, to establish a blended balance of hybridity, effectively eliminating the traditional egocentric composer's role as the only relevant compositional voice.

'Producer as Composer' expresses direct involvement with sound and its use in the creation of a piece of music. As studio technology has increasingly enabled greater creativity, the role of the music producer has expanded from a primarily technical position, to a creative and artistic one where a producer is actively involved in arrangement, orchestration and manipulation of recorded material beyond that originally conceived by the composer.<sup>253</sup> Certain producers introduced new ideas and techniques which expanded this role: Phil Spector created the 'Wall of Sound'; George Martin combined classical, commercial and experimental techniques in the recording studio; and Brian Eno treated the recording studio as a musical instrument and compositional workspace.<sup>254</sup> As the recording process has moved from documentation to creation, the input of the person crafting the sound can have as much impact on the final version of the composition as the person writing the tunes.

Moorefield showcases the creativity involved in crafting the 'sound' of a recording, suggesting "technology and artistic creation are increasingly interdependent in our culture."<sup>255</sup> The extent to which a composer involves technology in the compositional process will inform the types of music composed.<sup>256</sup> Boundaries between the roles of the composer, producer, engineer and performer are increasingly blurred by technological advances: technology's portability is such that it is now possible to perform with the recording studio on stage, creating studio-based sound manipulations as part of a live performance. The majority of works in this portfolio use existing technology in performance.

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<sup>253</sup> Moorefield (2010), p. xiii

<sup>254</sup> loc. cit.

<sup>255</sup> ibid. p.xvii

<sup>256</sup> loc. cit.

Most of the portfolio compositions have been crafted by the composer/producer wearing dual hats.<sup>257</sup> Hybrid genre music relies on the producer's and composer's ability to craft recorded sound with traditional musical notation, expanding traditional concepts of orchestration and instrumental timbre, to embrace sound design, audio mixing, and the internal manipulation of sound files through various effects and editing techniques. The manipulation of 'sound' plays an equal part in the creation of hybrid music compositions.

### Technology in Genre

Music as we know it today – in all of its many-faceted, genre-bending splendour – would not exist without technology. The explosive development of new musical ideas and materials during the last hundred years is a direct result of explorations with electronic instruments and recording technologies.<sup>258</sup>

A key aspect of genre development in music is through technological development.<sup>259</sup> As new technologies are invented, new musical forms and ideas are made possible, and are uncovered by musicians and composers. Technological advances have made many genres possible that wouldn't have otherwise existed: microphones allow singers to 'croon' with an orchestra; the electric guitar inspired the creation of rock'n'roll; magnetic tape recording enabled the construction of *musique concrète*. The recording studio also created the first truly effective way of capturing the essence of songs and gave rise to the 'music business'.

New genres develop as much through intentional use of technology as through its intentional abuse. The innovative abuse inherent in overdriving a guitar amp and thus distorting the sound gave rise to rock music and its many offshoots. The manipulation of a piece of vinyl on a record player allowed the DJs in New York to create hip hop thereby creating a genre from pieces of technologically abused

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<sup>257</sup> *Norse Suite* and '*Colorless green ideas sleep furiously*' are both fully acoustic pieces with no additional technological requirements, although some of the scoring techniques aim to create electronic effects in an acoustic world. This is covered in more detail in the piece-by-piece analysis.

<sup>258</sup> Holmes, Thom. *Electronic and Experimental Music: Pioneers in Technology and Composition*. London & New York: Routledge, 2002, p.1

<sup>259</sup> Discussed in: Jones, Steve. *Rock Formation: Music, Technology and Mass Communication*. London & Newbury Park: Sage Publications, 1992

sound fragments.<sup>260</sup> Technology encourages composers to “think differently about the music they make. Their aural vocabulary has no bounds, and the structures they impose, or choose to avoid, are all made possible by technology.”<sup>261</sup>

### **Use of Technology in the Portfolio**

A crucial element of the compositional aesthetic of this research is writing music for live performance. In the compositional process, technological elements are used as an adjunct to extend and enhance the sounds of the instruments. The key aspects of musical performance are controlled directly by performers to enable elements of improvisation, as well as the traditional techniques of ensemble performance, such as listening to others in the group to permit real-time adjustments of tuning and timing for artistic result. The only interactivity is between the performers in each ensemble.

Many of the pieces in the portfolio are constructed for performance with a pre-recorded backing track. This gives the composer time in the composition process to craft layers of accompaniment and effects in the studio. Through careful planning and sound manipulation, this rigid sonic backdrop still allows the musicians some freedom in performance. Certain compositions use in-ear monitoring systems for playback of a click track<sup>262</sup> so that the entire ensemble stays in time; this allows for the more rhythmic elements of music to consistently express the intended effect.

Rather than developing new software or sound design technological tools, which is beyond the scope and purpose of this research, the portfolio compositions rely on current, commercially available technologies such as Ableton Live, Pro Tools, and stable, performance-proven hardware such as effects pedals. Through the use of current audio-production technology and effects, the composer draws on the sonic possibilities of certain selected genres to stretch and enhance music elements from other contributing genres. Technology is used in the compositional

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<sup>260</sup> Record scratches, early samplers with very limited memory, and a lo-fi aesthetic typified the beginning of hip-hop.

<sup>261</sup> Holmes (2002), p.1

<sup>262</sup> The click track is a term used in recording and popular music to describe a form of metronome used by musicians in the studio or on stage to maintain a consistent beat. The metronome ‘click’ is fed through headphones to one or more of the musicians during a recording or performance, but cannot be heard by the audience.

process purely to shape the sonic design of the music. Analytical notes in subsequent chapters address technological elements used in the compositional process with regard to the final sound created and its sonic role rather than providing an in-depth study of the techniques and technology involved in sound creation.

## Electronics and Rhythm

Electronic technology has become part of our folk music. Look in the window of any popular music store and you will see what I mean.<sup>263</sup>

Electronic music is an umbrella genre label. In the realm of ‘art’ music it refers to such composers as Edgard Varèse, Pierre Schaeffer, Karlheinz Stockhausen, John Cage and the work created at IRCAM.<sup>264</sup> This same term is also applied to ‘popular’ music, such as that composed by Kraftwerk, Giorgio Moroder, Daft Punk and BT. The portfolio compositions draw from both the ‘art’ and ‘popular’ traditions of electronic music. But what is the difference between these two? While they may use similar tools and techniques for sound manipulation, the difference is most clearly defined by rhythm:

It is the beat that draws the dividing line between serious and vernacular, visceral and intellectual . . . While composers used to define themselves in terms of tonal style those distinctions have been largely superseded by rhythmic content.<sup>265</sup>

The processes and techniques developed in electronic music are generally created and developed by technicians working in the area of ‘art’ music. These developments have allowed for greater manipulation of sound and advanced options for the diffusion and live control of previously studio-based music. However, these live performance techniques, theatrical spectacles and uses of experimental software and hardware are rapidly being incorporated into ‘popular’ electronic music.<sup>266</sup> The experimental techniques refined by art music technicians are often combined to work with the steady beat in popular electronic music.

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<sup>263</sup> Reich, Steve. *Writings on Music 1965-2000*. New York: Oxford University Press, 2002, p.159

<sup>264</sup> IRCAM is the *Institut de Recherche et Coordination Acoustique/Musique*. It is a French science institute focussed on music, sound and avant garde electro-acoustical art music. Pierre Boulez was the original director at IRCAM.

<sup>265</sup> Neill, Ben. ‘Pleasure Beats: Rhythm and the Aesthetics of Current Electronic Music’ in *Leonardo Music Journal*, Vol. 12 (2002): Project MUSE. Web. 21 Jan. 2011. <<http://muse.jhu.edu/>>, p.3

<sup>266</sup> *ibid.* p.4



Some of these technological advancements are utilised in the portfolio compositions. Use of this studio-based technology may be interpreted as providing another bridge between art and popular music.

Together with the technological link between electronic art and popular music, there is also a tradition of composing music through the manipulation of ‘sound objects’.<sup>267</sup> Holmes asserts that “composing timbres is as important in electronic music as composing pitches.”<sup>268</sup> The present portfolio includes a number of instances where electronic sound manipulation is applied to the compositional process. For some of the sonic elements used within the pieces, traditional notation and transcriptions would be of little use; therefore a more descriptive approach to the ‘sound object’ provides a better insight into both the creation and purpose of any sonic tweaking.

Electronic music and sound manipulation techniques are so prominent in both the popular and art worlds of current music making that to ignore them in this portfolio of hybrid genre music would be to omit a range of possible compositional techniques, both in sound design and in live performance. To fully engage with the systematic method of hybrid genre composition proposed in this thesis, the composer needs a clear grasp of the techniques and technologies available, and to use them in a considered manner to enhance, rather than overwhelm, the desired ‘sound’ product.

### **The Recording Studio as a Compositional Tool**

The effect of recording is that it takes music out of the time dimension and puts it in the space dimension. As soon as you do that, you’re in a position of being able to listen again and again to a performance, and to become very fond of details that weren’t intended by the composer or the musicians. The effect of this on the composer is that he can think in terms of supplying material that would actually be too subtle for a first listening.<sup>269</sup>

The studio becomes a versatile tool in the compositional process of a composer working with recorded sound and electronic musical technologies. As recording

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<sup>267</sup> ‘Sound Objects’ were discussed as early as 1952 by Pierre Schaeffer. Covered in Holmes (2002), p. 97

<sup>268</sup> Holmes (2002), p. 237

<sup>269</sup> Eno, Brian. ‘The Studio as Compositional Tool’ in *Audio Culture: Readings in Modern Music*. Christoph Cox & Daniel Warner (ed.). New York & London: Continuum, 2004, p.127

has moved from a technical matter to an artistic pursuit, understanding the possibilities of the recording studio is essential. This gives the sound-based composer more creative freedom as the production and mixing of sound becomes an integral part of the composition.<sup>270</sup> As this artistic approach to the manipulation of sound has developed, “recording’s metaphor has shifted from one of the ‘illusion of reality’ (mimetic space) to the ‘reality of illusion’ (a virtual world in which everything is possible).”<sup>271</sup>

This ‘reality of illusion’ enables the composer to create music that exists in a musical landscape beyond what is possible in acoustic music. The studio permits the addition of effects, layering of sound, and the internal manipulation of sound to create recordings that actively demonstrate their creation outside of acoustic reality. Justin Williams discusses this in, ‘Jazz/Hip-Hop Hybridities and the Recording Studio’:

This type of phonographic staging suggests a more abstract recording space, often in opposition to the ‘concert realism’ of recordings that stage liveness. This phenomenon is something I wish to call ‘studio consciousness’ – elements of a recording that draw specific attention to the fact the given song was recorded in a studio. This could be verbal (‘turn my headphones up’), timbral (use of effects), spatial (creating an artificial ambience through effects) or media-based.<sup>272</sup>

The work in this portfolio is, for the most part, firmly based on ‘studio consciousness’ whereby compositional techniques are not hidden in the music; they become focal points in the sonic texture. The use of backing tracks as accompaniment for live performance means this hybrid music also blends the ideas of ‘studio consciousness’ and ‘concert realism’ by presenting both ideas in a more traditional concert setting.

Composer Brian Eno refers to the studio as his instrument, describing his method as ‘in-studio composition’:

You no longer come to the studio with a conception of the finished piece. Instead, you come with actually rather a bare skeleton of the piece, or perhaps with no starting point. Once you become familiar with studio facilities, or even if you’re not, actually, you can begin to compose in relation to those facilities. You can begin to think in terms of putting something on, putting

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<sup>270</sup> Discussed in: Moorefield (2010)

<sup>271</sup> Moorefield (2010), p. xiii

<sup>272</sup> Williams (2011)

something else on, trying this on top of it, and so on, then taking some of the original things off, or taking a mixture of things off, and seeing what you're left with – actually constructing a piece in the studio.<sup>273</sup>

The practice of crafting compositions in the studio environment is germane to the compositional practice evident in the research portfolio. Because the portfolio pieces utilise both traditional notation and sound-based composition, it was necessary for both elements to be created concurrently. The use of both recording studio and various sound manipulation techniques is equally important to the more traditional composition practices.

Given that 'sound', the use of effects, and elements of improvisation are all vital parts of this hybrid music, it is important that all pieces are recorded.<sup>274</sup> The live recordings are not intended to be the definitive version of these pieces; there will be some variance between the notated score and the audio recording. These recordings, and the techniques required in their making, will be case specific: some pieces have been recorded merely as a documentation of a live performance; other pieces have been recorded in a studio environment, allowing further sonic manipulation and layering. The studio environment will be addressed as an additional creative tool in the piece-by-piece analysis. As traditional musical analysis is largely reliant on notation, and such key elements of studio-based music as overall 'sound', production values, timbre, sound quality and nuance are difficult to notate, more descriptive analysis for these sections is essential.

### **Improvisation and Performance**

Improvisation enjoys the curious distinction of being both the most widely practised of all musical activities and the least acknowledged and understood. While it is today present in almost every area of music, there is an almost total absence of information about it.<sup>275</sup>

*Oxford Music Online* describes improvisation as

the creation of a musical work, or the final form of a musical work, as it is being performed. It may involve the work's immediate composition by its

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<sup>273</sup> Tamm (1988), p.64

<sup>274</sup> Both as audio and, in most cases, as video of live performances.

<sup>275</sup> Bailey, Derek. *Improvisation: Its Nature and Practice in Music*. USA: Da Capo Press, Inc. 1993, p.ix

performers, or the elaboration or adjustment of an existing framework, or anything in between.<sup>276</sup>

Improvisation is often believed to be “something without preparation and without consideration, a completely ad hoc activity, frivolous and inconsequential, lacking in design and method.”<sup>277</sup> But it is also a useful tool for both composition and performance.

In *The Improvisation of Musical Dialogue*, Bruce Ellis Benson proposes the definition of at least 11 different improvisation types in two sections:

#### PERFORMER-BASED IMPROVISATION

- 1) Filling in of details not in the score such as tempo, timbre, attack, dynamics
- 2) Addition of notes to the score expected by the composer, such as trills and figured bass
- 3) Addition of sections of music such as cadenzas
- 4) Transcriptions to different ensembles/voices
- 5) A performer/conductor/editor adds or subtracts sections from the piece.
- 6) An arrangement of the piece
- 7) Changing the melody line or harmonisation. This ranges from subtle changes to making the piece almost unrecognisable
- 8) Keeping the basic form and improvising in those confines

#### COMPOSER-BASED IMPROVISATION

- 9) Composer uses a particular form or style [genre] of music as a kind of template
- 10) Composer takes a piece of music, such as a folk tune, and uses it as the basis for a new work
- 11) The subtlest form: Composer and performer are part of a musical tradition and work within and modify it through augmentation and transformation<sup>278</sup>

The improvisation types utilised in the portfolio are given above as 1, 2, 3, 9, 10 and 11. The creation of hybrid genre music relies on awareness of genre traditions and, by using the hybridity table, a new genre template is created.

Performance practice and improvisation are key elements in the determination of genre. Many genres of art music limit performance flexibility to decisions of tempo, dynamics, phrasing and articulation. The performer is not involved in

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<sup>276</sup> Bruno Nettl, et al. "Improvisation." *Oxford Music Online*. Oxford University Press. Web. 24 Oct. 2013. <<http://www.oxfordmusiconline.com.ezproxy.waikato.ac.nz/subscriber/article/grove/music/13738>>

<sup>277</sup> Bailey (1993), p.xii

<sup>278</sup> Benson (2003), pp.26-30

genre formation.<sup>279</sup> In popular music, on the other hand, most performers have greater opportunity to creatively shape a piece and its genre;<sup>280</sup> much of this creativity springs from improvisation.

In most classical music, the art of improvisation has largely evaporated due to the “direct goal of faithfulness to the work and the composer”.<sup>281</sup> If improvisation is used, composers mostly employ it for “more precise compositional aims.”<sup>282</sup> The composer will have specific ideas of what the final sound will be, and it is often used for creating musical textures where precise notation would be cumbersome and difficult to perform accurately.

There is a reliance on the score in classical music that comes from: the level of complexity in the composition; boundaries set by the composer;<sup>283</sup> and also in part from the ensemble sizes in ‘classical’ music. The more people you have in a group, the greater the necessity to have some way of keeping them together, thus the importance of the score. Popular music is generally performed by smaller groups, and is generally much simpler music, so scores are not necessary and improvisation can flourish.

Much of the perceived vitality in popular music stems from the notion that, “when a musician improvises, the act of creation is experienced at first hand.”<sup>284</sup>

Improvisation usually occurs within a set of conventions. Generally, musicians have an idea of how they are going to play, of any conventions they are going to adopt, and of how the performance genre characteristics expect them to play.<sup>285</sup>

The ability to improvise depends on an innate familiarity with the musical context in which one improvises. With continued genre awareness, the ability to improvise can develop.<sup>286</sup>

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<sup>279</sup> There are many examples of improvisation within ‘art’ music, but the term improvisation is not commonly associated with its traditions. Even many concerto cadenzas have been scored.

<sup>280</sup> Discussed in: Hamm, Charles. ‘Some thoughts on the measurement of popularity in music’ in *Popular Music Perspectives: Papers from the First International Conference on Popular Music Research, June 1981* (ed. D. Horn & P.Tagg). Gothenburg & Exeter: IASPM, 1982, pp.3-5

<sup>281</sup> Benson (2003), p.5

<sup>282</sup> Bailey (1993), p.70

<sup>283</sup> *ibid.* p.8

<sup>284</sup> Small (1987), p.289

<sup>285</sup> *ibid.* p.290

<sup>286</sup> Bailey (1993), p.7

Composition may be described as improvisatory at its core.<sup>287</sup> Many composers include improvisations in their working practice. John Zorn regularly includes improvisation as part of his compositions.<sup>288</sup> Michael Daugherty “often begins composing with improvisation and collaborates with instrumentalists to explore frontiers of timbre and technique . . . and only in the later stages of his work converts the results to notation”.<sup>289</sup> Composers can improvise with the rules and conventions of musical genres: “composers do not merely work *within* a given discourse: the act of composition inevitably involves going beyond the lines.”<sup>290</sup> Composition of hybrid music develops through new combinations of genre material, and requires a new structure to guide musical creation and improvisation, and the systematic method for hybridity developed in this thesis helps achieve that.

As improvisation becomes a greater part of any composition, the relationship between performer and composer begins to blur, bringing into question authorship and challenging the formalist idea of the composer.<sup>291</sup> Boulez identifies one of the key differences between composer and improviser:

Instrumentalists do not possess invention – otherwise they would be composers. There has been a lot of talk of ‘improvisation’, but even in the best sense of the word it cannot replace invention. True invention entails reflection on problems that in principle have never been posed, or at least not in the manner which is readily apparent, and reflection upon the act of creation implies an obstacle to be overcome. Instrumentalists are not superhuman, and their response to the phenomenon of invention is normally to manipulate what is stored in the memory. They recall what has already been played, in order to manipulate and transform it.<sup>292</sup>

The concept of musical memory delivers habits and musical reflexes which inform the process of improvising.<sup>293</sup> These habits may be used as signifiers of key genre characteristics, or tropes, which, when placed within a hybrid genre composition, allow for further blurring and layering of the original genre material. The careful and considered placement of improvisation within a more structured

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<sup>287</sup> Benson (2003), p.2

<sup>288</sup> An example being the piece *Spillane* from 1987 which utilises Zorn's file-card method of organizing sound blocks into an overall structure. The structure and piece can be transformed depending on the musicians Zorn chose, and the way they interpreted what was written on the file cards.

<sup>289</sup> Clague, Mark. ‘Grove Dictionary of American Music Entry: Michael Daugherty’. *Michael Daugherty Composer Bio*. Web. 2013. <<http://www.michaeldaugherty.net/index.cfm?pagename=bio>>

<sup>290</sup> Benson (2003), p.52

<sup>291</sup> Durant, Alan. ‘Improvisation in the Political Economy of Music’ in *Music and the Politics of Culture*. Ed. Christopher Norris. New York: St Martin’s Press, 1989, p.279

<sup>292</sup> Pierre Boulez, as quoted in: Durant (1989), p.278

<sup>293</sup> *ibid.* p.272

compositional framework may offer an additional performance dimension to the composition of hybrid genre music.

The use of improvisation in the composition and performance processes in the portfolio pieces is discussed in the piece-by-piece analysis where use of the more traditional concept of improvisation is specifically identified. With regard to the creative process, the distinction between composition and improvisation is, at times, difficult to define. For analytical purposes, the role of improvisation is to highlight the fleeting and transitory moments of creation fulfilled by the performer's interpretation. Here, the main difference between composition and improvisation may best be described thus: "in composition you have all the time you want to decide what to say in fifteen seconds, while in improvisation you have fifteen seconds."<sup>294</sup>

### **A Unique Ensemble**

Part of the construction of hybrid genre music relies on specific performance techniques. This, in turn, necessitates composing for specific performers.<sup>295</sup>

Selecting performers from a range of specific genre backgrounds, compositions may be constructed where performers are expected to perform in a new situation, but maintain some elements of the performance practices of their relevant genre. Inclusion of these performance practices adds to the authenticity of specific genre choices, as well as creating clear musical reference points for the genre conventions.

There is an existing tradition of writing for specific performers. This is evident in works that have been developed through commission, where a composer is writing a piece at the request of, and in consultation with, a performer or group. In popular music, songs may be created through collective composition in a band situation – where each instrumentalist composes their own instrument-specific parts in the context of the finished song. A clear example of a composer writing

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<sup>294</sup> Bailey (1993), p.141

<sup>295</sup> The majority of the recorded compositions were composed for and performed by specific musicians. Generally these musicians have been the same across all the pieces in the portfolio – apart from cello (played by Yotam Levy, except for *Into the Nocturnal Sunshine* played by Santiago Canon Valencia) and drums (played by: Brad Thomson – *The Long White Cloud* & *Into the Nocturnal Sunshine*; Jeremy Hantler – *One Night, New Breath*; the composer for all pre-recorded parts)

specifically for the style and skills of individual musicians is in Duke Ellington's works such as "Jeep's Blues" for saxophonist Johnny Hodges (also known as Jeep), and "Concerto for Cootie" for trumpeter Cootie Williams.

Ellington, and his associates,<sup>296</sup> wrote to "fit the tonal personalities of the individual instrumentalists who have the responsibility of interpreting our works".<sup>297</sup> Ellington brought together "disparate ideas and idioms and treated his band as a source of *collective* composition, encouraging and learning from his players' contributions."<sup>298</sup>

Charles Mingus worked similarly.

Like Duke Ellington, Mingus was always trying to construct a soundscape out of the characteristic dialects of his instrumentalists. Perhaps the major compositional method of both these jazz auteurs was the organisation of a dialogical environment in which the musicians were obliged to speak as 'themselves'.<sup>299</sup>

Other composer/performers, such as Gil Evans, Michael Daugherty and John Zorn, also select their collaborators with this idea of composition in mind. John Zorn said:

It's true I pick the bands and in that sense the Ellington tradition, the selection of the people, is very important. Everybody is vital. You take one person out and the chemistry is going to be different.<sup>300</sup>

This tradition of composition for specific performers is a particular feature in most of the portfolio compositions where the main performers were selected to form a purpose-built music performance ensemble of ten musicians. From this ensemble other smaller instrumental combinations, and solo performers, were chosen for the majority of works.<sup>301</sup> As each piece was composed, the performers were consulted on what would work for both the instrument and their

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<sup>296</sup> Ellington often worked with co-composers such as Billy Strayhorn.

<sup>297</sup> Ellington, Duke. *Music Is My Mistress*. New York: Doubleday, 1973, p.452

<sup>298</sup> Middleton, Richard. 'Musical Belongings: Western Music and Its Low-Other' in *Western Music and Its Others*. (ed. G. Born & D. Hesmondhalgh) Berkeley, Los Angeles & London: University of California Press, 2000, p.71

<sup>299</sup> Toynbee, Jason. 'Making Up and Showing Off: What musicians do.' in *The Popular Music Studies Reader*. (ed. A. Bennett, B. Shank & J. Toynbee) London & New York: Routledge, 2006, p.72

<sup>300</sup> Conversations with John Zorn in: Bailey (1993), p.77

<sup>301</sup> Exceptions to this are: '*Colorless green ideas sleep furiously*' (for full orchestra); *Sketches of an Intergalactic Earworm* (piano trio and boombox – similar instruments can be found in the ensemble, but this piece was written specifically for the New Zealand Chamber Soloists).



interpretation of the score. The process of working with performers on the creation of a piece is not a new idea. Terry Riley explains how he worked in this way with the Kronos Quartet:

When I write a score for them it's an unedited score. I put in just a minimal amount of dynamics and phrasing marks. It's essentially a score like Vivaldi would have done. So when we go to rehearsal, we spend a lot of time trying out different ideas in order to shape the music, to form it. At the end of the process, it makes the performers actually own the music. That to me is the best way for composers and musicians to interact.<sup>302</sup>

Ensemble performance is an essential component of musical practice, and live performance is essential to the compositional aesthetic of this portfolio. The unique ensembles utilised in the recording of portfolio pieces includes performers from such musical genres as rock, jazz, classical, hip-hop and electronica. Their backgrounds bring a sense of authenticity and clear awareness of genre conventions to the hybrid music in the portfolio. The selected genre elements are combined so that some of this genre-specific experience expressed by the performers may be used to solidify certain parts of the hybrid. The tradition of writing for custom ensembles as a means to propel new and unfamiliar music performance is well established.<sup>303</sup>

## **Conclusion**

Application of the hybridity table to the compositional process facilitates the composition of balanced hybrid music. This music is informed by ideas of musical borrowing, draws on a range of existing technologies, blurs the line between the composer and producer, and relies for its success on the inclusion of improvisatory performance techniques and genre-specific musical awareness. Subsequent chapters of this thesis examine the compositional approach, sonic materials, and sense of hybridity expressed in each of the nine original compositions created for the portfolio.

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<sup>302</sup> Schwarz, K. Robert, "A New Look at a Major Minimalist", in *The New York Times* (Sunday, May 6, 1990), Section H, p.24. Retrieved online 25 November 2012. <<http://www.nytimes.com/1990/05/06/arts/music-a-new-look-at-a-major-minimalist.html>>

<sup>303</sup> Recent and current examples include the Michael Nyman Band in London, and the Philip Glass Band in New York.

## **Part Two: Analysis of the Compositions**

### **Chapter Three - *Tracking Forward***

*Tracking Forward* (hereafter, *TF*) is a short work for solo viola and backing track with video. It was the first piece written for the research portfolio utilising the hybridity table as a compositional tool, hybridising late twentieth century solo viola music, electroacoustic soundscape, electronic dance music and blues.

#### **Background**

The impetus to write *TF* emerged from discussion with violist Adam Maha, who was searching for a contemporary work to perform in his MMus viola recital. Inspired by the composer's fondness for blues music, and beyond using *TF* to test the hybridity hypothesis, this piece aims to explore the soulful sound world of the blues using solo viola combined with blues harmonica and studio-based effects. The intended programming in a classical viola recital dictated familiar techniques of late twentieth century instrumental writing, reworked in the hybrid context.

In performance, *TF* is accompanied by experimental video artist Dan Inglis's video projection. Composition began with a studio recording of the viola part then the composer instructed Inglis to respond with creative freedom, bearing in mind the intended live concert presentation.

The completed work has been presented in three formats: as a stand-alone recital piece for viola and audio backing track; as a multimedia piece for viola, backing track and video projection; and as a stand-alone film piece with full audio recording. The stand-alone film version, *Rolling Stock*, has been presented at various international experimental film festivals.<sup>304</sup>

Although *TF* exists as a film-only version,<sup>305</sup> its true character is best realised in live performance. The violist performs, without click track, in front of the film constructed to coincide with the musical accents and flourishes of the studio recording; but as there is no clear sense of beat for much of *TF*, the violist is left

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<sup>304</sup> 2nd Annual Experimental Film Festival Portland 2013, Portland, Oregon, USA;  
7th Annual Byron Bay International Film Festival 2013, Byron Bay, NSW, Australia;  
10th Annual Oxford Film Festival 2013, Oxford, Mississippi, USA;  
Hamilton International Short Film Showcase 2013, Hamilton, New Zealand.

<sup>305</sup> With pre-recorded recording studio performance of the viola part.

with relative freedom in performance, therefore, no two performances are identical. Different unexpected sync points between viola and video playback can emerge in performance. The pre-recorded sounds are those of: improvised and recorded blues harmonica licks; electronic manipulation of specific recorded viola parts; synthesiser sounds; and, drum samples.

### **Precedents**

Research of scores from the solo viola repertoire, the principal performance tradition informing this composition, identified different techniques and compositional approaches. Those works providing important reference points for *TF* include: György Ligeti's *Solo Viola Sonata*, Martin Lodge's *Pacific Rock*, Paul Hindemith's *Sonata no.5 for Solo Viola*, Luciano Berio's *Sequenza for Viola* and Igor Stravinsky's *Elegy for Solo Viola*. Steve Reich's use of a pre-recorded backing track in *Different Trains* provided an important influence on the contemporary chamber music setting; other musical influences include the Delta blues of Robert Johnson, and the harmonica techniques of James Cotton, Howlin' Wolf, Sonny Boy Williamson II, and Little Walter.

### **Genre and Hybridity**

The hybridity table below forms a compositional guide for how each of the genre elements from the included source genres are utilised as compositional tools and approaches in *TF*. The source genres are: twentieth century chamber music, drawing from repertoire for solo viola, including the specific works noted above; blues music, with particular reference to the Delta blues; electroacoustic soundscape, using studio editing techniques to transform the pre-recorded viola parts, harmonica parts, and other sound effects; and electronic dance music, mostly through the use of programmed drum machine sounds and some synthesizer beds.

## Hybridity Table

MetaGenre	Source Genres and their individual elements				Genre elements for use in Composition		
	Twentieth Century	Art Electronica	EDM	Blues	Hybrid Genre		
Sub Genre	Solo Viola	Soundscape	Techno	Delta	Juxtaposed elements	Synthesised elements	Other use of elements
Construction	Meticulous scoring - strictly controlled.	Extremely structured, usually layered – studio construction	Rigidly structured in repeating units - Computer controlled. Loop based.	Loose song form based structure – 12bar blues		Scored composition with some elements of improvisation over a structured pre-recorded bed.	
Form	Usually long forms - multi movement	Long forms	Short looped segments developed through repetition	Short forms – that are developed (and expanded) in performance			Short form (7mins) - single movement
Tempo	Closely specified	Time-based	Rigid (usually within a small BPM range)	Free but rhythmic. Fluctuates according to the performance.	Strictly controlled base tempo with some freedom in the main melodic lines		
Freedom	Limited	Pre-recorded, so fixed	Pre-recorded, so fixed	Freely Improvised within genre constraints			Some freedom, but with a pre-conceived outcome
Complexity	Can be layered and complex	Extremely layered and timbrally complex	Simple	Compositionally simple, but with nuanced performance		Moderate complexity with some virtuosic elements.	
Harmony	Strong, complex controlled harmonic progressions	Focussed on spectromorphology and timbre/gesture/texture. Traditional ideas of harmony are generally not applicable.	Very basic chordal harmony	Simple repetitive harmonic structures – sometimes with ambiguous modality due to 'blue notes'		Minimal and restrained harmonic movement. Use of some blues-based chordal ideas.	
Sonic design / timbre	Using acoustic instruments	Layered sound recordings, electronic effects and sound editing	Computer based sound design - often synthesised	Acoustic instruments		Acoustic instrument (with mic) and pre-recorded backing track	
Use of Technology / Notation	Traditional Score	Studio construction	Recording	No score. Aural tradition.			Completely scored – with studio constructed backing
Rhythm	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Can have some rhythmic complexity due to the time-based nature.	Strict rhythms - drum machine. Often simple steady repetitive rhythm	Rhythm fluidity – but usually with a steady shuffling rhythm.	Layered rhythms - cross rhythmic ideas		Strict rhythms in backing track, but freedom in viola line.
External References	Absolute or programme	Absolute or programme	Instrumental – but song based. Lyrics often repeated sample.	Programme – songs tell a story			Not explicitly programmatic, but based on a narrative concept
Gesture	Gestural range restricted to instrumental techniques	Wide gestural range	Punchy and driving. Small repetitive aggressive gestures.	Swooping and falling.		Not too many extended viola techniques, but sweeping/granular gestures in backing.	
Purpose / location	Formal - concert	Formal – concerts/ installations	Headphones /dance club	Bar, club, street corner			Formal - for the concert hall
Thematic Material	Balanced and shaped, especially using development techniques	Balanced and shaped	Repetitive	Repetitive		Use asymmetric phrases within a balanced structure with some repetitive themes and elements	
Dynamic	Large range	Large range	Very loud or very soft.	Large range			Full Range
Pitch	Specific methods of pitch organisation eg. clusters, harmonic field etc.	Mixture of found sound, noise and musical gestures. Timbrally organised. Usually not pitch focussed.	Tonal/modal. Largely consonant. Sometimes timbrally focussed.	Tonal with chromatic inflections (blue notes)		Use of blues scale as main melodic idea. Built from the lowest note of the viola. Highlight the 'tritone'	
Ensemble	Viola	Found sound / electronics / producer/composer	Studio producer/ composer / engineer	Guitar (often with slide), harmonica, vocals			Viola with backing track.

Table 11. Tracking Forward (TF): Hybridity table

## Composition Process

The plan for this piece was to write for a conventional, solo acoustic instrument, and to augment that sound with studio-based sound manipulation and a pre-recorded backing for technologically simple performance purposes, while retaining a unique, highly manipulated sound.

Main themes and melodic ideas for the viola part were developed first from notes based on the hexatonic blues scale, essentially the minor pentatonic scale plus the  $\flat 5$ th degree. While this scale is similar to the minor pentatonic, the blues scale is neither major nor minor in the traditional sense.<sup>306</sup> C, the lowest note on the viola, was selected as the starting note for this scale.



Figure 2. Tracking Forward (TF): Blues scale in C

The main theme, a four dyad pattern (fig.3) constructed in two groups remains consistent from first conception to final realisation. The performer slides heavily between the first chord and the following chord, then repeats the gesture with a slightly altered final chord. This motive aims to imitate a steam train whistle, and produce a vague simulation of the ‘Doppler effect’ where the pitch of a moving object such as a car, train or siren lowers as it moves away from the listener. The openness of the dyad creates some harmonic ambiguity, removed from the standard triadic structure of blues music.

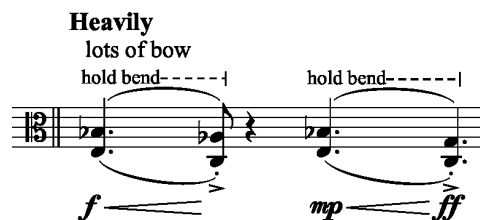


Figure 3. TF: Main theme

<sup>306</sup> Sonnier, Jr., Austin. *A Guide to the Blues: History, Who's Who, Research Sources*. Westport: Greenwood Press, 1994, p.9

Following a first sketch of the piece, readings with violist Adam Maha included experiments playing the viola with a guitarist's glass slide – a small glass tube fitted over a finger. In guitar performance it enables the performer's chord hand to slide seamlessly across the notes on the fretboard.



Figure 4. Glass guitar slide

A section of *TF*, written to make use of pizzicato technique, assumed the slide would enhance note resonance, so that sliding between pizzicato notes would be audible. Unfortunately, the glass slide effect did not translate from guitar to viola because of tension on the strings and lack of lasting resonance. It proved almost impossible to differentiate the sound, and was awkward in performance practice. The melodic line of the glass slide section was then reworked into the final composition in a more practicable way. Figure 5 shows the original version with the glass slide; and figure 6 shows the reworked version.

Get glass slide.  
Use violin in guitar style.

**Longingly**  
sliding between notes  
pizz.

mf

p

mp

f

pp

mf

mp

Figure 5. *TF*: Glass slide section from early draft

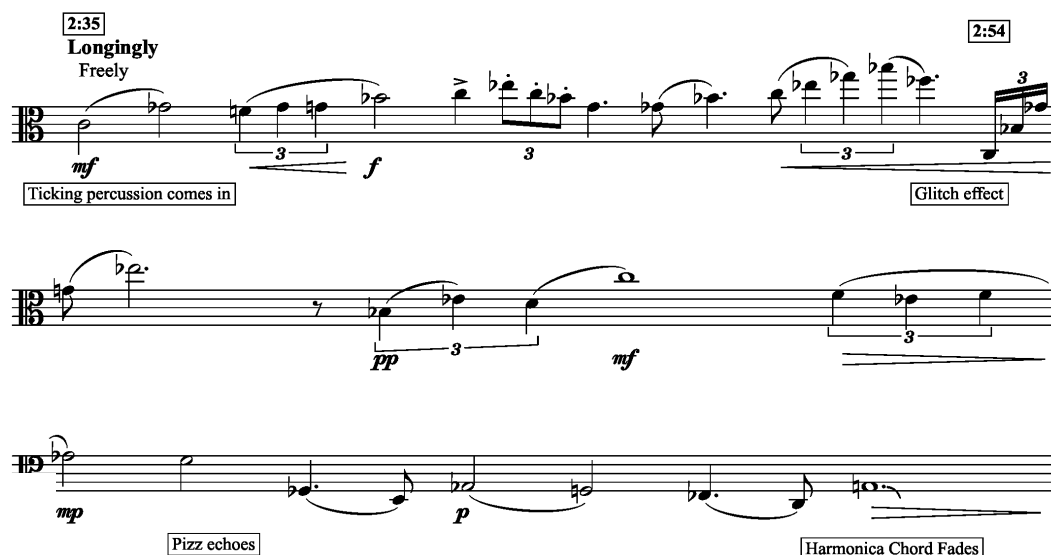


Figure 6. TF: Glass slide material reworked in final version

After rehearsed readings, a rough recording of the viola part created a timing guide for the backing track parts whose early versions relied on the manipulation of actual train sounds. Careful consideration of the sampled train sounds tied *TF* too specifically to a time and place in a somewhat obvious, even forced or contrived manner. In a subsequent and significant rewrite: sections were reworked, removed and rearranged; train recordings were removed; and, the harmonica became more prominent.

The final revision was reconstructed first using the backing track then re-working the score to fit. Treating the rough recording of the original viola part as a source of samples for cutting up, manipulation and reworking provided an additional layer of accompanying texture in the backing track. The resulting aural effects suggest additional electronic effects on the live viola, especially when the performance coincides precisely with the pre-recorded part. An example of this effect occurs in bar 35 where the performer plays a pizzicato chord, and, if the timing aligns precisely, the backing track will play a manipulated echo of that chord.



Figure 7. TF: Scored pizzicato with pre-recorded pizz. echoes (2:32 approx)

In several takes the composer drew on his blues band performance experience improvising on harmonica. These gestures and sounds were also filtered through the lens of composer-as-producer working on twentieth century art music. The improvised harmonica recordings were then treated as further source material for samples and also reworked into the final texture. These samples include the sound of the instrument, but unlike software instrument replicas, these sound recordings capture the sound of the performer's breath, mouth movements, and involuntary noises, all of which become part of the performance and the final composition. The score was then finalised with short additional guided improvisation sections, to be performed by solo viola, added to assist in synchronisation with backing track and video elements.

### **Concept and Aesthetic**

The principal purpose of a music score is to inform live performance. *TF* was created with potential to exist in various formats: the viola performed with, and enhanced by, the pre-recorded backing track; the viola and backing track accompanied by projected video, made specifically for *TF*; the film with full audio recording as a stand-alone piece. Creating a piece in a range of formats means that the work can be presented in various situations, such as small house concerts, larger concert halls and film festivals.

*Tracking Forward* is not programmatic music; rather it is an exploration of the idea of the blues and its intrinsically rich content. It has been noted that

The blues takes many forms . . . it is variously a feeling, a mood, a nameless threat, a person, a lover, a boss man, a mob, and, of course, the Devil himself. It is often experienced as both; cause and effect, action and reaction, and it can be used as both hex and counter-hex, poison and antidote, pain and relief. Most importantly, the blues is both the cause of song and the song itself.<sup>307</sup>

*TF* also portrays a journey, most obviously a train journey. It aims to capture the folkloric essence of the hobo-journeyman hitching a ride on trains, playing harmonica while travelling across the vast American landscape.

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<sup>307</sup> Comentale, Edward. *Sweet Air: American Popular Song*. Illinois: University of Illinois Press, 2013, p.49



## Structure

*Tracking Forward* is structured as follows:

	OPENING - SECTION A		'SADNESS' – SECTION B			'CLIMAX' (WITH CODA) – SECTION C	
	Subsection 1	Subsection 2	Subsection 3	Subsection 4	Subsection 5	Subsection 6	Subsection 7
Time code	0:00-1:05	1:05-1:57	1:57-2:35	2:35-4:13	4:13-5:04	5:04-6:12	6:12-6:58
Time Length	1:05	0:52	0:38	1:38	0:51	1:08	0:46
Bar Number *approx	(1 – 25)		(26 – 58)			(58 – 97)	
Performance Direction	Heavily	Heavily – breaking away	With sadness	Longingly	With sadness	With vigour	Heavily
Description	Main theme + building momentum	Variations on subsection 1	First appearance of clear rhythm in backing track.	Very free. Building lyrically into the harmonics on the viola.	Variations on subsection 3	Furious and fast. Clear climactic point.	Variations on subsection 1 – with added final run to finish.

Table 12. TF: Structural plan

The work comprises three principal structural sections. Sections A and C are related: Section C expresses continuations and developments of the main themes introduced in Section A. The material in these sections is fragmented and built on short rhythmic ideas. In contrast, the material in Section B is more lyrical and melodic. Only specific sections of the *TF* score use barlines; the majority of the score omits barlines to achieve the rhythmic freedom typical of the main melodic line in blues music, most often the vocal line.<sup>308</sup> This sense of ‘floating’ rhythm often works in contrast to “the regularity of the accompaniment rhythm”<sup>309</sup> found in blues music.

Each section may be further subdivided: the first and third sections have two subsections, while the second section has three. This gives a subsection per section ratio of 2:3:2, corresponding with the time in minutes for each section. There are two common structural delineators for the ends of each subsection: either a moment of breath; or a variation on a ‘falling’ pitch bend motif. The falling motif derives from two sources:

- 1) ‘Blue notes’ – notes from the diatonic scale are lowered to give a bluesy inflection, often heard as a pitch bend. It may be played on guitar as the performer physically bends the string to alter the pitch, or played on the harmonica where the performer plays a note by drawing

<sup>308</sup> Boone, Graeme M. ‘Twelve key recordings’ in *The Cambridge Companion to Blues and Gospel Music*. Ed. Allan Moore. Cambridge: Cambridge University Press, 2002, pp.61-88

<sup>309</sup> Cohn, Lawrence. *Nothing But the Blues: The Music and the Musicians*. New York & London: Abbeville Press, 1993, p.26

air in through one of the holes and then drawing air in harder to force a stronger vibration on the reed and audibly bend the note. The falling melodic shape also corresponds to the characteristic high-to-low melodic progression of the blues.<sup>310</sup>

- 2) 'hiianga'<sup>311</sup> – a traditional falling motion which characterises the performance of waiata – a type of traditional Maori song. The inclusion of this technique arose naturally from the composer's musical environment because of its prevalence in New Zealand culture; waiata featuring this falling motion are performed regularly at welcoming events. As the performer/commissioner of this work, Adam Maha, is of Maori descent it seemed especially appropriate.

The falling motif that marks the end of subsections is used in a range of ways.

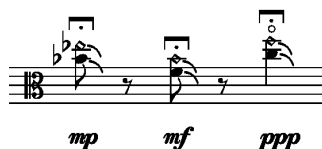


Figure 8. TF: Falling motif at end of subsection 2



Figure 9. TF: Falling motif and 'breath' at end of subsection 6



Figure 10. TF: Falling motif and 'breath' attached to main theme in subsection 7

<sup>310</sup> *ibid.* p.22

<sup>311</sup> McLean, Mervyn. *Maori Music*. Auckland: Auckland University Press, 1996, p.256

## Analysis

*Tracking Forward* begins with the blues harmonica slowly bending into a C chord, layered with a time-stretched and manipulated recording of breath, and a loop of a kokako<sup>312</sup> call modified with electronic effects. This short opening cue precedes the live viola playing the main theme.

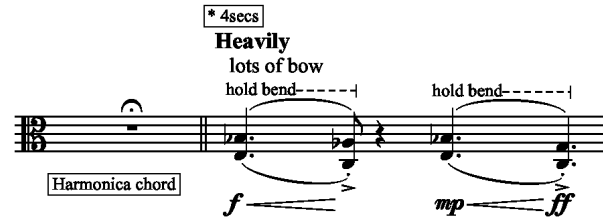


Figure 11. TF: Opening bars

The viola's second dyad, C–Ab, is accompanied by a granulated<sup>313</sup> edit of the second chord on the backing track.

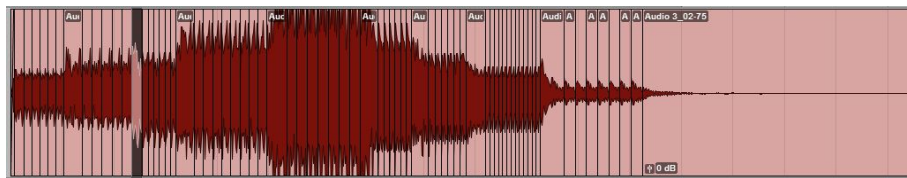


Figure 12. TF: Granular waveform edit of second chord

### Audio example 1. *Tracking Forward* (TF): Granular viola chord

As previously stated, the main musical theme features four dyads, structured in groups of two.

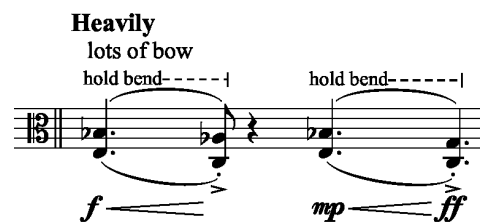


Figure 13. TF: Main theme

<sup>312</sup> The kokako is an endangered forest bird indigenous to New Zealand. It is slate-grey with wattles and a black mask. It is one of three species of New Zealand wattlebird.

<sup>313</sup> The recording of the single viola chord is cut up into miniscule sections that are fractions of a second long, which are then duplicated and re-arranged to create a digitally elongated and transformed version of the original chord.

While the notes in these chords are not all part of the hexatonic blues scale informing the majority of the melodic material in this piece, they have been added to the pitch selection so that this theme achieves the intuitively sought sound, and still allows the 2<sup>nd</sup> and 4<sup>th</sup> chords to finish on the viola's low C. Chords 1 and 3 are the same (E & Bb) diminished 5<sup>th</sup>, or tritone, which characterises *TF*. Chords 2 and 4 are a minor 6<sup>th</sup> (C & Ab) and perfect 5<sup>th</sup> (C & G) respectively. While the sliding diminished 5<sup>th</sup> and minor 6<sup>th</sup> bring some chromatic inflection and tonal ambiguity to the opening, the tonality established by the opening harmonica chord is settled by the perfect 5<sup>th</sup> in the final dyad of this thematic gesture. Common Practice Era<sup>314</sup> approaches to tonality, triadic harmonisation, cadences or modulation are not utilised in *TF*.<sup>315</sup> Instead, tonality is built on pitch centrality using the note C as an implied tonic, or harmonic centre of gravity, and achieved by way of: harmonic ambiguity in the dyads; repeated C pitches; and drone-like elements in the backing track.

At approx 0:22 the main theme is restated, but in this case the theme is cut into two sections with short rhythmic flourishes placed between.

Figure 14. *TF*: Second statement of main theme

This section then leads into the other musical idea based upon the sound of a train. Bar 10 is built on an accelerating note repetition, imitating a train pulling away from the station.

<sup>314</sup> Common Practice Era being the Baroque, Classical and Romantic periods.

<sup>315</sup> These approaches include conventionalised chord sequences and contrapuntal norms, and can be contrasted with earlier modal music and later atonal music. These approaches can also be contrasted with popular music styles that are broadly tonal but do not obey the same norms. For more information see: George, Graham. *Tonality and Musical Structure*. London: Faber & Faber, 1970, and; Dahlhaus, Carl. *Studies on the Origin of Harmonic Tonality*. (trans. Robert O. Gjerdingen) New Jersey: Princeton University Press, 1990

**0:36 Trying to pull free**  
 10 Freely

*f pp* Backing track tempo swell

Figure 15. TF: Train pulling away motif

This gesture returns in subsection 2, but in its second iteration the idea is spread across an extending pitch range in the hexatonic C blues scale.

**1:22 Breaking Away**  
 Freely

*mp f mf* String Swell

Figure 16. TF: Variation on train pulling away motif

The first clear sense of rhythmic pulse becomes apparent in subsection 3. The backing track is constructed from a throbbing bass pattern, a fluctuating digital click-based, Electronic Dance Music (EDM) influenced, percussion part, and further manipulated recordings of harmonica improvisations and some of the viola recording. This is the first segment where barlines are used, with an expectation that this section will be ‘in time’.

Audio example 2. TF: Throbbing bass part

1:57  
**With some sadness**  
 In strict tempo with backing, but with freedom.

*mp*  
 Throbbing Bass pattern

*mf*  
 Chord echoes

*f*  
 Chord echoes

*mp* > *pp*

Becoming Free

(tr) *mf*  
 Harmonica Chord Fades

*ff*  
 Pizz echoes

pizz.  
 arco

Figure 17. TF: Subsection 3

Rhythmically, the more lyrical lines draw on the ‘swing’ in blues music, often best represented by a dotted crotchet to quaver, or dotted quaver to semiquaver relationship, or as a triplet. Dotted and triplet rhythms feature prominently in the more lyrical subsections (3, 4 and 5). The melodic material found in subsection 3 is varied and developed to form the material in subsection 5.

The melodic line in subsection 4 is again written without bar lines, and played freely, but underneath the backing track features a number of precisely arranged and rhythmically layered parts. The subsection moves at 140 beats per minute. The clearest rhythmic element is a percussive wooden sound played at mostly constant semiquavers, but with some variation in the rhythmic accents. This part is processed through a delay/echo chamber to further enhance its polyrhythmic nature. Below this are continued manipulations of harmonica and viola recordings obtained using various effects plug-ins and granular deconstruction.

A large, low, resonant drum hit, occurring once every four bars, augments the rhythmic pulse. This drum is also routed through a delay/echo plug-in. Finally, a programmed drum machine part runs throughout this section, designed to have a strikingly lo-fi, deconstructed, ‘grimy’ sonic texture that is sent through a filter. The drum machine part is slowly released and then reapplied through the course of the segment.

This subsection ends with an echo swarm, where the sound feeding into the echo unit is forced into feedback so that the echoed signal forms a loop of echo that builds and transforms as it progresses. The echo swarm is also used to mark the end of subsection 6 as it moves into the restatement of the main theme in subsection 7.

The climactic point of the piece occurs in subsection 6. The wooden percussive sound is reiterated from subsection 4. The harmonica and pre-recorded viola parts go through a range of transformations as they fill the middle and background of the texture. The major addition to the sonic texture in this subsection is the programmed drum machine part whose rhythm is based on patterns similar to those in subsection 4, but placed more prominently in the mix and presented with fewer filtering effects.

Audio example 3. *TF*: Final percussive pattern

Throughout this subsection a feedback-based synthetic texture builds steadily until a break in the percussion part which corresponds with the held climactic note in the viola part. The use of studio production techniques is integral to the compositional construction of this piece, and at this point they feature in the foreground of the sonic texture; the climactic point is highlighted through studio-constructed sound.

*Figure 18. TF: Last 8 bars before the break*

Following this break, the backing track is deconstructed by way of: layered echo parts of pizzicato chords and percussion (wooden sticks, digital clicks and drum machine); string swells; and sustained harmonica notes. These build into a final

swarm that peaks and is then cut-off by the second chord of the opening theme played by both live viola and pre-recorded viola.

*TF* closes with a descending hexatonic blues scale into a trill on the central pitch note C. This is accompanied by a long held harmonica bend marking the end of the journey. This final melodic statement is echoed in the film by switching off a light on the screen.

Figure 19. *TF*: Final melodic run

## Reflections on Hybridity

Being the first piece composed using the hybridity table as a pre-compositional planning tool, the systematic process deployed for this piece was in its earliest stages of development. The balance of hybridity in *TF* does fluctuate between densely layered hybridity in the climax to almost solo viola lines. Basing the melodic material on the blues scale, together with the harmonica sound, emphasises the intended genre focus on the blues. The other genre elements derive from the studio-based electroacoustic and EDM genres and so they exist purely in the backing track. The balance of hybridity here is achieved by constantly shifting the balance of sounds and effects between the foreground and background textures, as well as through the inclusion of the pre-recorded and manipulated viola parts to morph the two separate sound worlds together. The balance of hybridity reaches its peak through the control of specific effects and transformations as the synth and rhythmic textures become most prevalent in the climactic parts.



In this work the overall impression of balanced hybridity may feel skewed towards Western European art chamber music in: the manner of presentation; the use of the viola; the ambiguous harmonic element; and, the extended structure of the piece. If *TF* was presented as a stand-alone piece for unaccompanied viola, the sense of hybridity would be completely lost; it would simply be a blues-influenced chamber piece. But, with the addition of the layers of pre-recorded backing, and the multimedia element of the accompanying film, there is a clearer sense of a hybrid work – one that is, for the most part, balanced and benefitting from the systematic hybrid genre composition method.

## Chapter Four - The Long White Cloud

*The Long White Cloud* (hereafter, *TLWC*) is a suite for chamber ensemble consisting of four movements and three inter-movement interludes that are played together seamlessly without break. This piece was written for a specific ensemble of performers with very specific performance traditions. The ensemble consists of flute, viola, cello, trumpet, keyboards, guitar, bass, drums, turntable, electronics and backing track. Throughout this piece multiple genre threads are hybridised in a range of different combinations.<sup>316</sup>

At its core, *TLWC* is a reflection of how the composer experiences life in New Zealand. The title is taken from the Maori name for New Zealand – Aotearoa – commonly translated as ‘the land of the long white cloud’.<sup>317</sup> The use of multiple genre threads is analogous to the country’s multicultural nature. Through the piece a musical space is created rather than reflected. Manipulated environmental sounds from the New Zealand landscape are interwoven through the instrumental texture. The resulting musical landscape is then supported by the traditional sounds of taonga puoro provided by Dr. Richard Nunns. This piece attempts to capture an idea of New Zealand’s beauty, sounds and landscape using the techniques of musical hybridity.

In *TLWC* improvisatory elements are included as part of the composition: improvised solo sections, along with the genre-related improvisation of the textural accompaniment parts, based on a skeletal outline and genre-specific performance notes. The expectation is that performers will bring distinctive elements from their own specialist genres to the realisation of the piece. These distinctive elements may include clichés of genres as intended by the composer. The compositional decision to include these genre-specific elements accords with the aesthetic view famously expressed by Gustav Mahler:

“The symphony must be like the world. It must be all-embracing.”<sup>318</sup>

If it is all-embracing, the symphony could include the cheap, the over familiar, the vulgar, the sentimental, and the simple (e.g. harmonic stasis), as well as the noble,

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<sup>316</sup> Discussed in greater detail in the subsequent ‘Genre and Hybridity’ section, pp.88-92

<sup>317</sup> ‘Aotearoa’, from *An Encyclopaedia of New Zealand*, A. H. McIntock (ed), 1966. *Te Ara - the Encyclopedia of New Zealand*, updated 24-Nov-09 <<http://www.TeAra.govt.nz/en/1966/aotearoa>>

<sup>318</sup> de la Grange, Henry-Louis. *Gustav Mahler, Vol.3. Vienna: Triumph and Disillusion*. Oxford: Oxford University Press, 1999, p.753

the rare, the exotic, the orderly, and the complex. *TLWC* intends to embrace all of these in its hybrid character.

### **Genre and Hybridity**

If one can make any sort of generalisation about the most recent chamber music, it would seem to be an openness to the world, in every sense – geographical, historical, traditional, across genres and decades – and an eagerness to join those worlds, across boundaries.<sup>319</sup>

In terms of genre inclusion, *TLWC* is perhaps the most open of all the works in this portfolio. It is music constructed with an eagerness to combine many of the musical genres that have intrigued or influenced the composer. The primary genres are: minimalism, twentieth century art music, electronica, rock, and jazz; in addition there are fleeting references to other genre elements, often explored only in single sections.<sup>320</sup>

Part of the hybrid nature of this piece comes from the combination of performers from different genres, placing them in a new context and discovering how to work together through the performance of this new music. While the hybridity table method was used in the pre-composition process for this piece, it is cumbersome to present all the necessary elements in that form for the entirety of this piece. In an attempt to present the genre usage more transparently, an analytical method presenting genre construction over time was designed. The following tables reveal how the various genre elements, presented individually, are layered and change throughout the piece.

First an explanation of the labels used and how they relate to the elements in this piece:

Twentieth century chamber music: heard primarily in the flute, viola and cello parts, but also reflected in elements of the backing track. The techniques utilised include careful pitch organisation, counterpoint, extended melodic lines, and polyphonic layering. In twentieth century chamber music, a concise genre

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<sup>319</sup> McCalla, James. *Twentieth Century Chamber Music*. London & New York: Routledge, 2003, p.xxiii

<sup>320</sup> Discussions of these sections and the genre elements used are discussed below in the genre maps, and in the specific analytical sections for the piece.

definition can be hard to pinpoint because, “few systemic requirements seem to exist, and certainly no overriding style or method of composition.”<sup>321</sup>

Minimalism: found across the whole ensemble, but particularly in the tuned percussion, backing track parts; focussed mainly on the use of subtle phasing techniques, use of motivic repetition, and studio-based looping elements.

Film score: describes the use of contemporary cinematic sound textures, and the use of sound-design timbres as part of the musical composition. Standard film score-based musical gestures are also used in brass swells, explosive unnatural percussive swells and hits, and foreign instruments.

Jazz: drawing on sub-genres of modal, cool, and bebop jazz, heard predominantly in the trumpet and bass parts; particularly prominent elements also heard in ‘walking’ bass lines and muted solo trumpet.

Electronica: a catch-all term for electronically generated music, particularly dance music, EDM, IDM, dubstep, techno, glitch. Presented in programmed drum sounds, studio-based manipulation of samples, loop-based sections, and synths.

Electroacoustic: addresses found-sounds, studio manipulation, and soundscape design as part of the composition; heard as part of the backing tracks, particularly in the manipulation and presentation of natural sounds.

Taonga puoro: the traditional instrumental sounds of the Maori. In this piece, these are provided by Dr. Richard Nunns; through his work and collaboration on the project it is believed that the treatment of these sounds is culturally appropriate. The sounds of the taonga puoro reflect an important part of the New Zealand soundscape and, as such, are important in the presentation of this piece.

Hip hop: represented in this piece by turntablism - the art of manipulating sounds and creating music using a turntable and mixer, justified thus:

A phonograph in the hands of a 'hip hop/scratch' artist who plays a record like an electronic washboard with a phonographic needle as a

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<sup>321</sup> McCalla (2003), p.xxii

plectrum, produces sounds which are unique and not reproduced – the record player becomes a musical instrument.<sup>322</sup>

Wall-of-Sound/Noise: not essentially a genre, it is a music production technique developed by Phil Spector in the 1960s involving large numbers of instrumentalists playing the same parts in unison, adding musical arrangements for a variety of other musicians, and recording the sound through an echo chamber.<sup>323</sup> It created a dense, layered and reverberant sound. In *TLWC* this approach is taken and then adapted along with the ideas of noise music – expressive noise presented in a musical context. Noise textures and layered instrumental elements are combined to create swelling, reverberant gestures at key climactic points.

Rock: drawing most specifically from the sub-genres of metal, post-rock and shoegaze; most clearly presented through guitar and drum parts, using crunchy power chords, driving steady rhythm, and some virtuosic solos.

Funk: often harmonically static, but rhythmically intricate. The varied placement of beats contributes to the sense of ‘groove’ and provides the main source of musical variation and interest. The use of funk as a genre element in this piece is minimal focussing on the interplay between guitar, bass and drums and the backing track.

Blues:<sup>324</sup> Use of blues in this piece is minimal, drawing on the Chicago electric blues sound, and in this case typified by the playing of guitarists such as Stevie Ray Vaughan.

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<sup>322</sup> Oswald, John. "Bettered by the Borrower: The Ethics of Musical Debt" in *Audio Culture: Readings in Modern Music*. (Eds. Christopher Cox and Daniel Warner) London & New York: Continuum International Publishing, 2004, p.132

<sup>323</sup> For more about this, see the section on ‘Sound, Idiolect and the Producer’ in Chapter Two, p.56

<sup>324</sup> A detailed discussion of blues can be found throughout Chapter Three: *Tracking Forward*.

## Hybrid Genre Breakdown

This series of tables details genre element usage by bar number. Black squares indicate the presence of a genre element in the musical texture.

<b>MOVEMENT ONE</b> <b>(00:00 - 06:16)</b>						
	1 - 20	20 - 73	74 - 126	127 - 137	137 - 194	195 - 208
<b>Genres:</b>						
20th Century chamber music						
Minimalism						
Film score						
Jazz						
Electronica						
Electroacoustic						
Taonga puoro						
Hip hop						
Wall-of-sound						

<b>Interlude 1</b> <b>(06:16 - 07:45)</b>		
	1 - 29	29 - 40
<b>Genres:</b>		
20th Century chamber music		
Electroacoustic		
Taonga puoro		

<b>MOVEMENT TWO</b> <b>(07:45 - 13:21)</b>							
	1 - 31	32 - 47	48 - 63	64 - 77	78 - 94	95 - 126	127 - 141
<b>Genres:</b>							
20th Century chamber music							
Minimalism							
Film score							
Jazz							
Electronica							
Electroacoustic							
Hip hop							
Wall-of-sound							
Rock							
Funk							

<b>Interlude 2</b> <b>(13:21 - 15:03)</b>	
	1 - 41
<b>Genres:</b>	
20th Century chamber music	
Electroacoustic	
Taonga puoro	

<b>MOVEMENT THREE</b> <b>(15:03 - 21:12)</b>					
	1 - 45	46 - 63	64 - 95	96 - 135	136 - 169
<b>Genres:</b>					
20th Century chamber music					
Minimalism					
Film score					
Jazz					
Electronica					
Electroacoustic					
Wall-of-sound					
Rock					

<b>Interlude 3</b> <b>(21:12 - 23:27)</b>			
	1 - 20	21 - 42	43 - 62
<b>Genres:</b>			
20th Century chamber music			
Film score			
Electronica			
Electroacoustic			
Taonga puoro			
Hip hop			

<b>MOVEMENT FOUR</b> <b>(23:27 - 31:03)</b>										
	1 - 12	13 - 52	53 - 92	93 - 101	102 - 119	120 - 133	134 - 165	166 - 198	199 - 230	231 - 267
<b>Genres:</b>										
20th Century chamber music										
Minimalism										
Film score										
Jazz										
Electronica										
Electroacoustic										
Taonga puoro										
Hip hop										
Wall-of-sound										
Rock										
Funk										
Blues										

Table 13. The Long White Cloud (TLWC): Genre breakdown tables

Due to the large scale of this piece, having all the genres above present at all times would result in an incoherent jumble. There would be too many layers, and as such the dramatic shape and general perception of the piece would lose focus. In an effort to deal with this issue, hybridity is achieved by manipulating layers of genre elements. So while at any particular point in time the layers of hybridity may differ and one genre may seem more present than others, on a global scale, the balance of hybridity of the piece is balanced. The hybridity is adaptable, and moves throughout various phases according to the compositional requirements of the piece. While this composition deploys the hybrid genre methodology devised for this research, it is also an artistic statement. The science of composition needs to serve the creative development of the music, not the other way around.

## Composition Process

The roles of the producer, composer and performer are thoroughly intertwined in the composition of *TLWC*. Compositional decisions such as arrangement and sonic construction rely on the composer's technical skills in sound production and editing, as much as those of orchestration and traditional composition. Then, when working with a range of instrumental samples, synthetic textures and

hardware instruments, the skills of performance become part of the flow of the final realisation of the piece through the recording of the backing tracks.

This piece experienced the longest gestation period of any of the works in the portfolio. Initially, a number of unrelated sketches, themes and ideas were gradually worked into a six-movement suite. However, through workshopping with performers, the composer and supervisors felt it necessary to adjust and refocus the piece in a slightly new direction. Thus, large sections of the original version were re-edited, rearranged and recomposed into the final construction.

Once an underlying concept and shape of the piece was designed, the sketches and ideas were put together and expanded upon, movement-by-movement, gradually developed and refined from an originally improvisational standpoint. The key riffs and motifs were then developed through exploration and manipulation of the audio recordings of those original improvisations. The composition of the basic textural bed for each movement was built through the layering of parts, and the manipulation of various fragments of recordings, both of instrumental musical ideas, synthesizer patch design, and natural found sound sources. Having created basic beds, composition commenced on the traditionally scored elements, and a plan formulated for the way any live improvised elements would fit into the texture.

The parts for the flute, viola, cello, and a majority of the trumpet, were composed using traditional notation. These instruments do have some short improvised sections, but the bulk of their instrumental parts were composed in a traditional way. The guitar, bass, keyboard and drum parts were composed as a set of instructions based around harmonic arrangement, structural plans, and a general description of the timbre and stylistic qualities desired for each part. These instructions, written in vernacular tone without excessive detail and reflective of the composer's familiarity with the performers, were issued as a page of notes for each movement. Each performer in the ensemble was especially selected for their particular skill set and background, and so the compositional process plan allowed these performers room to interpret the materials presented them. The notes serve only as a guide; finer details of these elements were discussed during rehearsals.



Such discussion of arrangement, orchestration, composition and performance during the rehearsal/performance period is common practice in the popular music world.

The work was revised and altered throughout the rehearsal period. Feedback from performers provided an opportunity to analyse, breakdown, rewrite, rearrange, add and/or subtract elements from the texture to achieve the ideal live performance. After the final performance and recording the compositional process remained unfinished; many compositional elements cannot be finalised until the piece is performed. The post-production presentation of the piece creates an important record of how the piece contributes to this creative research portfolio. The development and clarity of the final hybrid focus of the piece is reliant on thorough post-production mixing, not least because of the multiple genres which need to be heard for the hybridity to assert itself. If any one instrument dominates the recording, this can skew the final perception of hybridity balance.

### **Concept and Aesthetic**

*The Long White Cloud* includes the strongest popular music elements of all the pieces in the portfolio. Whereas the majority of other works have a more contemporary art music presentation and focus, *TLWC* is bombastic, generically broad and very pop in character, but with an intellectual twist. As the overall research goal of this portfolio is to navigate and hybridise selected musical elements from different musical genres into artistically credible new works, it is appropriate for some of the works to approach this goal from a more popular music angle.

This piece is constructed with three main layers:

1. Traditional composition with respect to notation, counterpoint, harmonic structure
2. Improvised performance guides with genre-specific technique
3. Studio as compositional tool with respect to pre-composed backing tracks, found sound elements, studio-based sound effects

The compositional intention for this piece was to seamlessly combine all three layers, combining a unique ensemble with pre-recorded backing tracks, for the purpose of live performance.

*TLWC* is composed specifically for live performance and/or recording without intention to rely on a traditional notated score. It places importance on performer interpretation, creating a situation where the piece will never be presented exactly the same way twice. Thus, it is more closely related to the jazz idea of composition, or partially related to graphic scoring, relying on performers from a mix of genre backgrounds to present a hybrid work.

## Structure

Macro level structure of *The Long White Cloud*

MOVEMENT	Mvt. 1	Interlude 1	Mvt.2	Interlude2	Mvt.3	Interlude3	Mvt. 4
Tempo	132bpm	Slow from 132-97 bpm	97bpm	97bpm	110bpm	110bpm	142bpm
Tonal Centre	C	(C-D)	D (+Fmin)	(D-Eb)	Eb	(Eb-F)	F
Length (bars)	208	40	141	41	169	62	267
Length (Time)	0:00 – 6:16	6:16 – 7:45	7:45 – 13:21	13:21 – 15:03	15:03 – 21:12	21:12 - 23:27	23:27 – 31:03
Sections per movement	3	1	7	1	5	1	7

Table 14. TLWC: Macro structure table

Over the span of the piece the tonal centre moves steadily upwards from a perceived tonal centre of C in the beginning, to F in the final movement. At times this is based on a traditional idea of tonality, at other times these notes merely serve as a pitch centrality upon which the rest of the harmonic structure is focussed, either as a harmonic field, or as a series of clusters.<sup>325</sup>

<sup>325</sup> Details about pitch, tonality and harmonic fields can be found in the section on ‘Pitch Organisation’ below.

The entire piece is composed in simple quadruple meter, but because it doesn't have a consistent sense of beat,<sup>326</sup> it was essential to provide all performers with a click track, accessed through headphones, to ensure that all parts, notated, improvised and pre-recorded, remained coordinated. In film scoring, performers regularly play with a click track to ensure numerous complex layers of sound coordinate. This click track, underlying each movement and interlude, then guides the performers through the piece.

Thematically, each movement has its own inspiration and its own melodic ideas specific to each section. The movements and interludes have descriptive titles, but these provide only an abstract sense of place and space; the music is not intended to be explicitly programmatic. The titles also reflect some of the natural sound elements used in the creation of the backing textures.

Movement 1: At dawn with the korimako

Interlude 1: The tui's call

Movement 2: Sea chase at the Auckland Islands

Interlude 2: A flightless night

Movement 3: Along the river Waikato

Interlude 3: Onomatopoeic owls

Movement 4: Kokako, bringer of water

These seven sections flow together seamlessly, each one blending into the next. The transitional moments between movements are typically guided by sound-design elements: manipulation of natural found-sounds and also through the use of the taonga puoro parts pre-recorded by Dr. Richard Nunns.

### **Pitch Organisation**

In a similar manner to the genre breakdown presented earlier in this chapter, it is appropriate to address the use of pitch organisation in tabular form: each movement is analysed explaining how the pitch organisation works in layers. Each of the techniques described in the table use generally descriptive terms.

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<sup>326</sup> There are a number of arrhythmic sections: particularly in the interludes, where the music is more textural.

Tonal: includes anything based on standard scales or modes. The use of tonality doesn't necessarily follow strict rules of tonal harmony in terms of voice leading, cadences, and modulation, but these sections have a tonal musical quality and are based on tonal major/minor scales. This section also covers any use of standard modes.

Clusters: includes the more atonal elements of the piece, providing synthetic scales that are developed throughout the piece; also includes any saturated chromaticism, or use of a harmonic field.

Noise: Not used in a pejorative sense, noise refers to anything not played by the instruments in the room including manipulated found-sounds and environmental recordings, un-pitched synthesized textures, and any taonga puoro recordings.

Improvised (melody): to point out any main melodic lines that are improvised by the musicians. While there are improvised parts in the accompaniment throughout the piece, it is the moments where the main melodic focus is improvised that are included under this label. These improvised melodic sections could use any method of pitch organisation, but are most often tonal.

#### Movement One – At dawn with the korimako (00:00 – 6:16)

Section Bar Numbers	A		B		C	
	1-20	20 - 73	74-126	127-137	137-194	195 - 208
<b>Pitch Organisation</b>						
Tonal						
Clusters						
Noise						
Improvised (melody)						

*Table 15. TLWC: Pitch organisation in movement one*

Movement One begins with a cluster of Bb, B, C, Db, G, elements which continue throughout the piece; noise elements underline the entire movement. Tonal harmony is included in Section B because the minimalist section is based in a cluster of Bb C and D, but the combined harmonic stasis could essentially be interpreted as F# major. In the improvised section, the trumpet melody features scalar elements and genre-influenced gestures and riffs whose performance corresponds to certain tonal and modal shapes common in jazz performance.

### Movement Two – Sea Chase at the Auckland Islands (07:45 – 13:21)

Section	A	B	C	D	E	F	G
Bar Numbers	1-31	32 - 47	48-63	64-77	78-94	95 - 126	127 - 141
<b>Pitch Organisation</b>							
Tonal							
Clusters							
Noise							
Improvised (melody)							

*Table 16. TLWC: Pitch organisation in movement two*

Movement Two begins with a textural wash from which the main F minor melodic line emerges and continues throughout the piece. It is underlined by a continuation of the opening cluster-based textural synth elements, not at the forefront of the musical arrangement, but providing a drone element throughout the tonal sections. The trumpet again plays the improvised melody here. Section F layers different methods of pitch organisation in a more obvious way: the rhythm section retains the tonal centre, and melodic instruments together with backing track play a more adventurous chromatic melody and harmonic language.

### Movement Three – Along the river Waikato (15:03 – 21:12)

Section	A	B	C	D	E
Bar Numbers	1-45	46 - 63	64-95	96-135	136-169
<b>Pitch Organisation</b>					
Tonal					
Noise					
Improvised (melody)					

*Table 17. TLWC: Pitch organisation in movement three*

Movement Three is essentially tonal, based in Eb major. Noise elements emanate from the manipulation of bird sound and some taonga puoro parts. It is the most song-like of all the movements.

### Movement Four – Kokako, bringer of water (23:27 – 31:03)

Section	A				B	C	D	E	F	G
Bar Numbers	1-12	13 - 52	53-92	93-101	102-119	120 - 133	134-165	166-198	199-230	231-267
<b>Pitch Organisation</b>										
Tonal										
Clusters										
Noise										
Improvised (melody)										

*Table 18. TLWC: Pitch organisation in movement four*

Movement Four is also essentially tonal, but the noise elements – manipulated rainfall sounds and bird song – are more pronounced, adding to the perceived sense of dissonance. The cluster elements around the tonal centre F are more an implied dissonance than any specific synthetic scale or pitch-class set.

### Interludes

The pitch organisation of all three interludes combines noise manipulation and harmonic field. The latter is used consistently in all the three interludes, but the sense of pitch centrality is adjusted using repeated notes in the instrumental parts, along with held pitched textures in the backing track. The harmonic field was constructed intuitively, providing a sense of tonality in areas, but with sufficient chromatic intervals and unexpected leaps to create an ambiguous sense of tonality.



*Figure 20. The Long White Cloud (TLWC): Harmonic field for interludes*

The individual instruments guide the pitch organisation of the taonga puoro throughout this piece. Each instrument has its own unique pitch range, and utilises a range of microtonal tuning elements that contribute to its character. In the same way that the bird song represents a sonic character removed from any considerations of pitch, the taonga puoro parts were similarly designed. The character of both the instrument and melodic phrase is the most important part, allowing these sounds to sit within any system of harmonic organisation and retain justification in the musical context of this piece.

## Analysis

### Movement One: At dawn with the korimako

Movement one is in three broad sections built in ternary form:

	Section A	Section B	Section C
Bar Numbers	1 – 73	74 – 137	137 - 208
Musical Elements	Piano loop, textural instrumental elements	Minimalist harp and percussion, cello solo	A combination of elements from section A and B – with improvised trumpet solo and ‘swing’ rhythm

*Table 19. TLWC: Structural plan for movement one*

This movement builds like a slow moving dawn, and utilises the bird call of the korimako, the New Zealand bellbird, recognised by its melodious song which Captain Cook described as sounding “like small bells exquisitely tuned”.<sup>327</sup>

Section A is built around the main pre-recorded piano loop consisting of a Bb, B, C, Db, G. This section is textural and features atmospheric, non-motivic lines on scored instruments, taonga puoro, manipulated bird song and sparse improvised textures from the bass and keyboards.

#### Audio example 4. *The Long White Cloud (TLWC)*: Opening piano loop

Section B is 60 bars structured around a minimalist bed of pre-recorded marimba and harp with audio manipulation through layering, phasing, and filter effects. This is built on a cluster of Bb, C and Db, where C is treated as an almost drone-like central point. When combined with the cello part this section can be heard as a harmonic stasis around F# major.

#### Audio example 5. *TLWC*: Marimba with harp phasing

The acoustic guitar and viola play arpeggiated parts similar to the backing adding extra rhythmic layers to the minimalist bed already in place. On top of this, the cello has an extended solo melodic line.

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<sup>327</sup> ‘Bellbird/korimako’ *Department of Conservation*. n.d. Web. Accessed: 3 March 2014.  
<<http://www.doc.govt.nz/conservation/native-animals/birds/birds-a-z/bellbird-korimako/>>



Figure 21. TLWC: Cello solo, section B, movement one

Section C is the final 70 bars of the movement, and is a layered combination of material from both Sections A and B, with Section A being the most present. This section also features a jazz-influenced trumpet solo, accompanied by walking bass line and swing drums. The improvisation in this section approaches some of the genre conventions of free jazz, where the harmonic structure of the section is not prescribed. The performers are free to move around the harmonic outline of the clusters, or find inspiration in the alternate harmonic movement that takes place within the texture played by the cinematic sampled strings.



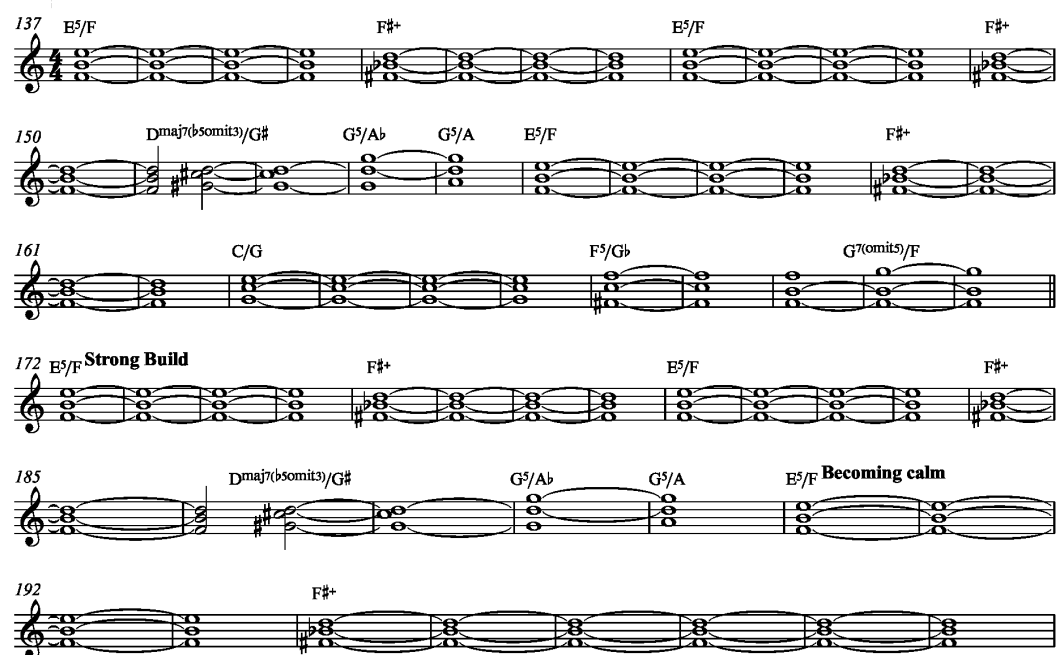


Figure 22. TLWC: Harmonic structure of string samples, section three, movement one

This movement ends as the rhythm and melodic lines crumble into the wash that introduces the first interlude.

### Interlude One: The tui's call

In contrast with the four main movements of this piece, the three interludes use a consistently smaller ensemble: flute, viola, cello and backing track. This ensemble intends to present the twentieth century art music genre elements more transparently. The pitch material for the all three interludes is based on the same harmonic field. Each interlude is named for a native bird, and features recordings of those birds as part of the sonic texture. Interlude One utilises the sound of the tui, known for its' noisy, unusual call, different for each individual, combining bellbird-like notes with "harsh clicks, barks, cackles, and wheezes."<sup>328</sup>

Each interlude features one of the three scored instruments as the main melodic line while the others play accompaniment. In Interlude One, the solo line is played by flute:

<sup>328</sup> 'Tui'. *Department of Conservation*. n.d. Web. Accessed: 3 March 2014.  
<http://www.doc.govt.nz/conservation/native-animals/birds/birds-a-z/tui/>



Figure 23. TLWC: Flute solo, interlude one

The main melodic parts of the interlude sit on a synth-based texture where the tonal centre slowly drifts from C to D. Recordings of taonga puoro and granular manipulations of recorded tui song are inserted with the live instrumental accompaniment. Elements of these manipulations are directly linked to the tempo grid and so form part of the rhythmic pulse.

Audio example 6. TLWC: Tui glitch manipulation

## Movement Two: Sea Chase at the Auckland Islands

Movement Two is in seven sections.

	Section A	Section B	Section C	Section D	Section E	Section F	Section G
Bars	1 -31	32 – 47	48 – 63	64 – 77	78 – 94	95 – 126	127 - 141
Description	Atmospheric textural, drone.	Main melodic theme.	Based on material in section B, with trumpet solo.	Build on material from section B and C – intensifying.	Climax and crumble. Becomes a textural wash.	Driving electronic section. Extended harmonies and new melodic line.	Climax and crumble. Similar to section E. Becomes textural wash to end.

*Table 20. TLWC: Structural plan for movement two*

The Auckland Islands are an archipelago of the New Zealand subantarctic islands. They lie 465 kilometres from Bluff in the South Island and have no permanent human inhabitants. Auckland Island, the main island, is notable for its steep cliffs, rugged terrain and consequent shipwrecks. New Zealand authorities established and maintained three main emergency depots on the islands from 1887. They also cached additional supplies, including boats to help reach the main depots, around the islands.<sup>329</sup>

The movement opens atmospherically in Section A. All instruments play textural parts, slowly creating a dramatic build up through rising pitch and increased dynamic. Based around the cluster C-D-Eb-F, with D as the drone centre, the free form improvisation from the keyboards, guitar, bass and drums, creates an additional textural layer to the scored parts for flute, viola, cello and trumpet.

In Section B the tonal centre moves to F minor, and features the clearest presentation of any collective melodic line in this piece, played by all four of the scored instruments.

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<sup>329</sup> Scadden, Ken. 'Castaways - Wrecked on a subantarctic island', *Te Ara - the Encyclopedia of New Zealand*, updated 13-Jul-12 <<http://www.TeAra.govt.nz/en/castaways/page-1>>

Figure 24. TLWC: *Main theme, movement two*<sup>330</sup>

This is accompanied by a rhythmic groove-based accompaniment from the guitar, bass, keyboards and drums, following an ascending harmonic pattern F – G – Ab – Bb in a loop.

Section C is a continuation of the material in Section B, except instead of the unified melodic line, the trumpet performs an improvised solo while other scored parts provide counter-melodies and accompaniment.

This then flows directly into Section D. The ascending harmonic shape continues and the whole ensemble builds in intensity throughout this section to reach an unmaintainable dynamic peak which crumbles into Section E – a ‘wash’<sup>331</sup> of sound, both live and pre-recorded where the sense of rhythmic pulse becomes lost.

<sup>330</sup> Trumpet part is in Bb so shown pitch in score extracts is the transposing pitch.

<sup>331</sup> ‘wash’ – this term describes the textural presence of a sound. A sound wash is essentially an indistinct textural bed. It can be associated with synth pads, and the ‘wet/dry’ quality of a reverb.

From this arrhythmic texture Section F emerges, signalled by four electronic drum clicks. This section is electronic, dissonant, and distorted. The pre-recorded backing features a relentless electronic programmed drum pattern, some monophonic synth accent phrases, and a moving bed of synthesizer pad sound. The synth pad, and live keyboard part, is based on harmonies inspired by Wagner's 'Tristan Chord' from *Tristan und Isolde*.



Figure 25. TLWC: 'Tristan' chord transformation, section F, movement two

The harmonic structure of this section is not related to the harmonic structure of *Tristan und Isolde*, simply the voicing of this chord influenced this section. The impulse for including this harmonic quotation was two-fold: first, the composer sought a musically significant way to expand the harmony for this breakdown section; and second, composition for this section followed a viewing of the fourth lecture from the 1973 Norton lectures series, Leonard Bernstein at Harvard: *The Unanswered Question*, titled 'The Delights and Dangers of Ambiguity' where he discusses this chord and its variations.

**Breakdown**  
**Solid, Electronic and Mechanical**

95 B $\flat$  $\Delta$ 7 E $\flat$ (b5)/A B $\flat$  $\Delta$ 7 C(sus9) B $\flat$  $\Delta$ 7 G+(omit3)

107 D $\flat$ /C A $\flat$ 6(omit3) A $\flat$ 5 A $\flat$ (sus4)/B $\flat$  A $\flat$ (sus4) G $\flat$ 13(b5)/B

117 D5 B $\flat$  $\Delta$ 7 F $\sharp$  $\Delta$ 7 E $\flat$ maj7/A F7(omit5)/A

Figure 26. TLWC: Harmonic structure, section F, movement two

The next layer of this section is in guitar, bass and drums, playing a half-time groove based around the electronic groove of the programmed drums, but independent of the harmonic movement. Their rhythmic groove is built on a tonal focus of F, spread over a repeated two-bar phrase with various scalar movements

in the second bar leading back to the strong F emphasis on the first beats of the first bar.

Audio example 7. TLWC: Guitar, bass and drums groove

The final elements of this section are in the scored instruments; viola and cello play a unison rhythmic counter part, adding to the groove set out by the backing and rhythm section.

The image displays two systems of musical notation for Viola (Vla.) and Cello (Vc.) parts. The first system, starting at measure 97, shows a unison rhythmic pattern in F minor. The Viola part uses a soprano clef and the Cello part uses a bass clef. The second system, starting at measure 101, continues the unison rhythmic pattern. The notation includes various rhythmic values such as eighth and sixteenth notes, rests, and accidentals (flats and naturals) consistent with the F minor key signature.

*Figure 27. TLWC: Viola and cello part, section F, movement two*

On top of these combined rhythmic elements is an extended melodic line played by flute and trumpet. Based in F minor, it features saturated chromaticism throughout the line to cloud the pure tonal sense of the section, and also develops alongside the harmonic movement in the synth wash. This melodic line is consistently doubled at the sixth throughout.

**Breakdown**  
95 Solid, Electronic and Mechanical

The musical score consists of six systems, each with a Flute (Fl.) and Trumpet (Tpt.) part. The key signature has one sharp (F#) and the time signature is 4/4. Measure numbers 95, 101, 107, 114, 120, and 123 are marked at the beginning of the systems. The notation includes various note values, rests, triplets, and slurs, indicating a complex and melodic passage.

Figure 28. TLWC: Flute and trumpet melody, section F, movement two

Section G ends the piece in a falling crash, similar to that of Section E, where the piece crumbles on itself, dying away, falling back to ‘D’ as a tonal centre before finally transitioning into Interlude Two.

#### Interlude Two: A flightless night

This interlude is built in similar layers to the first interlude, featuring a synth-based harmonic texture slowly shifting from D to Eb. The taonga puoro return playing pahu (jade gong) and koauau (flute). The found-sound elements of this section are based on recordings of indigenous New Zealand birds, namely the kiwi, a flightless bird, and national symbol of New Zealand, also inspiring the title. The scored instruments play above these layers where viola takes the lead melodic line.



Figure 29. TLWC: Viola solo, interlude two

### Movement Three: Along the river Waikato

Movement three is the most purely tonal part of *TLWC* and is based on song structure in five sections:

	Section A	Section B	Section C	Section D	Section E
Song structure format:	Verse	Chorus	Verse	Chorus	Verse
Alternate Marking based on musical material	A	B	A'	B'	A''
Description	Introduction. Main accompaniment is piano with flute melody.	New harmonic pattern. Bass and trumpet added to the texture.	Back to opening harmonic idea. Addition of guitar and drums. Viola improvises melody.	Final Chorus. 'Wall of Sound' – texturally thick	Instruments removed. Becomes calmer. Finish with piano.

Table 21. TLWC: Structural plan for movement three

The Waikato River is the longest river in New Zealand, running 425 kilometres through the North Island from Lake Taupo, New Zealand's largest lake, through the Huka Falls, and to meet the Tasman Sea at Port Waikato. It runs through the composer's hometown of Hamilton, located in the Waikato region.

Section A opens with the piano alternating between Eb and C minor arpeggios. Over this harmonic base the flute plays the main melodic line of this verse with the viola and cello playing accompaniment and counter melody parts.



6 Section A - Lyrical and floating

12

16

Figure 30. TLWC: Opening melodic section, movement three

The melodic line continues to develop over the opening 40 bar section, reaching a peak at around bar 38 before transitioning into the introduction of Section B at bar 46.

Section B is the first statement of the ‘chorus’ part of the movement. This is marked by the inclusion of bass and trumpet. The bass and piano provide the new harmonic pattern of Ab / Bb / Gm / Cm repeated. Over this the flute and trumpet play the main melodic lines, and the viola and cello continue as in the previous section.

**46 Section B - Calm but Strong**

Fl. *mp*

Tpt. *f*

Fl. *mf*

Tpt.

Fl. *p*

Tpt.

Figure 31. TLWC: Flute and trumpet melody, section B, movement three

Section C (A') moves back to the opening harmonic idea. In this second variation of the harmonic pattern, the guitar and drums are added to help the rhythmic and dynamic build of the movement. The main melodic line of the second 'verse' is an improvisation on viola. The accompaniment of this solo section continues in the same way as in previous sections, but with a constant sense of dynamic building into Section D (B'), the final version of the 'chorus'. Here the trumpet brings back a variation of the first chorus part, while the other parts become more expansive, and the overall track builds into a 'wall-of-sound'.

**Section B' - Wall of Sound**  
**Global Crescendo through section**

96 *mf*

102 *f*

108

114

Figure 32. TLWC: Trumpet melody, section D, movement three

This ‘wall-of-sound’ is created through rhythmic movement in all instruments, as well as interlocked layers of moving melodic ideas. At the core of this section is a combination of the sound worlds of post-rock and ambient music within the hybrid context: both these genres make a feature of space and texture, particularly through reverb manipulation. Performing this type of music in a naturally reverberant concert chamber means that the density of musical parts, combined with the overall dynamic increase, helps to create this effect in this section, thus adding to the ‘wall-of-sound’.

The image displays a musical score for four instruments: Flute (Fl.), Trumpet (Tpt.), Viola (Vla.), and Violoncello (Vc.). The score is divided into two systems. The first system begins at measure 128, and the second system begins at measure 132. The Flute and Trumpet parts are characterized by rapid, interlocking melodic lines. The Viola part has a sustained, low-register line, marked with '8va' (octave up). The Violoncello part features a rhythmic pattern of eighth notes with triplets. The score is marked with 'ff' (fortissimo) and '8va' (octave up) for the Viola part.

Figure 33. TLWC: Final wall-of-sound moment, section D, movement three

The piece reaches its eventual peak here, accompanied by the inclusion of manipulated found-sound most often present in the interlude sections.

#### Audio example 8. TLWC: Bird manipulation

This movement closes in Section E (A'') with a return to the opening harmonic idea, the instruments steadily becoming quieter, leaving the movement to close, as it opened, with the piano part.

### Interlude Three: Onomatopoeic owls

The title comes from New Zealand's only native owl, the ruru, whose two-pitched call inspires their onomatopoeic name.<sup>332</sup> This is the most rhythmically defined of all the interludes. Along with a synth wash shifting from Eb to F, taonga puoro and manipulated bird sound, this interlude also includes cinematic percussion parts and glitched-programmed drums<sup>333</sup> providing an additional rhythmic pulse. This rhythmic pulse helps to foreshadow the heavy rhythmic focus of the last movement. The cello plays the lead melodic part, which provides a transition into Movement Four.

1 ♩=110

11

17

25 *f*

33 *mp*

39 *mf*

44 *f*

51 *f*

57 *mf*

1 ♩=142 In a spatial trance

Figure 34. TLWC: Cello solo, interlude three

### Audio example 9. TLWC: Cinematic percussion parts

<sup>332</sup> 'Ruru'. *Department of Conservation*. n.d. Web. Accessed: 3 March 2013.

<<http://www.doc.govt.nz/conservation/native-animals/birds/birds-a-z/morepork-ruru/>>

<sup>333</sup> Programmed drums are sequenced drum patterns performed by a drum machine or software equivalent. Glitch is an audio effect where the sound source is manipulated in an extreme manner, often resulted in noise-like 'glitch' elements.

## Movement Four: Kokako, bringer of water

Movement Four is also in seven sections, as was Movement Two, and as is the macro structure of the piece.

↓	Bar Numbers	Description
Section A	1 – 101	Minimalist instrumental parts, glitched rainfall, guitar solo
Section B	102 – 119	Calm, flute melody, programmed drums, birdcall manipulation
Section C	120 – 133	Heavy, percussive stabs with moving accent.
Section D	134 – 165	Heavy, dense, rhythmic electronica. Electronic breaks and swells
Section E	166 – 198	Lighter, contemporary classical music inspired flute/viola/cello
Section F	199 – 230	Variation on Section D – Similar material with different electronic elements
Section G	231 – 267	Variation on Section E to finish – inclusion of trumpet with melody

Table 22. TLWC: Structural plan for movement four

The title for this movement comes from the kokako, an indigenous New Zealand wattlebird, whose call can be heard in the backing track of this movement. In Maori myth, the kokako gave Maui water while he fought the sun. The kokako would fill its wattles with water and bring the water to Maui. Maui rewarded the kokako by “making its legs long and slender, enabling the bird to bound through the forest with ease in search of food.”<sup>334</sup>

Section A starts with a looping minimalist/trance-based idea constantly developing, through instrumental layering, as it progresses. Built on a synth-based drone of Fmin7, along with rhythmic and glitched manipulations of rainfall, a pre-recorded, echoed piano part sets up a repeated minimalist pattern over which the scored instruments play a series of loops.



Figure 35. TLWC: Flute and trumpet minimalist loops, opening of movement four



Figure 36. TLWC: Further minimalist loops, opening of movement four

<sup>334</sup> ‘Kokako’. Department of Conservation. n.d. Web. Accessed: 3 March 2014.  
<http://www.doc.govt.nz/conservation/native-animals/birds/birds-a-z/kokako/>

Above this minimalist texture, a guitar solo develops. The guitarist is instructed to create something that starts textural and sparse, and becomes more intense, drawing inspiration from rock and electric blues from bars 53 to 101. The genre references for the guitar part utilise distorted guitar tones, virtuosic scalic flourishes, and bent note slides, all of which are present in the recorded performance.

Section B provides a moment of calm. The flute plays an extended melodic phrase over accompaniment from viola and cello with a synthesized tonal harmonic bed. Programmed drums are introduced, along with manipulated kokako bird recordings, which provide the rhythmic pulse.



*Figure 37. TLWC: Flute melody, section B, movement four*

Section C erupts from the end of Section B into a series of heavy, percussive rhythmic stabs, moving around the beat with manipulations of recordings of rain holding the steady pulse together.

**Crunchy and Aggressive**

120

Fl.

Tpt.

Vla.

Vc.

Db/F

127

Fl.

Tpt.

Vla.

Vc.

Figure 38. TLWC.: *Rhythmic stabs, section C, movement four*

This leads into Section D, heavily influenced by dense, rhythmic electronica. The entire ensemble plays rhythmic flourishes built around electronic breaks and swells. Rather than focussing on melodic or harmonic movement and change, the whole section places all the emphasis on rhythm. Certain sonic gestures and breaks occur only once, so while the overall structure of the section is loop-based the musical interest comes from the unexpected changes and breaks from the loop.

142

Fl.

Tpt.

Vla.

Vc.

Bass

Fm7

D6/F

Figure 39. TLWC.: *Instrumental rhythmic gestures, section D, movement four*

The sonic swells in the backing track are created through various studio-based manipulations, combining the techniques of reversing, splicing, distortion, delays, phasing, glitching and time-compression. These swelling elements are presented as foreground gestural sound objects.

Audio example 10. TLWC: Glitch synth swells

The tension and heavy rhythmic pulse breaks in Section E becoming texturally lighter and allowing more of the classical chamber music elements to come to the foreground. Counter melodies between the flute, viola and cello build throughout the section. From the halfway point, the instrumentation intensifies, reintroducing the bass, drums, and trumpet.

166 With relentless serenity (cello solo)

174

Fl.

Vla.

Vc.

Tpt.

*Figure 40. TLWC: Scored instruments, beginning of section E, movement four*

This section continuously builds to a one-bar programmed drum solo at the end, leading into Section F, a restatement, with variations, of Section D. Again, rhythmically dense and filled with gestural flourishes, Section F also features the added layer of guitar solo over the top of the texture, building from ideas and sounds set out in the opening guitar solo of this movement.

Audio example 11. TLWC: Guitar solo



Section G, the seventh and final section of this movement and the piece, is a continuation and variation of the chamber music-influenced portion of Section E. Here the trumpet plays the main melodic role, with counter melodies provided by flute, viola and cello.

Serene, but with the afterthought of menace

Figure 41. *TLWC: Scored instruments, section G, movement four*

The extra instrumentation slowly dies away, creating more space and allowing room for the final phrases of the melodic line to die away. This whole section is accompanied by the manipulations of the kokako birds and rainfall, also heard in Sections B and E.

#### Audio example 12. *TLWC*: Kokako and rain manipulation

### General Notes about Studio Techniques and Use of Pre-recorded Sound

Throughout *TLWC* the backing tracks include: a range of synthesizer-based textures, both tonal and noise-based; various studio-based sound manipulation and editing techniques; the use of bird song and natural recordings; and inclusion of instrumental sound library samples<sup>335</sup> to augment the orchestration. These sound sources in the backing tracks have also undergone various transformations, such

<sup>335</sup> These sound library samples take recordings of individual notes with a range of performance techniques on a variety of instruments and map them to a MIDI keyboard through software plug-ins on a computer. These virtual instruments are used a lot in the creation of cinematic soundtracks – particularly where budget restrictions don't allow for larger ensembles to be recorded.

as delay, echo, distortion, phasing, and filtering, to create the desired sonic textures. Where these elements have been presented in the foreground, there are notes and sound examples given in the analysis above. Any other detailed descriptions of the methods and techniques for achieving the sound design elements used in this piece lie beyond the scope of this thesis. The production techniques utilised throughout the compositional process for this piece are informed by the composer's previous experience and creative practice in this field. While these techniques and sounds add to the overall presentation of this piece from a sonic, musical and aesthetic perspective, they do not necessarily change the sense of hybridity that is at the core of this research.

### **Reflections on Hybridity**

This piece presented certain difficulties with respect to composition, balance, interpretation of parts, and perception. Compositionally, the first hurdle was how to address the improvised elements so that they would best achieve the desired outcome, but also allow enough flexibility within the sonic texture of the backing track and notated parts. It was important to have all the parts work together seamlessly, without simply adding superfluous noise. Each musician and musical decision needed to contribute to the composition in an appropriate manner.

In terms of balance, the main difficulty was keeping all the genre layers in mind, knowing where each section was leading and how each genre element would be utilised and balanced in the texture. The hybridity table provided a strong starting point, but the 'producer-as-composer' working with discreet pockets of pre-recorded sound, engaged in a constant struggle in pursuit of the ideal balance between parts.

The interpretation of parts and perception of the piece are somewhat interlinked. From a performer's standpoint this was relatively straightforward. The familiarity between composer and performers ensured a clear understanding of the final goal for the piece, so the musicians worked toward that outcome, passing the music through their own genre backgrounds to fuse those sounds in the ensemble context.

The perception of hybridity becomes increasingly difficult to examine from an audience perspective. Although audience perception lies beyond the intended scope of this research it is relevant to note that the sense of hybridity in any piece of music changes according to the genre background of the listener. Depending on which genres the listener is familiar with, there is potential for the hybridity balance to shift in accordance with respective awarenesses. It remains only to reconfirm that the intention of this research is to address the hybrid genre compositional process, and that in this regard *The Long White Cloud* can be interpreted as a piece of hybrid genre music.

## Chapter Five – ‘*Colorless green ideas sleep furiously*’

‘*Colorless green ideas sleep furiously*’ (hereafter, *CGISF*) is a single movement piece for contemporary orchestra. The title for the piece is a grammatically correct but semantically nonsensical sentence composed by linguist Noam Chomsky. This sentence appeals as a title because the more one ponders its meaning, the more one develops a possible context. To the composer it suggests the cartoonish imagery of an imaginary world. This imagery finds a reflection in the piece.

This composition aims to combine the roles and compositional approaches of both the traditional composer and the modern pop producer/composer: developing musical fragments by approximating digital studio effects and editing techniques on acoustic instruments through traditional notation; and exploring the techniques and tools of timbral manipulation, echo and delay, phasing, filters and low frequency oscillators, in a purely acoustic world. In previous work<sup>336</sup> the composer experimented with pre-recorded backing tracks, samples, electronic instruments, and effects pedals within the orchestral setting, and decided to utilise some of these same techniques with a purely acoustic orchestra.

### Precedents

The inspiration for *CGISF* emerged from a number of aesthetically different places. The process began with an examination of the works of Toru Takemitsu and John Adams, who come from different places, and who differ stylistically, but who were both influenced, in certain ways, by the culture of the other in their respective compositions. Both use repetition as a structural element, but on different scales:

- Takemitsu uses repetition on a macro level, composing slow intricately textured and varied music that features repetition of whole sections. Some of the musical development in these pieces is achieved through structural manipulation and internal variation of the repeated sections.

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<sup>336</sup> Previous works to explore additional sounds and tools in the orchestral texture: *Symphony No. 1*, for orchestra and turntables; *Electric Bass Concerto* – for electric bass and orchestra; *Loss of control in chaotic moisture*, for orchestra and backing track; *High Speed Chase Scene*, for orchestra and samples.

- Adams uses repetition on a micro level. The melodic and thematic elements in his music draw from the more apparent, minimalist style of repetition. Here, short musical fragments are repeated throughout the piece forming the overall melodic and harmonic material. Subtle variations within the micro level repetitions provide the sense of change and development in the music.

The compositional approach for *CGISF* draws not only from both Toru Takemitsu and John Adams as musical precedents, but is also influenced by the composer's appreciation of the orchestral works of Tan Dun, Michael Daugherty and Igor Stravinsky.

The other precedent that informs the underlying structure of this piece is film editing techniques, rather than the structural elements of more traditional orchestral forms. So, instead of a measured progressive development of ideas, the goal was to create a composition that is very sectional and choppy, flicking between ideas, timbres and settings quickly in the same way an editor edits video footage together. A musical parallel to this structural approach can be found in the work of Michael Daugherty. His music is often organised into blocks with distinct melodic, harmonic, and rhythmic signatures. These blocks are then developed

through a process of chunked 'polyphonic multitracking' (instead of linear transformation) in which musical formations change instrumental forces and shift contrapuntally against other blocks, exhibiting contrast and cross-pollination.<sup>337</sup>

### **Genre and Hybridity**

Working from the compositional aesthetics and stylistic approaches of the various precedents, this piece aims to synthesize the ideas of twentieth century orchestral music with elements of various popular music genres. In writing for the Western European art music orchestral ensemble, it is particularly difficult to move away from conventional perceptions, preconceived aesthetics, and the culture of that tradition, not least because its sound, presentation and techniques are so engrained into the composer's cultural awareness. The use of the hybridity table provides a necessary foundation for attempting to overcome this difficulty. Through careful

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<sup>337</sup> Clague, Mark. 'Grove Dictionary of American Music Entry: Michael Daugherty'. *Michael Daugherty Composer Bio*. Web. 2013. <<http://www.michaeldaugherty.net/index.cfm?pagename=bio>>

consideration of the genre elements, particularly different methods of sound creation, the composer aimed to create a piece that balances the compositional aesthetics of orchestral music with those of selected popular music genres.

Other genres selected for inclusion in this piece are: minimalism, particularly in the use of repetitive rhythmic fragments and subtle phasing techniques; jazz, particularly the cool jazz subgenre, especially in certain harmonic choices and instrumentation; intelligent dance music (IDM), a vague term describing electronic dance music increasingly accessed by listeners rather than dancers. This piece explores organic, acoustic ways of recreating studio-based effects, together with the traditions of film music, creating a dramatic narrative in music drawing from a range of genres in an orchestral setting and applying electronic techniques to the orchestral texture.

## Hybridity Table

Meta Genre Sub Genre	Source Genres and their individual elements					Genre elements for use in Composition		
	Twentieth Century	Western Art Music	Modern	Electronica	Jazz	Hybrid Genre		
Construction	Orchestral	Minimalism	Film Score	IDM	Cool	Juxtaposed elements	Synthesised elements	Other use of elements
	Meticulous scoring - strictly controlled.	Meticulous scoring - strictly controlled.	Works with films editing, style and story elements.	Rigidly structured in repeating units - computer controlled. Loop based.	Head sheet with improvisations (sometimes more traditionally scored)			Meticulous scoring - strictly controlled.
Form	Usually long forms - multi movement	Usually long forms	A number of short cues that link together through the narrative.	Short looped segments developed through repetition	Short forms – that are developed (and expanded) in performance			Long form - single movement
	Closely specified	Closely specified	Time-based and controlled. Often linked to click.	Rigid (usually within a small BPM range)	Free but rhythmic. Fluctuates according to the performance.			Closely specified
Freedom	Limited	Limited	Limited	Pre-recorded, so fixed	Freely Improvised within genre constraints			Limited
	Can be layered and complex	Can be layered and but often built on simple repetitive fragments	Can be layered and complex	Some simple elements, but with layers of complex electronic manipulation	Varies, but often complex and nuanced in performance		Moderate complexity with some virtuosic elements.	
Complexity	Strong, complex controlled harmonic progressions - both tonal and atonal.	Often tonal harmonic progressions. Sometimes drone based.	Varies: From static textures to controlled harmonic progressions - with elements of sound design	Very basic chordal harmony	Colour' chords. Controlled harmonic progressions. Strong modal qualities		Varies: From static textures to strong, complex controlled harmonic progressions - both tonal and atonal. With elements of sound design	
	Using acoustic instruments	Using acoustic instruments + synthesisers	Layered sound recordings, acoustic instruments, electronic effects and sound editing	Computer based sound design - often synthesised	Acoustic instruments			Acoustic instruments
Sonic design / timbre	Traditional score	Traditional score / sometimes with studio construction	Traditional score with studio construction	Recording	Head sheet. Improvisation. Aural tradition.			Traditional score
	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Strict rhythms - drum machine. Often layered rhythms with internal rhythmic modulation.	Rhythm fluidity – but usually with a steady swung rhythm.			Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)
Rhythm	Absolute or programme	Absolute or programme	Programme - based on film narrative	Instrumental – but Song based.	Absolute or programme			Based on a loose, but unrevealed narrative.
	Gestural range restricted to instrumental techniques	Gestural range restricted to instrumental techniques - repetitive	Wide gestural range	Punchy and driving. Small repetitive aggressive gestures. Use of sound manipulation.	Gestural range restricted to instrumental techniques		Some extended orchestral techniques - approximating studio effects.	
External References	Formal - concert	Formal - concert	In cinema	Headphones /dance club	Bar, club, recording			Formal - for the concert hall
	Balanced and shaped, especially using development techniques	Balanced and shaped, especially using development techniques	Balanced and shaped	Repetitive	Repetitive + improvised		Choppy and section. A range of different thematic ideas: some repetitive themes and elements	
Purpose / location	Large range	Large range	Large range	Very loud or very soft.	Large range			Full Range
	Specific methods of pitch organisation eg. clusters, harmonic field etc.	Specific methods of pitch organisation – often tonal	Specific methods of pitch organisation - plus sound design techniques	Tonal/modal. Largely consonant. Sometimes timbrally focussed.	Tonal or modal with chromatic inflections		Use of harmonic field for majority of the piece. Some tonal sections - not using traditional ideas of tonality.	
Thematic Material	Orchestra	Extremely varied.	Extremely varied.	Studio producer/ composer / engineer	Wide range.			Orchestra

Table 23. 'Colorless green ideas sleep furiously' (CGISF): Hybridity table

## Composition Process

This began with a rough sketch of a dramatic shape, very loosely based on a surreal episode of the cartoon *Adventure Time* entitled ‘No one can hear you’.<sup>338</sup> The dramatic shape and corresponding time-code of this episode informed the rough sketch for shape, sections and tempo of the piece. While the shape is based on a loose interpretation, the musical outcome is not an attempt to retell, or interpret, the story from this episode. The use of this shape helped to give the piece the intended sectional quality by applying some of the techniques of film editing to musical composition. Although this non-linear approach was interesting from a structure standpoint, it was still important to create a sense of cohesion between cuts which necessitated the creation of elements of transition throughout the score. This approach to shape seemed to enhance the hybrid nature of the work, providing a point of difference from the more typical use of smooth transitions and sectional development found in the orchestral art music repertoire.

Several systems of pitch organisation are used throughout the piece: tonal, in the minimalist section; modal, in the jazz section; harmonic stasis, as drones in wash sections; and the harmonic field. The majority of the pitch organisation is built upon a specifically created harmonic field. It is very dense with chromatic runs in each octave. Several features contribute to its character:

- Solitary B natural in octave 4
- No B pitch (sharp, natural or flat) in octave 3 or 7
- C and F occur in every octave
- Harmonic field runs from E1 to D7 and contains 52 pitches
- Becomes more open at its high and low extremities, with a very close cluster of notes in the centre



Figure 42. ‘Colorless green ideas sleep furiously’ (CGISF): *Harmonic field*

<sup>338</sup> ‘No one can hear you.’ *Adventure Time*, Season 3, Episode 15. Dir. Larry Leichliter. (Written by Mark Banker, Patrick McHale, Kent Osborne & Pendleton Ward) Frederator Studios: Cartoon Network, 14 Nov 2011.



This harmonic field was constructed in an intuitive way without any internal intervallic symmetry or extra-musical structure. The chromatic qualities compliment the manic dramatic elements found in the original *Adventure Time* cartoon.

During the compositional period a substantial amount of time was spent experimenting with methods to attempt to generate electronic sounds and effects from acoustic instruments. This involved experiments in layering numerous different instrumental timbres on top of one another and playing them slightly out of phase, or in alternating bars, or playing at the same time but with different dynamic swells, so that the timbre of the perceived sound would transform throughout the phrases.

The musical score is a complex orchestral arrangement for a large ensemble. It features multiple staves for various instruments, including Piccolo, Flutes 1 & 2, Oboes 1 & 2, Clarinets A, Clarinets 1 & 2, Bass Clarinet, Bassoons 1 & 2, Contrabassoon, Horns 1, 3 & 4, Horns 2, 4 & 5, Trumpets C, Trumpets 2 & 3, Trombones 1 & 2, Bass Trombone, and Tuba. The score is written in 4/4 time and includes a variety of musical notations such as notes, rests, slurs, and dynamic markings (p, mp, mf, f). The music is characterized by its chromatic nature and the way it layers different instrumental timbres to create an electronic effect.

Figure 43. CGISF: Timbral transformations as electronic effect

The hybridity in this piece features elements that are consistently synthesized throughout the majority of the piece,<sup>339</sup> but there are also a few specific points where certain genres have solitary moments of clarity as part of the sectional arrangement of the piece. For example, the clearest jazz sections are the trombone solo in Section K, bars 132 – 158, and the vibraphone solo informed by ‘elevator/lounge-styled’ jazz which occurs intermittently between bars 274 and 308.



Figure 44. CGISF: Opening of elevator/lounge-styled vibraphone solo

There is also an electronica-influenced section towards the end of the piece in Section EE, bar 334 - 358, which is specifically influenced by the dubstep<sup>340</sup> genre of sound production and manipulation, particularly the ‘wobble bass’<sup>341</sup> sound. The acoustic recreation of the ‘wobble bass’ sound is expressed in two ways: first, through the use of extreme vibrato and accented articulation of a single note on the cello and bass; and secondly in the sliding trombone part which appears to accelerate and crescendo over bar 345. This section can be interpreted as a remix or variation of the minimalist section that directly precedes it. Also, throughout this section, the percussion is being utilised in a drum kit-like manner.

<sup>339</sup> As presented in the hybridity table above.

<sup>340</sup> Dubstep is a genre of electronic dance music. It is musically related to dub, drum’n’bass, 2-step, garage and jungle. The music generally features syncopated drum patterns at 140 or 70bpm, prominent sub-bass frequencies, and is quite dark, favouring minor keys and dissonant intervals.

<sup>341</sup> Wobble bass is a term used to describe the sound of the synthesized bass found in a lot of dubstep music. This sound is created through the use of a low-frequency oscillator on a programmed synth bass sound.

**EE**  
HEAVY and DARK  
♩=70

342

B. Cl.

Bsn. 1,2

Chm.

Hn. 1,3

Hn. 2,4

Tbn. 1,2

B. Tbn.

Tba.

S. D.

B. D.

Cym.

Roto-4.

Tom-4.

Vc.

Ch.

Extreme Vibrato working with the given rhythm

Figure 45. CGISF: Dubstep/electronica, section EE

### **Concept and Aesthetic**

One of the key experiments in this piece was to explore how to marry the roles of the composer and producer in the creation of an orchestral piece using the traditions of notation and composition for acoustic instruments. How can a composer whose work typically involves some element of technological sound manipulation create those same sonic effects purely through acoustic means? *CGISF* is one example of an approach that aims to generate a set of instructions that will enable the creation of digital audio effects within the acoustic world of the orchestra.

The other aesthetic consideration was the desire to create one of the more avant-garde works in the portfolio. It was important to try to maintain a sense of the tradition of contemporary classical orchestral composition, so as to avoid using the orchestra as an expensive synthesizer, creating acoustic renditions of popular ideas that would typically be created by someone at a keyboard. The orchestral writing needed to have a sophistication befitting the traditions of the ensemble.

### **Use of Quotation**

*CGISF* features two elements of quotation, not of direct melodic elements or shapes, but more rhythmic or gestural. The first is the use of a suspended beat where the last quaver of a bar is tied to the 1<sup>st</sup> beat of the next bar. This technique is used by John Adams in both *Short Ride in a Fast Machine*, and *Fearful Symmetries*. The following excerpt identifies thematic use of suspended beat in the cello line. Other instruments adopt this idea as the section develops.

AA With Drive and Purpose  $\text{♩} = 140$

308

Ob. 1,2

C. A.

Cl. 1,2

S. D.

Vln. 1

Vln. 2

Vla.

Vc.

312

Picc.

Fl. 1,2

Ob. 1,2

C. A.

Cl. 1,2

S. D.

Vln. 1

Vln. 2

Vla.

Vc.

Figure 46. CGISF: *Suspended beat in cello part*

The second use of quotation in *CGISF* is in the rhythmic and gestural ideas influenced by Toru Takemitsu and adapted from his works *A Flock Descends into the Pentagonal Garden*, *Twill by Twilight*, *Star-Isle*, and *Dream Window*.

The image displays two staves of musical notation for the piece *CGISF*. The first staff (measures 19-22) includes parts for Piccolo, Flute 1 & 2, Oboe 1 & 2, Clarinet A, and Clarinet 1 & 2. The second staff (measures 22-25) includes parts for Piccolo, Flute 1 & 2, Oboe 1 & 2, Clarinet A, and Clarinet 1 & 2. The score features various musical notations, including notes, rests, and dynamic markings such as *p*, *mp*, and *mf*. The Piccolo part in measure 22 is marked with a box labeled 'Relentless'.

Figure 47. *CGISF*: Rhythmic and gestural ideas influenced by Takemitsu

## Structure

*CGISF* is a sectional and fragmented piece. New and different sections often interrupt related parts, mimicking the non-linear editing techniques used in film. *CGISF* can be broken down into 35 separate moments each with its own descriptive performance direction.

Structural Plan for <i>CGISF</i>					
	Score Marking	Bars	Performance Direction	Description	Genre Focus
1		1 – 3	Expansively	Opening gesture	
2	A	4 – 22	Menacing	Fast-paced stabs	
3	B	23 – 38	Relentless	Rising angular figure	
4	C	39 – 58	Menacing	Fast-paced stabs	
5	D	59 – 67	(cont.)	Variation of section B. Building into transition	
6	E	68 – 79	Spacious, but insular	Pulsating percussion with woodwind flourishes	
7	F	80 – 84	Furiously	Big stabs	
8	G	85 – 104	Freely	Washy, first moment without obvious pulse.	
9	H	105 – 112	With a definite drive	Angular and short	
10	I	113 – 125	(cont.)	Variations on previous section - decays and delays	
11	J	126 – 131	(cont.)	Addition of brass stabs and percussion - moving towards the transition	
12	K	132 – 160	Luxurious and free	Trombone solo with strings	Jazz
13	L	161 – 171	Ethereal and washy	Extended rising figure – timbral transformations	
14	M	172 – 181	Mechanically	Percussive and angular scalar lines	
15	N	182 – 187	Aggressively	Stabs and angular figure	
16	O	188 – 204	With bounce	Variations on angular figure of N and brass stabs of J	
17	P	205 – 214	Very free	Washy, and slow moving	
18	Q	215 – 217	Relentless and driving	Variation of F	
19	R	218 – 229	Very free	Variation of P	
20	S	230 – 239	Mechanical	Variation of E	
21	T	240 – 256	Tribal – free but rhythmic	Variation of ‘free’ sections with big percussive drum rolls.	
22	U	257 – 269	(cont.)	Variations of T + accelerando	
23	V	270 – 273	With fervour	Similar to opening gesture	
24	W	274 – 277	Relaxed	Vibes solo	Elevator/ Lounge jazz
25	W	278 – 282	Agitated	Orchestral busyness	
26	X	283 – 288	Relaxed	Vibes solo	Elevator/ Lounge jazz
27	X	289 – 293	Agitated	Orchestral busyness	
28	Y	294 – 298	Relaxed into furiously	Vibes solo interrupted by orchestral fury	Elevator/ Lounge jazz
29	Z	299 – 307	Relaxed into furiously	Vibes solo interrupted by orchestral fury	Elevator/ Lounge jazz
30	AA	308 – 315	With drive and purpose	Minimalist section	Minimalism
31	BB	316 – 323	(cont.)	Building	Minimalism
32	CC	324 – 331	(cont.)	More building	Minimalism
33	DD	332 – 341	(cont.)	Final build	Minimalism
34	EE	342 – 357	Heavy and dark	All low register instruments	Electronica
35	FF	358 – 375	Very free	Washy and free – rising figure variation of section L	

Table 24. *CGISF: Structural plan*

Table 24 presents the piece in sections related to the rehearsal markings in the score from A to FF, with the relevant bar numbers, performance directions, and an abbreviated description of the musical material. The extreme right hand column pinpoints any particular highlighted genre focus. Colours visually represent sections linked by common musical materials; sections of the same colour utilise similar motives, themes, harmonies, or sonic textures.

## Analysis

The first thematic gesture, a glissando on strings creating a rising effect, is accompanied by a repetitive percussion figure. Together, these elements form the basis of much of the thematic material of the piece.

The musical score for Figure 48, titled 'CGISF: Opening thematic gesture', is written for a percussion ensemble and a string orchestra. The percussion section includes Timp., S. D., Cym., T.-t., Tom-t., Mar. (soft mallets), Vib., and Vln. 1. The string section includes Vln. 2, Vla., Vc., and Cb. The score is in 4/4 time and features a glissando on the strings and a repetitive percussion figure. The tempo is marked 'Expansively' with a metronome marking of 150. The dynamics range from pppp to ff.

Figure 48. CGISF: Opening thematic gesture

This leads into Section A where the orchestra plays various notes across the spectrum of the harmonic field in constantly changing meters. The lower strings and tuned percussion provide the rhythmic drive and forward motion, while the violins, low brass and unpitched percussion play different stab accents creating a manic percussive and aggressive effect.



Figure 49. CGISF: Section A - opening idea

Woodwinds interject periodically with variations on the Takemitsu-influenced gestures previously discussed under ‘Use of Quotation’.

Section A flows directly into Section B without too much variation. The forward motion is brought to a halt by a large stab chord on strings, brass and percussion. Following that stab, multiple motifs are introduced and used throughout the rest of the piece: first, the trumpets play a repeated note figure that gives the impression of acceleration.

Figure 50. CGISF: Repeated note figure on trumpets

Then the low brass and strings play a rising interrupted triplet figure, topped with growling horns.

The musical score for Figure 51, titled "CGISF: Rising interrupted triplet figure, section B", spans measures 24 to 27. It features the following instruments and parts:

- Hn. 1,3**: Horns 1 and 3, playing a "Becoming growl" motif starting in measure 25, marked *mf*.
- Hn. 2,4**: Horns 2 and 4, playing a "Becoming growl" motif starting in measure 25, marked *mf*.
- Tbn. 1,2**: Trombones 1 and 2, playing a rising interrupted triplet figure starting in measure 24, marked *ff*.
- B. Tbn.**: Baritone Trombone, playing the same rising interrupted triplet figure, marked *ff*.
- Tba.**: Tuba, playing the same rising interrupted triplet figure, marked *ff*.
- Mar.**: Maracas, playing the same rising interrupted triplet figure, marked *f*.
- Vib.**: Vibraphone, playing the same rising interrupted triplet figure, marked *f*.
- Vln. 1**: Violin 1, playing the same rising interrupted triplet figure, marked *f*.
- Vln. 2**: Violin 2, playing the same rising interrupted triplet figure, marked *f*.
- Vla.**: Viola, playing the same rising interrupted triplet figure, marked *f*.
- Vc.**: Violoncello, playing the same rising interrupted triplet figure, marked *f*.
- Cb.**: Contrabass, playing the same rising interrupted triplet figure, marked *f*.

The rising interrupted triplet figure is a melodic motif consisting of a triplet of eighth notes, followed by a quarter rest, and then another triplet of eighth notes, all rising in pitch. The horns play a "Becoming growl" motif, which is a sustained note with a tremolo effect, marked *mf*.

Figure 51. CGISF: Rising interrupted triplet figure, section B

More stabs and a repeated tuned percussion figure from Section A follow these two motifs. This combination of elements continues throughout Section B.

The musical score for Figure 52, titled 'CGISF: Beginning of section B', is a complex orchestral arrangement. It begins at measure 29 with a section labeled 'Relentless'. The score is written for a large orchestra, including Horns 1 & 2, Horns 3 & 4, Trumpets 1 & 2, Trumpets 3 & 4, Trombones 1 & 2, Trombone 3, Timpani, Snare Drum, Bass Drum, Cymbals, Tom-tom, Tambourine, Maracas, Vibraphone, Harp, Violins 1 & 2, Viola, Violoncello, and Contrabass. The music is in 4/4 time and features a driving, rhythmic pattern in the strings and woodwinds, with brass instruments providing accents and a 'growing' effect. Dynamics range from *f* (forte) to *mp* (mezzo-piano). The score is divided into measures, with a repeat sign at the end of the first system. The 'Relentless' section is marked with a 'B' in a box. The music is characterized by a driving, rhythmic pattern in the strings and woodwinds, with brass instruments providing accents and a 'growing' effect. Dynamics range from *f* (forte) to *mp* (mezzo-piano).

Figure 52. CGISF: Beginning of section B

Section C, based on Section A – now includes upper brass and woodwind textures playing the rhythmic stabs with the strings and accenting the repeated tuned percussion figures on the oboe, cor anglais and clarinet. Over this percussive bed

the brass play a swelling chord. This chord gesture foreshadows subsequent free and ‘washy’ sections.

The musical score for Figure 53 shows a brass section with seven staves: Horns 1,3; Horns 2,4; Trumpets 1,2; Trumpets 3,4; Trombones 1,2; Trombone 3; and Tuba. The music is in 4/4 time. At measure 41, a swelling chord gesture is introduced, marked with *pp* (pianissimo) and *mf* (mezzo-forte) dynamics. The gesture is a sustained chord that swells over time, with the dynamics indicated by a line connecting the *pp* and *mf* markings. The score ends at measure 44.

Figure 53. CGISF: Horn swell chords, section C

The transition between sections C and D, is much like that from A to B. Section D is a variation on the material and structure of Section B and ends with a three bar ritardando with tuned percussion figures acting as a transition into the new material of Section E.

Section E is calmer than the previous sections, based on a pulsating, tuned percussion pattern. The woodwinds play a pseudo-pointillistic opening, leading into a canonic variation of the repeated note figure introduced by the trumpets in Section B. The horns continue with a morphing chordal swell.

69 E  $\text{♩} = 60$  Spacious but familiar

The musical score for Figure 54, titled 'Spacious but familiar', is for a section of a larger work. It begins at measure 69, marked with a tempo of  $\text{♩} = 60$ . The score features woodwind and percussion parts. The woodwinds (Piccolo, Flute 1 & 2, Oboe 1 & 2, Clarinet in A, Clarinet in Bb, Horn 1 & 3, Horn 2 & 4, Trumpet, Mellophone, and Vibraphone) play a repeated note figure with various dynamics (p, mp, mf, f, ppp) and articulations (accents, slurs). The percussion parts include complex rhythmic patterns with triplets and slurs.

Figure 54. CGISF: Pulsating percussion and pointillistic woodwind, section E

Throughout Section E the woodwinds continue the repeated note figure, along with further variations of the Takemitsu gesture and a pointillistic device that aims to recreate a morphing delay effect. Underneath the percussion and woodwind, the strings play a *flautando* extended and slowed variation of the rising figure, the latter reflecting Takemitsu's use of odd tuplets.

The image shows a musical score for strings, specifically for Violins 1 and 2, Viola, and Violoncello. The score is divided into two systems. The first system (measures 72-75) features 'flautando' markings and dynamic markings like *pp*, *p*, and *ppp*. The second system (measures 76-79) continues the string textures with various dynamics including *ppp*, *pp*, *p*, *mf*, and *mp*, and includes triplet markings.

Figure 55. CGISF: Flautando strings, section E

Section F is relatively short, interrupting the previous calm of Section E building on a rising triplet figure, and closing with percussive stabs built on notes of the harmonic field.

Section G is the first extended moment in *CGISF* that has no obvious rhythmic pulse. Over a slowly morphing held string chord, swelling chord gestures develop in the brass and woodwind, also revisiting the repeated note figure from Section B. Section G is the first moment where the recreation of an echo effect is used in the woodwinds. The flutes and contrabassoon play echoes of the piccolo and bassoons.

85 *Ad libitum* **G** ♩ = 50

Picc. *mp*

Fl. 1,2 *pp*

Bsn. 1,2 *mp*

Cbsn. *pp*

Figure 56. CGISF: Example of echo effect between instruments

Sections H draws on the melodic elements found in the woodwind in section C, but introduces a new rhythmic foundation which provides forward momentum following the arrhythmic texture of Section G. Repetitive percussion patterns on marimba and vibraphone are paired with harp chords, along with the introduction of the bongos. A range of pizzicato string patterns then further intensifies this dense rhythmic pattern (see below fig. 57).

In Section I, this rhythmic figure continues with another variation of the acoustic-recreation-of-an-echo effect introduced in Section G.

109

Bongos

Mar.

Vib.

Hp.

Vln. 1

Vln. 2

Vla.

Vc.

Cb.

v.s.

Figure 57. CGISF: Rhythmic pattern example in section H and I

Section J is a transitional moment combining various motivic elements from throughout the piece (Section A, B and H): repeated note figures, chordal swells, and repetitive tuned percussion.

Section K is another unexpected change in direction. On a bed of swelling tonal colour chords played by strings, woodwind and vibraphone, the first trombone is given a jazz-influenced extended solo.





Figure 58. CGISF: Trombone solo, section K

Section L returns to the arrhythmic wash developed earlier in the piece, but here the strings and brass play a rising figure distributed throughout the instruments, extended through a recreation of a timbral transformation effect created by synthesizers, where the timbres of two separate instruments are combined to perform a single note. The combinations are: bass and tuba; bass trombone and cello; viola and trombone; violins and trumpets. The swelling of the string instrument on the same pitch morphs from the attack of the brass instrument. This section aims to create a seamless transition between timbres, in effect, creating a hybrid instrument.

**L** Ethereal and Washy

161  $\text{♩} = 60$

Picc.

Fl. 1, 2

Hn. 1, 3

Hn. 2, 4

C Tpt. 1, 2

C Tpt. 3, 4

Tbn. 1, 2

B. Tbn.

Tbn.

Vln. 1

Vln. 2

Vla.

Vcl.

Db.

Figure 59. CGISF: Timbral transformation, section L

Section M draws from the rhythmic stabs at the beginning of the piece, and combines them with mechanical scalic runs on harp, horns, flutes and oboes. This part originates, in this context, from the use of sequencers and arpeggiators to control monophonic synthesizers. Although it might have been easier to play this part on tuned percussion, the timbral effect of these instruments playing the same patterns both in unison and at the octave provided another synthesized timbral combination. The brass and wind players alternate, playing every other bar, in order to make the line more mechanical, removing breath breaks in the scalic pattern.

The image displays a musical score for the 'Mechanical parts, section M' of a piece. The score is written for five instruments: Flute 1,2; Oboe 1,2; Horns 1,3; Horns 2,4; and Harp. The tempo is indicated as  $J=80$  and the style is 'Mechanically'. The Flute and Oboe parts are marked *mp* (mezzo-piano). The Horns are marked *p* (piano). The Harp part is marked *mf* (mezzo-forte) and features triplets. The score spans measures 172 to 175. The Flute and Oboe parts are marked 'M' at measure 172. The Harp part has a '3' above the first triplet. The score ends with 'v.s.' at measure 175.

Figure 60. CGISF: Mechanical parts, section M

Sections N, O, P, Q, R and S are all variations and combinations of previous material<sup>342</sup> representing the majority of the film editing inspired structural techniques where material from the first seven sections of the piece is reworked and varied to create this sense of non-linear transitional development.

<sup>342</sup> Details from these sections have already been presented in the analysis of previous sections. While these sections are musically relevant to the aesthetic and compositional aims of the piece, the analytical notes would not provide any additional note worthy elements for this discussion.

Section T draws on harmonic material from the previous ‘free’ sections, but here the held string chords provide the foundation for a drum solo-type section: the percussionists play drum fills on tom-toms, roto-toms, snare drum and timpani, passing the solos around the group in the same way that solos are shared in rock and jazz music.

The image displays a musical score for Section T, titled 'Tribal - free but rhythmic' with a tempo of J=90. The score is divided into two systems. The first system includes staves for Timpani (Timp.), Snare Drum (S. D.), Bass Drum (B. D.), Cymbal (Cym.), Roto-tom (Roto-t.), and Tom-tom (Tom-t.). The Timpani part features a series of rhythmic fills. The Snare Drum, Bass Drum, and Cymbal parts provide a steady, low-level accompaniment. The Roto-tom and Tom-tom parts play complex, syncopated rhythms. The second system includes staves for Violin 1 (Vln. 1), Violin 2 (Vln. 2), Viola (Vla.), Violoncello (Vc.), and Contrabass (Cb.). The strings play sustained, low-level accompaniment, with some parts marked 'arco' (arco). The score is written in a key with one sharp (F#) and a common time signature (C).

Figure 61. CGISF: *Drum solos, section T*

The solos in this section build throughout, continuing into Section U. The drum fills are accompanied by an ever-expanding orchestral backing which peaks then leads into a restatement of the opening gesture in Section V.

From here Sections W – Z work in call-and-response fashion; orchestral stabs interrupt an elevator/lounge style jazz melody. A small ensemble of vibraphone solo, harp chords and walking bass line provides the jazz section. The orchestral stabs providing the response are variations on the rising interrupted triplet pattern.

Figure 62. CGISF: Call-and-response jazz and orchestral stabs, section *W*

From here, three main parts close the piece: minimalism (Sections AA-DD); electronica (Section EE); and final free section (FF). These sections draw on the previously discussed elements,<sup>343</sup> but present them in a different context. The minimalism sections all express scalar figures, various tuned percussion patterns, and rising triplet figures.

Throughout the minimalist sections, AA – DD, the arrangement and orchestration expands, each new instrument providing a new motivic layer, leading to a climactic point, which introduces the electronica-influenced Section EE. This section features the lower register instruments and recreates a range of electronic music production techniques on acoustic instruments.<sup>344</sup>

*CGISF* closes in Section FF, with a variation of the rising figure, and the timbral transformation techniques first introduced in Section L. Here, the transformation is spread across the entire orchestra with woodwind, brass and percussion combining over the rising figure, supported by a drone-like held string foundation.

<sup>343</sup> Musical examples for these sections have already been presented in the discussions of quotation and compositional process, pp.129-131

<sup>344</sup> See genre section for this piece, discussing dubstep, pp.127-128

### **Reflections on Hybridity**

*CGISF* was one of the most difficult pieces in this portfolio to write, stemming from the challenge to find a balanced hybrid voice in an ensemble firmly rooted in established traditions. One outcome of composing hybrid music for such an ensemble is that the sense of hybridity can either seem lost, or appear forced. Of course, this difficulty is present regardless of the ensemble or source genres. As such, the systematic method of hybrid genre creation in this portfolio provides one possible approach for composing hybrid orchestral music, and *CGISF* is one possible outcome from use of the hybridity table system.

## Chapter Six – *Push for Miles*

*Push for Miles* (hereafter, *PfM*) is a short work for electric bass and backing track. The piece is essentially an ode to Miles Davis,<sup>345</sup> in particular his work in creating new fusions of musical styles, and convincing performers to follow him into this uncharted territory. *PfM* is based on vocal samples from an interview with bassist/composer Marcus Miller<sup>346</sup> talking about working with Miles Davis on jazz fusion projects. The backing track includes vibraphone, marimba, piano and drums together with looping vocal samples.

The instrumentation for *PfM* is influenced by the present composer's love of bass instruments, particularly electric bass guitar, and extends, in part, the compositional explorations in his *Electric Bass Concerto*.<sup>347</sup> Having worked on the concerto with bass player Nick Tipping, *PfM* was written, appropriately, with him in mind. Writing for specific performers allows the music to be crafted for the performance styles and techniques of that performer. Throughout the compositional process Nick acted as both collaborator and editor, ensuring that the bass part fell under the fingers appropriately.

### Precedents

Musical inspiration for this piece obviously comes from the jazz work of Miles Davis, along with some of his frequent collaborators:

- John Coltrane, jazz saxophonist and composer
- Bill Evans, jazz pianist and composer
- Marcus Miller, jazz multi-instrumentalist (prominently bass) and composer

*PfM* also takes inspiration from minimalism, particularly that of Steve Reich, the sample cut-up works of Jacob TV, and contemporary chamber music extended melodic composition. While the main musical feature of *PfM* is the extended melodic line of the bass,<sup>348</sup> the other prominent musical feature is the

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<sup>345</sup> Miles Davis (May 26, 1926 – September 28, 1991) was an American jazz musician, trumpeter, bandleader, and composer. Miles Davis was, along with his various musical collaborators, at the forefront of several major developments in jazz music, including bebop, cool jazz, hard bop, modal jazz, and jazz fusion.

<sup>346</sup> 'Marcus Miller interview & bass solo' on *SuchowTV*. Uploaded 26<sup>th</sup> July 2009. YouTube. ([http://www.youtube.com/watch?v=7vL5\\_QfEG04](http://www.youtube.com/watch?v=7vL5_QfEG04)) Accessed 16<sup>th</sup> January 2013  
(Sample source 00:21 – 03:27)

<sup>347</sup> Mayall, Jeremy M. *Electric Bass Concerto*. Unpublished score. 2005. (online access: <http://sounz.org.nz/works/show/19480>)

<sup>348</sup> Discussed in detail in the analysis section below.

manipulation and looping of the vocal samples. This technique for creating rhythmic and musical looping vocal snippets has its own specific musical precedents. The key composers who influenced this aspect of *PfM* were Steve Reich and Jacob TV, particularly their works *Come Out*<sup>349</sup> and *Grab It!*<sup>350</sup> respectively. The range of stylistic features and tone colours in *PfM* was inspired during the compositional process by the composer's listening to: Steve Mackey, *It Is Time*; John Psathas, *Island Songs*; and, Hiromi's *Sonicbloom*, *Time Out*. These pieces provided some sonic direction without any direct reference or musical borrowing.

### **Genre and Hybridity**

While the composer found inspiration for *PfM* in Miles Davis's jazz fusion, particularly between 1968 and 1975, this is reflected more in the melodic line and harmonic stasis of *PfM* than in the timbres commonly associated with jazz fusion, apart from deciding to write for electric bass, a key element in the jazz fusion sound. Other source genres used in *PfM* are: twentieth century chamber music, drawing on repertoire for solo bass instruments; minimalism, with particular reference to tape loops and tuned percussion; and, electroacoustic soundscape, using studio editing techniques to transform the vocal samples beyond basic looping through spatial manipulation and effects.

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<sup>349</sup> Reich, Steve. 'Come Out' (1966) on *Works: 1965-1995 (A 10 CD retrospective)*. Nonesuch. 1997. (disc 1)

<sup>350</sup> TV, Jacob. *Grab It!* (1999). Boombox.



## Hybridity Table

	Source Genres and their individual elements				Genre elements for use in Composition		
	Western Art Music	Art Electronica	Twentieth Century Music	Jazz	Hybrid Genre		
Meta Genre	Minimalism	Soundscape	Chamber Music	Fusion	Juxtaposed elements	Synthesised elements	Other use of elements
Sub Genre							
Construction	Meticulous scoring - strictly controlled.	Extremely structured, usually layered – studio construction	Meticulous scoring - strictly controlled.	'Head' sheet with improvisations. Loop elements.		Scored composition with some elements of improvisation over a structured pre-recorded bed.	
Form	Usually long forms	Long forms	Both short and long forms. Carefully controlled.	Short forms – that are developed (and expanded) in performance – almost loop based			Short form - single movement
Tempo	Closely specified	Time-based	Closely specified	Free but rhythmic. Trance-like.		Strictly controlled tempo constructed in studio with a sense of freedom and fluctuation in solo melodic line.	
Freedom	Limited	Pre-recorded, so fixed	Limited	Freely improvised within genre constraints	Elements of improvisation, with traditional score, and pre-recorded backing.		
Complexity	Can be layered and but often built on simple repetitive fragments	Extremely layered and timbrally complex	Can be layered and complex	Varies, but often complex and nuanced in performance		Moderate complexity.	
Harmony	Often tonal. Harmonic progressions. Sometimes drone based.	Focussed on spectromorphology and timbre/gesture/texture. Traditional ideas of harmony are generally not applicable.	Strong, complex, controlled harmonic progressions	'Colour' chords. Simple structures. Drone based.		Minimal and restrained harmonic movement. Use of studio techniques on vocal sample.	
Sonic design / timbre	Using acoustic instruments + synthesisers	Layered sound recordings, electronic effects and sound editing	Using acoustic Instruments	Acoustic and electric instruments		Electric instrument (with FX) and pre-recorded backing track	
Use of Technology / Notation	Traditional score / sometimes with studio construction	Studio construction	Traditional score	Head sheet. Improvisation. Aural tradition. Use of effects.		Notated score with improvised sections.	Studio construction
Rhythm	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Can have some rhythmic complexity due to the time-based nature.	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Rhythm fluidity in melody but strict in accompaniment. (Rock/Latin/funk influence)			Carefully controlled rhythmic variation.
External References	Absolute or programme	Absolute or programme	Absolute or programme	Absolute or programme			Not explicitly programmatic, but based on a concept
Gesture	Gestural range restricted to instrumental techniques - repetitive	Wide gestural range	Gestural range restricted to instrumental techniques.	Gestural range restricted to instrumental techniques.		Controlled gestural range. Instrument technique combined with studio manipulation.	
Purpose / location	Formal - concert	Formal – concerts/ installations	Formal - concert	Bar, club, recording			Concert hall
Thematic Material	Balanced and shaped, especially using development techniques	Balanced and shaped	Balanced and shaped, especially using development techniques	Repetitive 'head' with improvised solos.		Use asymmetric phrases within a balanced structure with some repetitive themes and elements	
Dynamic	Large range	Large range	Large range	Large range			Full range
Pitch	Specific methods of pitch organisation – often tonal	Mixture of found sound, noise and musical gestures. Timbrally organised. Usually not pitch focussed.	Specific methods of pitch organisation eg. clusters, harmonic field etc.	Tonal or modal with chromatic inflections		Tonal/modal – some timbrally based sound elements.	
Ensemble	Extremely varied.	Found sound / electronics / producer/composer	Extremely varied.	Trumpet, saxophone, keyboards, piano, bass, guitar, drums.			Electric bass and pre-recorded track.

Table 25. Push for Miles (PfM): Hybridity table

## **Composition Process**

The composition process began in response to the Marcus Miller interview which reflects on Miles Davis' work in jazz-fusion and his persuasion of a group of musicians from different backgrounds into unfamiliar territory. From this emerged a synergy with the composition of hybrid music for this portfolio. Additionally, the cadence and flow of Miller's voice seemed inherently musical. The interview audio was recorded using Pro Tools<sup>351</sup> then cut up, rearranged and set into a rhythmic grid.

The rhythm of the looped vocal samples provided the rhythmic basis for the rest of the backing track. Short motives were composed, then developed through improvisation and rehearsal working with the trance-like rhythm of the looped vocal segments. After patterns and structures were developed, transitions between sections were designed in Pro Tools to link the different sections together.

The finalised backing track provided the ultimate length and structure for the piece. Because the vocal looping was strictly rhythmic, exact lengths for each section could be determined, providing a dramatic impulse to guide the composition of the melodic line. The melodic line for the bass part, scored in a more traditional manner, went through several drafts, each sent to the soloist to play and examine and provide feedback on. This collaborative process resulted in the crafting of a melodic line that worked for both the nature of the piece and the performer.

## **Concept and Aesthetic**

*PfM* develops within a repetitive, highly rhythmic structure. The manipulation of the voice becomes incessant, establishing a mantra to highlight the trance-like nature of the minimalism and jazz fusion source genres. The extended melodic line of the bass contrasts with this trance-like repetitive foundation. Although this line features some motives that recur through variations and transformation, the lack of familiar repetition is intentional. Part of the conceptual design of this piece was for the bass part to be a through-composed melodic exploration over a fixed

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<sup>351</sup> Pro Tools is a digital audio workstation developed and manufactured by Avid Technology. It is widely used throughout the audio industries for recording and editing in music production, film scoring, film and television post-production, musical notation and MIDI sequencing.

and repetitive accompanying foundation. The piece attempts to juxtapose very structured and controlled elements with the freedom of a soloist.

It is expected that any performers of *PfM* will have some awareness of both the precedents and musicians that this work references, particularly the performance techniques of Miles Davis and Marcus Miller, thus contributing authentic performance practice. Every musician faces the task of interpreting musical texts. In the repertoire of early music the historically informed performance (HIP) practice has been developed to address the issue of interpretation:

The score often contains only the essential information, which must be added to on the basis of extensive knowledge of the correct type of execution.<sup>352</sup>

Extending this concept, *PfM* is built on an understanding of genre informed performance (GIP) practice. Understanding musical references, genre references and performance techniques is necessary for any performer to fully interpret the meaning, both explicit and implicit, of the score and in the intended live presentation of the work. GIP practice is built upon a heightened awareness of style, practice and musical reference that is specific to the individual genre. The GIP practice informs musical decisions relevant to the respective genre of the performer, as well as in the interpretation of genre elements within the hybrid music.

## Structure

*PfM* is played at a constant tempo, set to a 120bpm grid in the construction of the looping backing track. The majority of the piece is in 4/4 time, but there are several meter changes to 3/4 and 5/4. The harmonic structure is essentially drone-based, centred around A. The perceived harmony changes subtly depending on how the bass part moves above, and the shape of the repetitive pre-recorded percussion parts change throughout the section to provide additional momentum.

The score has been notated to encourage total openness of interpretation; little about the performance of *PfM* is set in concrete. The score should serve purely to

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<sup>352</sup> Seedorf, Thomas. 'Historical Performance Practice: Then and Now' on *Goethe Institute*. Web. (trans. Graham Lack) Published August 2011. (<https://www.goethe.de/en/kul/mus/gen/alt/7999415.html>) Accessed 2<sup>nd</sup> February 2014, par.3

guide the outcome; pitches and rhythm are given, but the performer interprets all else, moving and adapting at will. Performance instructions are intentionally minimal; the GIP practice encourages the performer to address the score appropriately.

Each section is based on its own sample from the Marcus Miller interview. Samples are reused as snippets in other sections, but the main repetitive strain for each section is unique to that section.

	Section A	Section B	Section C	Section D	Section E
Main Vocal Sample	“And Miles wanted to push”	“There were a lot of vamps that became like trances”	“Just keep playing this thing until people get lost in it”	“Hey, I need a bass player”	“They weren’t comfortable with playing this music”
Performer Influence	Miles Davis (trumpet)	Bill Evans (piano)	John Coltrane (saxophone)	Marcus Miller (bass)	Miles Davis (trumpet)
Bars	1 – 35	36 – 73	74 – 98	98 – 125	126 – 166
	Scored	Scored	Scored	Improvised	Scored

*Table 26. PfM: Sectional breakdown*

The melodic material for each section is also inspired by the performance practice of jazz musicians as indicated in the performer influence row of the table above. This was developed from the composer’s listening to recordings and examining transcriptions of solos of those musicians to develop an intuitive approach to each section. These musicians’ names also become a performance instruction, where the performer of *PfM* is expected to be familiar with their work, in order for that familiarity to influence their own performance.

The melodic line played by the bass is intended to convey a sense of being through-composed; one long extended melodic line rarely repeating itself. However, there are several thematic and rhythmic elements where the bass part reflects the rhythm of the vocal sample. These rhythmic moments are infrequent because the piece is intended to sound like the bass solo above the repetitive minimalist backing rather than an additional sound texture.

## Analysis

Section A opens with the first vocal sample “And they said, well let’s push with Miles”, accompanied by a swing drum fill. This one-bar introduction leads into the piece, where the bass is introduced over a bed of swing brush drums,

♩=120

**A** "And Miles wanted to push"

With slight delay

*mf*

*f*

(Miles Davis)

The musical score is written on a single staff in bass clef. It begins with a 4/4 time signature, followed by a key signature change to one flat (Bb). The tempo is marked as ♩=120. The piece is labeled 'A' and titled '"And Miles wanted to push"'. A performance instruction 'With slight delay' is placed above the first measure. The music starts with a whole rest, followed by a series of eighth and sixteenth notes, some beamed together. A dynamic marking of *mf* (mezzo-forte) is placed below the first note. The key signature changes to two flats (Bb, Eb) for the remainder of the piece. The music continues with eighth and sixteenth notes, some beamed together. A dynamic marking of *f* (forte) is placed below the final note. The piece ends with a double bar line. The name '(Miles Davis)' is written below the staff.

After the first bar,<sup>353</sup> which is performed by the backing track alone, bars 2 - 5 introduce the metrical pattern for the entire A section: three bars of four beats, and one bar of five beats. The main melodic theme is built on a rising 6<sup>th</sup> followed by a descending pattern, and repeated throughout. The last two beats of the 5/4 bar constitute an additional theme, a turnaround phrase also used throughout, and often used as an answering phrase to the preceding melodic shape, or leading to a restatement of the original rising 6<sup>th</sup>. The intentional lack of direct repetition means the only consistent element in this theme is the rising 6<sup>th</sup>. The first beat is not fixed, the descending pattern frequently changes, and the rhythmic pulse of the theme changes.



From this start point the melodic line is developed with some chromatic inflections beyond the main A minor-based harmonic area, then moves into the second thematic phrase: another leaping gesture, a rising 7<sup>th</sup> landing on a two-note chord. This pattern is repeated three times, comes to a close in an ascending scale which ends in a descending octave, and a variation of the turnaround motif.



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Section A finishes with two variations of the main melodic theme, both starting on beat 3 of the bar, as in the first statement. The first variation is extended by two bars effectively displacing the expected start point of the final version by 2 bars and signposting the change of section.

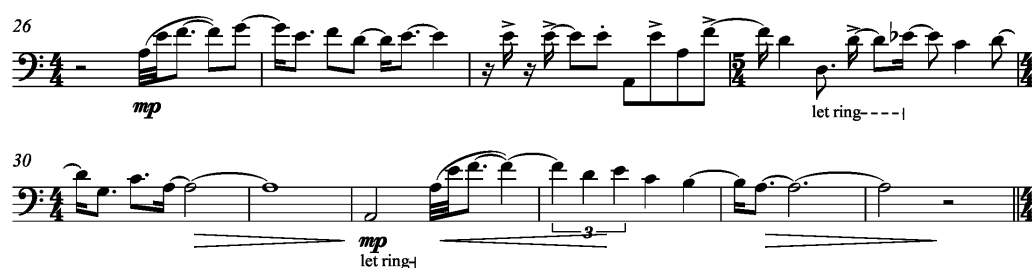


Figure 66. PfM: End of section A

Section B features a change in texture from the extended melodic line into a more homophonic chordal section, inspired by the piano playing of Bill Evans, particularly his work with Miles Davis on *Kind of Blue* and his own album *Conversations with Myself*. Section B draws on Evans' playing style: impressionist harmonies, block chords and rhythmically independent melodic lines reinterpreted for solo bass.

Section B opens with another rising 6<sup>th</sup> leading into the first chord from which the rest of the melodic line is developed.

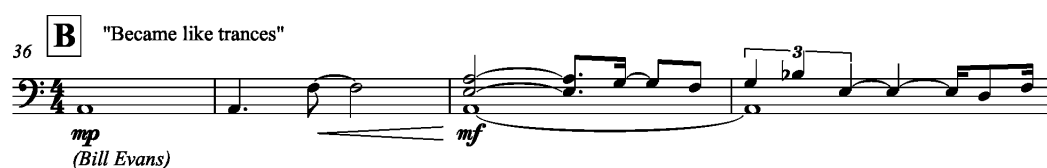


Figure 67. PfM: Beginning of section B

The melodic line then picks up the rhythmic signature of the vocal sample and plays in rhythmic unison with the vocal sample for the second 2 bars of the four bar phrase.



Figure 68. PfM: Four-bar phrase with vocal rhythm, bars 42-43

Section B continues with variations of this rhythmic idea over a steadily descending series of long held chords, regularly returning to the rising 6<sup>th</sup> throughout the melodic development.



This line then builds into the fast-paced runs of the last 12 bars. Underneath, the backing track builds in intensity, particularly through the increasing presence of drum-kit fills on toms and snare drum. This is supported by a vocal loop, trimming the line “Just keep playing this thing until people get lost in it” to a short loop “people get lost in it” with layered echo effects.



Figure 72. PfM: End of section C

Section D is the only section where the performer is directed to improvise, in the playing style of Marcus Miller, particularly his fusion work with Miles Davis, and to rely on their own GIP technique. To provide an element of tension, the backing track is composed in 5/4 rather than the 4/4 meter more typical of the rhythmic patterns in jazz/funk/rock fusion.

The backing percussion instrument parts are all based on the rhythmic elements of the vocal sample built into a minimalist loop. The vocal sample: “He just said hey, I need a bass player, a funky bass player”, is changed with additional cut-in lines such as: “to change the colour”, “to focus everybody” and “do people still do that?” Section D finishes with a 3/4 loop of “So, that’s what I’m saying is that umm” which transitions into Section E.

Section E is a variation on the melodic material, shape and individual motivic elements of Section A. Here the backing track consists of vocal samples: “They weren’t comfortable with playing this music”; “so much respect for Miles, they did it anyway”; “with no chord changes, and very strict rhythm”; and “trying to acclimate themselves to this new language”. These samples seemed the most poignant way to end this piece, because they speak directly about the difficulty of writing hybrid music. The instrumental parts in the accompaniment highlight this



sentiment, again utilising minimalist looping ideas based on the vocal rhythms, but with a chordal piano part providing a sense of harmonic movement and closure. The simple four-chord descending tonal loop heard throughout this section, ends with four, three-beat repeats of the final Bbmaj7 chord before the final held Am7 chord.



Figure 73. PfM: *Harmonic loop, section E*

The four, three-beat repeats of the Bbmaj7 chord are matched with a restatement of the 3/4 meter sample “so, that’s what I’m saying is that umm” from Section D, and a looped bass phrase, leading to the final chord over “well, lets push with Miles”

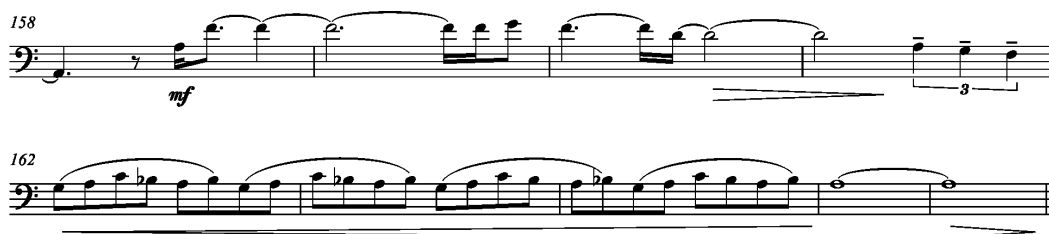


Figure 74. PfM: *End of section E*

## Sound Design

The vocal samples undergo several audio manipulations: panning, echo, phasing, filters, and glitch-granular effects. These elements work in and around the tuned percussion in the final mix of the backing track, yet still allow room for the bass performance. There is a definite exploration of sonic space in *PfM*’s final presentation, placing pockets of sound around the perceived sound field to allow all the layers of rhythm to cut through. Ideally, this piece should be heard through headphones, or in an intimate live setting with a high quality stereo speaker system. The only issue with its recorded versions, both CD and DVD, is that low frequencies are typically both felt and heard, so live performance generates a different impact from that of a video viewing.

## Reflections on Hybridity

One of the greatest difficulties in composing this piece was making the contrived seem natural, establishing a balance between incessant repetition of vocal samples and percussion, and the flowing through-composed melody. This was complicated by the solo bass line whose low frequency nature meant it was far easier for the melodic line to become lost amongst the higher frequency sounds of the backing track. By way of compensation for the bass part, elements in the backing track are moved around the sonic space, providing room for the bass to be more prominent. Alternatively, scoring much of the melodic line in the middle to upper registers of the bass would have subdued the true lower register of the instrument.

After its premiere performance, *PfM* was presented in three other versions: monophonic synthesizer; viola; and cello. Each performance differed noticeably. If the obvious timbral differences of the versions are ignored, it is the musicians themselves who contribute significantly to differing perceptions of hybridity. This presents itself in two main ways: firstly, whereas improvisation is not common practice in classical music, this piece requires a certain type of performer comfortable with improvising without the safety net of other musicians; secondly, the performance practice associated with this piece has definite links to the jazz genre where the performer must have an awareness of the referenced musicians, informing and enhancing their performance of the piece.

Although the compositions in this portfolio were all written with specific performers in mind, it is a rare privilege for the composer to hear alternative renditions of a piece because it creates another life for the piece beyond the initial, intended context. Fortunately, all the performers who have approached this piece have been open-minded to the nature of hybrid composition, and have been willing to familiarise themselves with the extra-musical elements of the genres referenced in each piece. The performers realise that some elements of this music explore performer and genre inseparability. Each musician being open to exploring the hybrid genre world means that these links can be preserved. A jazz bass player will interpret the piece differently from a classically trained cellist. While the sense of hybridity may change from an audience perspective, depending on the musician performing, the ideal performance maintains the underlying cross-genre hybrid nature of the piece.

## Chapter Seven - *Norse Suite*

*Norse Suite* (hereafter, *NS*) is a four-movement suite for viola and cello. Following its premiere on 7<sup>th</sup> April 2013 the piece was edited, reworked and rearranged into the final version, which was first performed on 8<sup>th</sup> June 2013. *NS* was originally conceived for electric guitar and viola, but the unavailability of performers necessitated adaption for viola and cello. The piece hybridises twentieth century chamber music, baroque, heavy metal, progressive rock, and rock-based guitar ‘shredding’ genres.

*Norse Suite* is a musical exploration of the similarities between virtuosity in classical and heavy metal music. The composers of heavy metal music drew upon the classical canon for various musical techniques and compositional procedures, which became fused, through ongoing creative practice, into their “blues-based rock sensibility”.<sup>355</sup> Robert Walser explains that the instrumental virtuosity and “studious devotion to the works of the classical canon”<sup>356</sup> of heavy metal musicians meant that these musicians strived for the levels of “classical excellence”.<sup>357</sup> Comparable with the way that heavy metal drew on classical music, *NS* completes the cycle, placing heavy metal music and its interpretation of classical music back in the realms of contemporary concert chamber music.

The inspiration for the piece comes from Viking mythology, specifically the Icelandic sagas, filtered through modern adaptations of Viking stories in film and videogame storytelling. These epic warrior tales also feature heavily in the titles and lyrics of heavy metal music: ‘Invaders’ by Iron Maiden; ‘The Immigrant Song’ by Led Zeppelin; and the entire sub-genre known as Viking Metal. Accordingly, the four movements of this suite have ‘Viking-esque’ names:

Movement One: And the horned warrior comes forth

Movement Two: In the depth of the winter

Movement Three: The duel

Movement Four: A path to Valhalla

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<sup>355</sup> Walser, Robert. ‘Eruptions: heavy metal appropriations of classical virtuosity’ in *Popular Music*, Vol.11, Issue 3 (Oct 1992) pp263-308: Cambridge University press, p.264

<sup>356</sup> loc. cit.

<sup>357</sup> loc. cit.

There is no intention to tell a Viking story musically, so the suite is not explicitly programmatic; but the ideas, feelings and concepts of these stories inform the focus of the work.

### **Genre and Hybridity**

The genre elements of twentieth century chamber music, baroque, and rock music, specifically heavy metal with guitar shredding,<sup>358</sup> express certain similarities between their constituent elements and so have been purposefully selected. The additional genre elements of minimalism, flamenco, and jazz ballad add further depth to the hybridity of *NS* at specific moments.<sup>359</sup> This proves useful in a longer form composition using traditional acoustic instruments.

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<sup>358</sup> Guitar shredding is a term for the virtuosic lead playing style of the electric guitar. It is based on various fast soloing techniques: sweep-picked arpeggios, scalar runs, finger-tapping and whammy-bar 'dive bombs'. It is often used with reference to heavy metal guitar playing. Guitarists commonly referred to as 'shredders' include: Eddie Van Halen, Steve Vai, John Petrucci, and Yngwie Malmsteen.

<sup>359</sup> These extra genre elements will not be addressed in the hybridity table as they are only fleeting references. The specific examples of these extra genres are subsequently addressed in the analysis section.

## Hybridity Table

	Source Genres and their individual elements			Genre elements for use in Composition		
Meta Genre	Twentieth Century	Art Music	Rock	Hybrid Genre		
Sub Genre	Chamber Music	Baroque	Heavy Metal	Juxtaposed elements	Synthesised elements	Other use of elements
Construction	Meticulous scoring - strictly controlled.	Extremely structured. Elements of improvisation.	Often structured in song form, usually meticulously planned.		Scored composition. Meticulously controlled.	
Form	Usually long forms - multi movement	Long and short forms	Long and short forms			Long form. Four movements
Tempo	Closely specified	Closely specified	Closely specified			Closely specified.
Freedom	Limited	Some freedom in accompaniment and ornamentation	Some freedom in solo lines, and rhythmic arrangement			Very little freedom, apart from interpretive performance practice.
Complexity	Can be layered and complex	Can be layered and complex - use of counterpoint.	Sometime simple in accompaniment, but virtuosic in solo instrumental technique.		Moderate complexity with some virtuosic elements.	
Harmony	Strong, complex controlled harmonic progressions	Strong controlled harmonic progressions	Basic chordal harmony		Minimal and restrained harmonic movement. Tonal.	
Sonic design / timbre	Using acoustic instruments	Using acoustic instruments	Electric instruments and effects pedals		(some scored elements to recreate electronic effects)	Acoustic Instruments
Use of Technology / Notation	Traditional score	Traditional score	Recording / rote learning			Completely scored
Rhythm	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)			Strict rhythms - driving
External References	Absolute or programme	Absolute or programme	Absolute or programme			Not explicitly programmatic, but based on a narrative concept
Gesture	Gestural range restricted to instrumental techniques	Gestural range restricted to instrumental techniques	Punchy and driving. Small repetitive aggressive gestures. Expanded beyond the traditional ideas of the instrument through amplification and effects pedals.		Some extended techniques to recreate effect-based gestures. Punchy and driving. Heavy.	
Purpose / location	Formal - concert	Formal - concert	Rock concert			Formal - for the concert hall
Thematic Material	Balanced and shaped, especially using development techniques	Balanced and shaped, especially using development techniques	Repetitive, often with long solo sections.		Balanced and shaped through the manipulation of short thematic ideas through a larger form.	
Dynamic	Large range	Large range	Large range, but often very loud.			Full range
Pitch	Specific methods of pitch organisation eg. clusters, harmonic field etc.	Usually based on ideas of tonal pitch organisation	Tonal/modal.		Tonal. Based around heavy metal guitar based approaches, but with some atonal elements.	
Ensemble	mixed	mixed	Guitar, bass, drums, keyboard, vocals.			Viola and cello

Table 27. Norse Suite (NS): Hybridity table

*Norse Suite* draws on certain twentieth century string techniques, contextualised as heavy-metal-meets-baroque-in-the-concert-hall. Rock and baroque music have some similarities in their compositional ideas: they use “conventional harmonic progressions, melodic patterns and structural frame-works”,<sup>360</sup> the musical ideas are often developed through variation rather than in extended forms, and there is typically a steady beat. In *NS*, along with the steady beat, and familiar melodic patterns, the harmonic progressions are largely tonal or modal, and develop using

<sup>360</sup> Middleton, Richard. *Studying Popular Music*. Buckingham & Philadelphia: Open University Press, 1990. p.30

the brash harmonic movement found in rock music rather than carefully developed counterpoint and modulation.

While the adaptation of classical music ideas to new musical contexts must be achieved through intense study, the introduction to classical music often happens outside the concert hall through recorded classical music rather than live performance. Many pop musicians will uncover classical music through the “recycling of all available musical discourses by the composers of television and movie music.”<sup>361</sup> The use of all kinds of music in film scores helps to remove the separation between ‘high’ and ‘low’ music, allowing the uninitiated listener to explore music as sound, devoid of any associated rituals. In this way, the existing interpretations of classical music through rock music support the premise of hybridity central to this research, where the musical elements are removed from the associated rituals and can be approached from a purely compositional standpoint.

The composition of *NS*, as with all the works in this portfolio, aims to “create new sounds by drawing on the power of the old”<sup>362</sup> thus imitating the musical approach of many heavy metal musicians. In his discussion of heavy metal appropriation of classical music, Robert Walser suggests that these appropriations are rarely parody; instead, they reflect “usually a reanimation, a reclamation of signs that can be turned to new uses”<sup>363</sup> and are not designed to reflect prestigious music, but to adapt the old traditions into the new music, creating new meanings in the new context.<sup>364</sup> Thus *NS*, along with all the work in the portfolio, aims to hybridise various genre conventions into a reanimation of musical elements creating new musical meanings in the hybrid music context.

### **Composition Process**

*Norse Suite* was composed in a relatively straightforward manner, albeit with a range of unexpected revisions. After determining the original instrumental combination of electric guitar and viola, and before completing the first

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<sup>361</sup> Walser (1992), p.267

<sup>362</sup> *ibid.* p.301

<sup>363</sup> *ibid.* p.302

<sup>364</sup> *loc. cit.*

movement, it became clear that finding guitarists with the necessary skills and time to learn a piece like this would be difficult. Previous experience suggested that the duo of viola and cello would be appropriate, especially as the cello has a similar range and flexibility to the guitar, so the transition to an alternate instrument was relatively simple.

Listening to guitar-based music and working out ways to translate those sounds and stylistic expressions on to classical string instruments inspired this composition. The third movement is a reworked sketch for two violas written as an experiment at the beginning of the research process. The fourth movement was originally composed as a separate section.

Throughout *NS* the intention is to convey electric guitar performance technique, timbre and aesthetics, on acoustic instruments. Other important factors include making the furious scalar melodic lines not seem like mere performance exercises, but rather a demonstration of virtuosity as befits the shred techniques of heavy metal guitarists.

After its premiere, the piece was edited, recomposed and rearranged. Certain sections were too long, or didn't flow convincingly in performance. The third and fourth movements flow better by merging seamlessly into one another without the customary break. The final version of the piece subsequently flowed more convincingly and reduced the performance time by three minutes.

### **Concept and Aesthetic**

Musically, this piece differs from the other works in the portfolio, and the composer's previous works, in the number of notes written for each instrument. The melodic lines are much more furious than the more minimalist lines which characterise other compositions in the portfolio.

*Norse Suite* attempts to capture and highlight rock music's bravado and masculinity and then presents it in the contemporary concert hall. The gestures and melodic ideas of this piece all have their genesis in rock music's electric guitar sound world. The electric guitar is powerful, flexible, nuanced, and

perceived as equivalent to “the premier virtuosic instruments of the seventeenth and eighteenth centuries”:<sup>365</sup> the organ and the violin. That bravado and masculinity, in both technique and performance presentation, is most prominent in those rock music genres directly associated with the electric guitar. The concept and aesthetic of *NS* reflects this association, maintaining that masculinity through the musical material, and in the live performance.<sup>366</sup>

The final overt display of masculinity in the rock-centric concept and aesthetic of *NS* is expressed in the performance directions throughout the piece:

- ‘aggressively with purpose’
- ‘with other-worldly power’
- ‘gruntingly’
- ‘with measured aggression’
- ‘with a matador-like bravado’
- ‘absolute menace’

In contrast, a ‘lighter’ side is also presented:

- ‘calm, but with some edge’
- ‘mockingly’
- ‘cheeky’
- ‘lyrical and driven’
- ‘with an intense lightness’

## Structure

Structurally, *Norse Suite* is in four movements:

	<b>Movement One</b>	<b>Movement Two</b>	<b>Movement Three</b>	<b>Movement Four</b>
Title	And the horned warrior comes forth	In the depth of the winter	The duel	A path to Valhalla
Tempo	Fast = 100bpm	Slow = 60bpm	Fast = 100bpm	Faster = 140bpm
Tonal Centre	E min	C	C Phrygian	Cmin - Dmin
Bars	142	58	68	(2 bar transition) + 114
Time	6:44 mins	5:51 mins	3:18 mins	3:46 mins
	Total combined time: 7:04 mins			

*Table 28. NS: Macro structural plan*

<sup>365</sup> Walser (1992), p.272

<sup>366</sup> The original concept for this piece would have both performers, with parts memorised, performing standing, and moving, like heavy metal guitarists, complete with leather pants and a full explosive light show.



In performance, however, just three movements are apparent because Movements Three and Four are seamlessly sequential. The perceived balance of the piece is found through the outer movements (One, Three and Four) being approximately 7 minutes long, and the internal Movement Two being slightly shorter at 6 minutes.

## Analysis

### Movement One: ‘And the horned warrior comes forth’

This movement develops through a number of short sectional ideas that are repeated and varied throughout the piece.

Section	Description	Bars	
A	Main theme – aggressive and driving	1-10	Chorus
B	Unison phrase 1 (built upon the motif of section A)	11-14	
C	Ending repeat motif.	15-20	
D	Intense lightness theme	21-28	Verse 1
E	Transitional phrase 1 (disjointed)	29-31	
F	Further variation on section D	32-35	
G	Continued variation on section D	36-39	
H	Transitional phase 1	40-42	Chorus
I	Slightly varied restatement of section A	43-49	
J	Transitional phrase 2 (runs)	50-55	
K	Strong and powerful	56-74	Verse 2
L	Transitional phrase 3 (repeats)	75-77	
M	Variation on section K	78-89	
N	Slightly varied restatement of section A	90-96	Chorus
O	Unison phrase 1	97-98	
P	Transitional phrase 2 (runs)	99-101	
Q	Variation on section K	102-108	Verse 2'
R	Transitional phrase 3 (repeats)	109-111	
S	Canon Runs	112-128	
T	Furious scales	129-132	Bridge
U	Unison phrase 1 (varied)	133-136	
V	Ending repeat motif. (varied)	137-142	

*Table 29. NS: Structural plan of movement one*

The overall structure of this movement resembles song form in its chorus, verse and bridge sections. There are three main melodic ideas in the chorus and verses, reworked through variations and interspersed with various transitional phrases.

The three main ideas are:

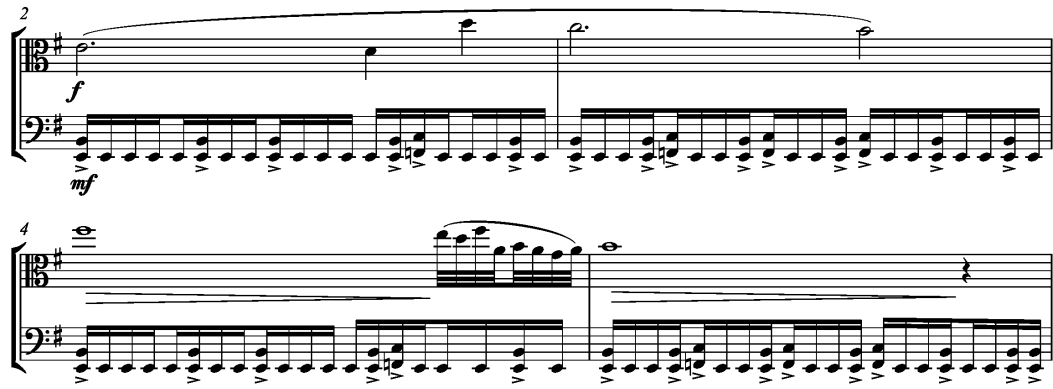


Figure 75. Norse Suite (NS): Main theme, section A, movement one



Figure 76. NS: Lightness theme, section D, movement one



Figure 77. NS: Strong and powerful theme, section K, movement one

These three themes form the basis of all the melodic and rhythmic material for the remainder of the movement. Each theme is accompanied by a pulsing rhythmic motif, the key representative element of rhythmic guitar playing in rock music, which establishes a powerful aural focus around ‘E’, the lowest note on the guitar.

Transitional moments provide either rest or propulsion in the dramatic framework, punctuating the musical statements and allowing for movement of the main melodic line between the instruments.



Figure 78. NS: Transitional phrase 1, movement one



Figure 79. NS: Transitional phrase 2, movement one



Figure 80. NS: Transitional phrase 3, movement one

The majority of Movement One is built on variations and rearrangements of all the musical examples above, the main themes and transitional phrases. The remaining section, a bridge section, introduces new material which appears only once, and is built on the scalar and arpeggiated gestures regularly featured in rock guitar solos. These scalar and arpeggiated gestures are canonic in structure; the cello repeats at the octave, one bar after the viola's statement.

**In a steady unrelenting flow**

112 arco *mp*

116

119

123

126

Figure 81. NS: Canon in the bridge section, movement one

The canon section continues until bar 126 where the cello and viola switch to contrary motion, building steadily to the climactic peak of the movement at bar 128. This is then followed by a unison run around the scale.

**With mechanical precision**

129 *mf*

Figure 82. NS: Unison run, bridge section, movement one

Following the momentary pause created by the bar containing one crotchet (bar 132), a return to a pseudo chorus section leads into the coda, which begins with a unison variation of the original chorus. The coda ending expresses the ‘Ending repeat motif’ which occurs only at the end of the main theme, given as Section C (bars 17-19) in the structural table above. The version in the coda (see below) is slightly extended from the original statement of the motif, built on an acoustic exploration of a digital delay manipulation technique.

Figure 83. NS: Ending repeat motif, coda, movement one

### Movement Two: ‘In the depth of the winter’

Movement Two is structured on slowly developing, longer phrases paired with short rhythmic motivic fragments that serve as both accompaniment and rhythmic drive in each new section.

Section	Description	Bars
Opening	Main theme. Use of rhythmic echo device in accompaniment	1 – 8
A	Distant echo idea. Rhythmically free	9 – 12
B	Variation on main theme	13 – 23
C	Transitional phrase	24 - 25
D	Secondary theme (based on ‘round midnight’)	26 – 37
E	Variation of secondary theme	38 – 49
F	Variations on transitional phrase and distant echo idea.	50 - 55
G	Variation on main theme as coda.	56 – 58

Table 30. NS: Structural plan of movement two

The main thematic elements exist in two parts: firstly, an extended melodic line for viola, which is then restated in slightly varied form by the cello in Section B.



Figure 84. NS: Main theme on viola, movement two

This melodic line is accompanied by a rhythmic figure in the cello. It is intentionally dynamically very specific in order to recreate electronic delay effects on an acoustic instrument.

**Lyrally sparse**  
**Adagio**  
**pizz.**

Figure 85 shows the main theme accompaniment on cello for movement two. It consists of two staves of music. The first staff contains measures 1 through 6, and the second staff contains measures 7 through 8. The tempo is marked 'Adagio' and the style is 'Lyrally sparse'. The key signature has one flat (B-flat). The time signature is 6/4. The dynamics are: p (piano), mf (mezzo-forte), mp (mezzo-piano), and pp (pianissimo). There are also markings for 'pizz.' (pizzicato) and 'arco' (arco).

Figure 85. NS: Main theme accompaniment on cello, movement two

It is built on the same two-bar rhythmic pattern with slightly altered pitch in the second two bars. This four-bar pattern then repeats to become the main accompaniment.

The main theme section is directly followed by the other key motivic component; again, one recreating electronic delay effects. This motif is in two parts: a broken chord ending on a decaying, held, high note; and a repeated, arrhythmic, viola chord bounce.



Figure 86. NS: Distant echo idea, movement two

This effect is an acoustic equivalent to having one chord played and then using a delay effect with an increasing delay time so that the repeated echoes move further apart with each successive repeat.

The second theme in Movement Two is based on a transformed quotation of the Thelonious Monk tune 'Round Midnight,'<sup>367</sup> selected because of the composer's fondness for the original version and its numerous cover versions. Both the tune and its genre connotations seemed an appropriate addition to the slow movement of the suite. Here is the original tune:

369

## 'Round Midnight

Music by Thelonious Monk  
& Cootie Williams  
Lyric by Bernie Hanighen

**Ballad** (Optional ad lib) (Intro)

Chords: A<sub>MI</sub> 7(b5), D<sub>MI</sub> 7(alt.), G<sub>MI</sub> 7(b5), C<sub>MI</sub> 7(alt.), F<sub>MI</sub> 7(b5), B<sub>b</sub> 7(alt.), E<sub>b</sub>MA 7(#11), B<sub>b</sub> 7(b5)

**[A] (Ballad)**

Chords: E<sub>b</sub>MI D, D<sub>b</sub>, C<sub>MI</sub> 7(b5), (F<sub>MI</sub> 7(b9)), A<sub>b</sub>MI 7, D<sub>b</sub> 7, C<sub>MI</sub> 7(b5), F<sub>MI</sub> 7(b9), A<sub>b</sub> 7, E<sub>b</sub>MI 7, (E<sub>b</sub>MI 7), G<sub>b</sub>MA 7(G<sub>MI</sub> 7(#9)), A<sub>b</sub>13(#11)

It be-gins to tell 'round mid-night, 'round mid-night, I do pret-ty well till

af - ter sun - down, Sup-per-time I'm feel - ing sad, But it

real - ly gets bad 'round mid - night. Mem-'ries al - ways start 'round

Figure 87. Melody from 'Round Midnight by Thelonious Monk<sup>368</sup>

<sup>367</sup> The main tune for 'Round Midnight (shown in fig. 87) starts at rehearsal mark A and lasts 8 bars.

<sup>368</sup> Score from: Sher, Chuck (ed.) *The Standards Real Book*. Petaluma, CA: Sher Music Co. 2000, p.369

This melodic line is then transformed into the cello line at Section D with a new harmonic accompaniment in the viola. The chords below (fig. 88) have been added using similar chord symbols as in the jazz part, but are based on some implied harmonies built on the combination of the melodic line and the musical accompaniment. As the viola is only ever playing two-note chords with passing notes, the combined effect of the harmony between the parts has been analysed.

**D** Cool but with some drive  
♩ = 75

26  $F_m(\text{omit}5)$   $Bb7(\text{omit}3)$   $E^\circ$   $F(\text{sus}2)$   $Bb7(\text{omit}3)$   $C7(\text{omit}5)/E$   $E^\circ$

31  $F$   $Bb^5$   $E_m(\text{omit}5)$

35  $F^5$   $Bb^5/F$   $A_b(\text{omit}5) F^5$   $Db_m(\text{omit}5)/F_b$   $Bb_m(\text{omit}5)/D_b$   $F/C$   $C(\text{sus}4) F/C$   $G_m(\text{omit}5)$

Figure 88. NS: 'Round Midnight' quote with harmonic analysis, section D, movement two

Directly after the material in fig.88 (bars 26-37), the 'Round Midnight' idea is restated and the melodic line taken by the viola (bars 38-49). In this second rendition of the melody, the accompaniment is revised into a more minimalist, rhythmic, repeated-note pattern. This new accompaniment is both a reference to minimalist tonal composition techniques, as well as a link back to the rhythmic riff-based guitar playing that informed the accompaniment of Movement One.



The cello part of this section also recreates a pseudo phaser/flanger<sup>369</sup> electronic effect on the acoustic instrument, achieved by constantly sliding the bow position from *sul tasto* to *sul ponticello* and back again over the first four bars of Section E.

38 **E** Lyrical and driven

42

45 poco accel. . . . . f

47 rit. . . . . Hold last note for extra time during pause. Die away to nothing.

Figure 89. NS: 'Round Midnight melody and minimalist accompaniment, section E, movement two

The original intention was to use the phaser/flanger effect throughout the whole section, but it proved too difficult to be both convincing, and audible, when the cello part moved to include the chordal parts, from bar 42. The second movement closes with a restatement of various elements from the main theme and distant echoes section.

<sup>369</sup> A phaser is an audio effect where an audio signal is filtered by splitting an audio signal into two paths. One path remains untouched. The other path has its phase altered. The amount of change in phase will create a series of peaks and troughs in the frequency spectrum. When the two signals are mixed, the frequencies that are out of phase will cancel each other out, creating the phaser's characteristic notches. The position of the peaks and troughs can be varied over time, creating a sweeping effect. A flanger is an audio effect also produced by splitting an audio signal into two paths. But here, one signal is delayed by a small and gradually changing period, usually smaller than 20 milliseconds. This produces a swept comb filter effect: peaks and notches are produced in the resulting frequency spectrum, related to each other in a linear harmonic series. Varying the time delay causes these to sweep up and down the frequency spectrum.

### Movements Three and Four: ‘The Duel’ & ‘A Path to Valhalla’

Although Movements Three and Four flow together without break, they are quite distinct in their respective composition and structure. ‘The Duel’ is fragmented and dramatic; ‘A Path to Valhalla’ is more minimal, each part building on the previous part and ending in climactic unison scalar runs.

	Section	Description	Bars	Additional Genre Focus
Mvt. 3	A	Main riff (foot stomp)	1 – 3	
	B	Main melodic theme	4 – 10	
	C	A stretched encounter	11 – 13	
	D	Unison melody	14 – 17	
	E	Transition phrase	18 – 19	
	F	Moving apart (contrary motion)	20 – 25	Blues
	G	Questioningly (call and response)	26 – 28	
	H	Main riff (varied)	29 – 31	
	I	A stretched encounter (varied)	32 – 33	
	J	Argument	34 – 39	
	K	Main riff	40 – 42	
	L	Matador with percussion	43 – 52	Flamenco
	M	Short canon phrase	53 – 55	
	N	Main riff	56 – 58	
	O	Main melodic theme (variations)	59 – 62	
	P	Development of Section O (with call and response)	63 – 68	
	Transition	Linking element between movements.	69 – 70	
Mvt 4	A'	Main thematic idea (minimalism)	71 – 108	Minimalism
	B'	Development of A' (with electronic effects)	109 – 146	Minimalism
	C'	Heavy – with extended virtuosic cello melody	147 – 172	
	D'	Full chords as break point.	173	
	E'	Climactic unison scalar runs	174 – 181	
	F'	Ending chords.	182 – 184	

*Table 31. NS: Structural plan of movement three and four*

Movement Three is the most dramatic of the suite. ‘The Duel’ occurs between the two instruments as a musical representation of two duelling warriors. This is not a brutal duel between opposing Viking warriors; a sense of unity remains in the unison passages throughout the movement. The dramatic basis for this piece is best described as a disagreement between clansmen before the battle commences; a friendly fight between brothers as a demonstration of skill.

This virtuosic musical battle is also inspired by the blues tradition of “cuttin’ heads”,<sup>370</sup> most clearly documented in the blues music-inspired film *Crossroads*.<sup>371</sup> At the climactic point of the film The Devil challenges Eugene Martone (a classical guitarist interested in the blues, played by Ralph Macchio) to attend a special concert to take part in a head-cutting guitar duel against The Devil’s guitarist (Steve Vai, a blues/rock guitarist in the role of "Jack Butler") so

<sup>370</sup> Also known as "headcutting," the term refers to a competition between musicians where one player will try to outdo another, entertaining an audience by outplaying or outperforming a rival.

<sup>371</sup> *Crossroads*. Dir. Walter Hill. Columbia Pictures, 1986

that blues musician, Willie "Blind Dog Fulton Smoke House" Brown (played by Joe Seneca), can retrieve his soul from an earlier deal with The Devil. The battle progresses and the guitarists trade virtuosic riffs until the crowd determines a winner. This process of 'trading riffs' features throughout Movement Three of *Norse Suite*.

The opening motif of this movement is built around repeated Cs, the lowest note for both the viola and the cello, thus achieving the most 'grunty' open-string sound when required.

○ = Foot Stomp  
♩ = 100

Figure 90. NS: Main riff, movement three

The foot stomp is used throughout as:

- 1) A theatrical gesture;
- 2) An aggressive attacking sound;
- 3) A beat marker pulse for the off-beats of the riff.

Movement Three is built on a series of distantly-related, relatively short, successive musical moments, as in the development of a fight. There are two main consistent and repeated melodic ideas: the main riff (fig.90) and the main theme (fig.91). The main melodic theme serves as the basis for much of the musical momentum, first occurring in bars 4-5 and revisited throughout.

Figure 91. NS: Main theme, movement three

The theme's pitch organisation is a six-note scale taken from the C Phrygian mode, C, Db, Eb, F, Ab, Bb, which then informs the pitch organisation for the rest of the piece.

Section F is a short section influenced by the blues. While still using the notes of the Phrygian mode, the descending melodic shape and selection of notes is intended to give a sense of the Blues.<sup>372</sup> The opening minor third, Ab-G-F, in the viola part, outlines an interval characterising the blues by the 'blue' note or flattened third. Each instrument has its own pitch centre, based on the movement of the blues melody:

- Viola: pitch is centred around F, a 4<sup>th</sup> up from C, the original centre C
- Cello: initially, pitch-centred around Bb but slides to G towards the end of this section

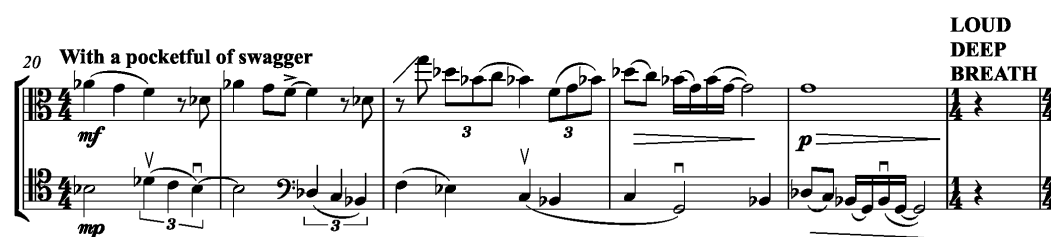


Figure 92. NS: Blues-inspired melody, section F, movement three

The performance direction suggests bravado and confidence, with a 'gangster-esque' quality, referencing both the Chicago mobsters and the Chicago electric blues.<sup>373</sup>

Section G draws on the call-and-response tradition of many forms of folk music including the blues, but here is condensed into immediate and overlapping responses. This also provides an electronic delay/echo effect on the acoustic instruments. The steady decrescendo over this section mimics the way an echo will steadily die away.

<sup>372</sup> A discussion about 'blue notes' and descending melodic shape in blues music can be found in the section on genres in Chapter Three: *Tracking Forward*.

<sup>373</sup> The electrified blues from Chicago was also influential on the British blues music, which, in turn, was related to the creation of rock and heavy metal music.



Figure 93. NS: Section G, movement three

Following this section there is a restatement of previous ideas, which then eventually build into Section L where flamenco music becomes an additional genre element. Although often based on the Phrygian mode, the main flamenco elements here are rhythm and performance practice. Flamenco rhythmic pulse, the *compás*, is often played by guitar, but if no guitarist is available the rhythm is rendered through hand-clapping (*palmas*).

The rhythmic pulse is usually a 12-beat pattern and the placement of the accents provide the different forms:

(x is a strong beat . is a weak beat)

- 1) *fandango*: x . . x . . x . . x . .
- 2) *soleá*: . . x . . x . . x . . x . .
- 3) *bulería*: . . x . . x . . x . . x . .
- 4) *seguiriya*: x . . x . . x . . x . .
- 5) *guajira*: x . . x . . x . . x . .<sup>374</sup>

The rhythmic pulse of Section L is based on the *guajira* rhythm. The musician not doing the solo, performs the *compás* by tapping the body of their instrument, creating a sound related to the *palmas* performance.

<sup>374</sup> Díaz-Báñez, J. M., G. Farigu, F. Gómez, D. Rappaport, and G. T. Toussaint. 'El compás flamenco: a phylogenetic analysis' in *Bridges: Mathematical Connections in Art, Music, and Science* Unknown. 2004 Accessed online: <<http://archive.bridgesmathart.org/2004/bridges2004-61.pdf>> pp.61-62

With a Matador-like bravado  
**POWERFUL**

43

Tapping the body of the instrument

46

Tapping the body of the instrument

**POWERFUL**  
in response to the last 4 bar section

50

Figure 94. NS: Flamenco-inspired rhythms, section L, movement three

Movement Three then closes with a restatement of the main riff and main theme, where the main theme is extended through the call-and-response technique used in Section G. In this version, instead of steadily dying away like an echo, this section steadily crescendos into the final statement of the theme.

63 Mockingly.

*ppp sfz p p ppp p*

66

*fff pizz.*

Figure 95. NS: Call-and-response, section P, movement three

The transitional phrase between movements is a short two-bar run from the highest note of the chord at the end of Movement Three, into an accelerating contrary motion run of leaps, which then blends into the minimalist opening of Movement Four.

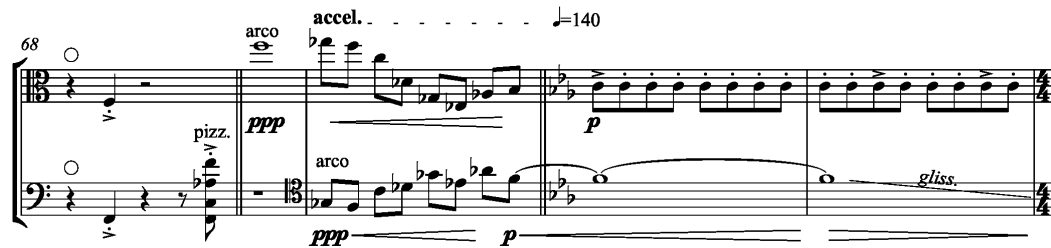


Figure 96. NS.: Transitional phrase, movements three and four

Movement Four is the least fragmented of all the movements in *Norse Suite*. It builds steadily bar upon bar, introducing more melodic movement and more variation on the rhythmic devices used throughout. The opening of this movement sets the pulse with steadily repeated quaver beats with a moving accent, often used to highlight the changes in pitch.



Figure 97. NS.: Opening bars, movement four

This pattern of repeated notes with changing accents continues through Sections A' and B' of Movement Four. As the variations continue the individual lines develop into scalic runs that alternate between the instruments.



Figure 98. NS: Alternate scalic runs, bars 119-125, movement four

In Section C' of Movement Four the cello assumes the role of the virtuosic soloist, guitar shredding, with viola playing the rhythmic accompaniment. As this section unfolds, the intensity heightens every eight bars. At first the viola accompaniment is a repeated single note rhythmic pattern.



Figure 99. NS: Viola rhythmic pattern 1, section C', movement four

This pattern moves around several notes varying the harmonic requirements to accompany the cello's melodic line, but the rhythmic pulse remains and the voicing is limited to single notes. In the second eight bars, the pattern is expanded to include two-note chords on the accented beats.



Figure 100. NS: Viola rhythmic pattern 2, section C', movement four

The third and final version of this rhythmic accompaniment starts with the inclusion of three-note chords on most of the accented beats, and then builds into more scalic runs to work alongside the cello melody.





Figure 101. NS: Viola rhythmic pattern 3, section C', movement four

Against this constant rhythmic pulse from the viola, the cello part is written as a pseudo cadenza, mimicking the virtuosic solos of guitar shredders. Structured around a range of scalar runs, this section also takes some inspiration from solo violin parts from *The Four Seasons* by Antonio Vivaldi.

Figure 102. NS: Cello solo, section C', movement four

From this cadenza-like section, the cello picks up the rhythmic pattern from the viola, and they play in unison from the last bar of the cello solo, to the climactic point, which is reached through repetition of the last two-beat run, culminating in two short repeated chords.



Figure 103. NS: Climax and break, bars 171-173, movement four

The unison playing continues through the final stages of the piece. These scalar runs lead into the final chord stabs, created from variations of the chords in bars 173, and are a link back to the closing section of Movement One. They also reflect the unison solo techniques found in many heavy metal and rock recordings.



Figure 104. NS: Ending of movement four

## Reflections on Hybridity

A sense of balanced hybridity is difficult to assess or describe. The compositional approach can be tailored to create hybrid music; however, the perception of the quality of that genre mix is entirely reliant on the musical, cultural and social background of the listener. When working with genres such as classical music and heavy metal, where there are a number of musical similarities in their construction, the greatest difference between them is timbral and sonic. If composing for a traditional acoustic ensemble this timbral difference is lost and so it can be difficult to maintain the true sense of those original genre elements.

Difficulty in finding an appropriate performer for the electric guitar in the early stages of this composition lead to the ensemble changing to viola and cello. While this change ensured a performance, in writing for a more traditional ensemble the potential for future performances is greater, but the sense remains that the true hybrid essence of this piece is somewhat lost in that translation.

It may have been more appropriate to include effects pedals and amplify the acoustic instruments in order to recreate some of those timbral qualities lost in the acoustic ensemble, but this sonic restriction lead to the exploration of new possibilities to recreate these elements in a purely acoustic environment. It may be necessary to revisit this piece in the future, either by reworking the final composition into the original ensemble of electric guitar and viola, or by working with performers to introduce effects pedals. But the relevance of *NS* in the context of this research is as a representative example of composing for traditional ensembles in a hybrid setting, along with the considerations that are necessary to compose acoustic music with a clear sense of hybridity.

Finally, the selection of performers for a piece of this type is critical to its success as a hybrid, as the performers need an awareness and appreciation of the core genre elements. In the same way that performers of classical music are aware of the traditions and techniques of that music, performers of hybrid music need to be aware of the extra-musical and performance traditions associated with the core genre elements of the hybrid. In the case of *Norse Suite* an awareness of the long-haired, leather-clad, masculine guitar-shredder becomes an important part of any musical interpretation.

## Chapter Eight - *The Foggy Field*

*The Foggy Field* (hereafter, *TFF*) is inspired by an interview<sup>375</sup> with Philip Glass<sup>376</sup> in which he describes the process of composition being like uncovering images through a thick fog. This piece explores the genre elements of minimalism, modal jazz, dance music/electronica, and soundscape.

*TFF* was originally conceived as a live performance piece for improviser on trumpet and flugelhorn, backing track and turntables. The backing track with a melodic ‘head’<sup>377</sup> bookends the piece and allows room for improvisation in the middle sections. After several live performances, it seemed that the hybridity lacked balance; the solo line was confined to the jazz idiom and so the backing track became merely a jazz fusion accompaniment. Recomposition, maintaining some of the key thematic moments, rebalanced the hybridity and transformed *TFF* into a studio-based production work. Revisiting the hybridity table during the recomposition process confirmed its usefulness as a tool for clarifying thinking and balancing genre elements.

The recomposition of *TFF* represents one of the clearest examples in the portfolio of how the roles of composer, performer, producer, improviser and studio technician operate in a fluid state of constant flux throughout the process of hybrid music composition. Where live performance, especially improvisation, often relies on an instant response to the impact of any sound presented, in the recording studio any instant response can be transformed into a more considered response: each recorded sound can become “repeatable, perfectible, subject to assessment, revision, manipulation”.<sup>378</sup> This blending of composition and performance is not possible without recording technology. The recomposition, or ‘remix’, from the original live version of *TFF* into this new, reconstructed, balanced hybrid uses the recording studio as a key component in the compositional process.

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<sup>375</sup> ‘Philip Glass and Scott Hicks In Conversation’ on *ForaTV*. Originally filmed 3/12/08 in association with Australia Broadcasting Corporation. Web. Accessed 19<sup>th</sup> Feb 2013  
<[http://fora.tv/2008/03/12/Philip\\_Glass\\_and\\_Scott\\_Hicks\\_In\\_Conversation](http://fora.tv/2008/03/12/Philip_Glass_and_Scott_Hicks_In_Conversation)> (Sample source 29:35 - 30:18)

<sup>376</sup> Philip Glass is an American composer, whose music is often described as minimalist.

<sup>377</sup> “The head consists of all the musical material prior to the beginning or after the end of improvised solos.” – Jackson, Travis A. *Blowin’ the Blues Away: Performance and Meaning on the New York Jazz Scene*. Berkeley & Los Angeles: University of California Press, 2012, p.146

<sup>378</sup> Clarke, Paul. ‘A Magic Science: Rock Music as a Recording Art’ in *Popular Music*, Vol. 3, Producers and Markets (1983), pp.195-213: Cambridge University Press, p.195

## Genre and Hybridity

Although some genre elements were revised in the recomposition of *TFF*, essentially, the outline remains unchanged. The source genres are: minimalism, drawing from repertoire for piano and percussion;<sup>379</sup> jazz, with particular reference to the modal jazz period;<sup>380</sup> electroacoustic soundscape, using studio editing techniques to transform the pre-recorded parts, and other sound effects; and trip hop, mostly using programmed drum machine sounds and turntablism.<sup>381</sup>

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<sup>379</sup> Particularly works by Philip Glass, Steve Reich and Steve Mackey.

<sup>380</sup> Particular focus on various works by Miles Davis, and the piano work of Bill Evans.

<sup>381</sup> Turntablism is the art of manipulating sounds and creating music using turntables.

## Hybridity Table

MetaGenre	Source Genres and their individual elements				Genre elements for use in Composition		
	Western Art Music	Art Electronica	Electronica	Jazz	Hybrid Genre		
Sub Genre	Minimalism	Soundscape	Trip hop	Modal	Juxtaposed elements	Synthesised elements	Other use of elements
Construction	Meticulous scoring - strictly controlled.	Extremely structured, usually layered – studio construction	Rigidly Structured in repeating units – often loop based.	'Head' sheet with improvisations.		Based on a 'head' sheet, then reconstructed into a studio based composition	
Form	Usually long forms	Long forms	Short looped segments developed through repetition	Short forms – that are developed (and expanded) in performance			Short form (5.5mins) - single movement
Tempo	Closely specified	Time-based	Rigid and often unchanging	Free but rhythmic. Fluctuates according to the performance.		Strictly controlled tempo constructed in studio with a sense of freedom and fluctuation in final presentation.	
Freedom	Limited	Pre-recorded, so fixed	Often pre-recorded, but performed with some flexibility.	Freely Improvised within genre constraints			Pre-recorded.
Complexity	Can be layered and but often built on simple repetitive fragments	Extremely layered and timbrally complex	Simple	Varies, but often complex and nuanced in performance		Moderate complexity. Advanced studio techniques.	
Harmony	Often tonal harmonic progressions. Sometimes drone based.	Focused on spectromorphology and timbre/gesture/ texture. Traditional ideas of harmony are generally not applicable.	Generally simple harmony. Sometimes based on 'colour' chords – also sample-based.	'Colour' chords. Song-based progressions. Strong modal qualities.		Minimal and restrained harmonic movement. Use of spectromorphological techniques	
Sonic design / timbre	Using acoustic instruments + synthesisers	Layered sound recordings, electronic effects and sound editing	Sample based + synthesized + real instruments.	Acoustic instruments			Layered sound recordings and studio editing.
Use of Technology / Notation	Traditional score / sometimes with studio construction	Studio construction	Recording	Head sheet. Improvisation. Aural tradition.		(draw from improvised material as samples)	studio construction
Rhythm	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Can have some rhythmic complexity due to the time-based nature.	Strict rhythms - drum machine. Loop based.	Rhythm fluidity – but usually with a steady swinging rhythm.			Carefully controlled rhythmic variation.
External References	Absolute or programme	Absolute or programme	Absolute or programme	Absolute or programme			Not explicitly programmatic, but based on a narrative concept
Gesture	Gestural range restricted to instrumental techniques - repetitive	Wide gestural range	Some gestural change, can depend on source material.	Gestural range restricted to instrumental techniques.		Controlled gestural range. Acoustic technique combined with studio manipulation.	
Purpose / location	Formal - concert	Formal – concerts/ installations	Headphones / club gig	Bar, club, recording			Concert hall / headphones
Thematic Material	Balanced and shaped, especially using development techniques	Balanced and shaped	Repetitive. Loop based.	Repetitive 'head' with improvised solos.		Still using base melodic material from head sheet – with extra manipulation in studio.	
Dynamic	Large range	Large range	Some variation	Large range			Full range
Pitch	Specific methods of pitch organisation – often tonal	Mixture of found sound, noise and musical gestures. Timbrally organised. Usually not pitch focussed.	Tonal/modal. Largely consonant. Sometimes timbrally focussed.	Modal with chromatic inflections		Tonal/modal – some timbrally based sound elements.	
Ensemble	Extremely varied.	Found sound / electronics / producer/composer	Studio producer/ composer / sometimes band.	Trumpet, saxophone, piano, bass, guitar, drums.			Pre-recorded track.

Table 32. The Foggy Field (TFF): Hybridity table

## Composition Process

*TFF* was composed in two separate phases: first, the creation of a jazz-meets-minimalism backing track to accompany melodic improvisation; and second, utilising recording of improvisations as source material in the construction of the final studio-based fixed media piece.

The original backing track elements are formed through minimalism-inspired tonal piano explorations. The track was recorded layer-by-layer, the composer playing parts on the piano. From these layers the five-section structure developed, and the harmonic structure arranged. As a compositional approach the combination of improvisation and recording is adapted from the approach of pianist/composer Bill Evans in the creation of his album *Conversations with Myself*.<sup>382</sup>

Improvisation can be described as “the real-time yet pre-heard – and even practiced – choice among possible paths that elaborate a pre-existing structure, using familiar patterns and their familiar combinations and embellishments.”<sup>383</sup> Then, by committing those improvisations to recording, and layering and structuring them, the studio construction transforms those moments into the fully formed composition. This method of improvisatory studio-based composition allows for ‘mistakes’ to play a more important role in the composition, through editing, manipulation and revision. The composition process of *TFF* utilises this idea on multiple levels: pre-composition, recorded performance, and studio remix.

The main melodic line for the trumpet is based on the backing track and the concept of finding elements in a fog. It becomes more involved as the piece progresses, allowing more of the melodic material to be uncovered over time. At the beginning of the piece the trumpet melody inspires subsequent improvisation.

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<sup>382</sup> Larson, Steve. ‘Composition versus Improvisation?’ in *Journal of Music Theory*, Vol. 49, No. 2 (Fall, 2005), pp.241-275: Duke University Press, p.241

<sup>383</sup> *ibid.* p.272



Figure 105. The Foggy Field (TFF): Original trumpet melody

The final layer of the original compositional idea includes the vocal sample that inspired *TFF*. Rather than manipulating the vocal sample directly in the studio, like most tape-based/electroacoustic-studio sampled music, it was treated as a sound source for improvisation and physically controlled through hip hop ‘turntablist’ techniques of scratching. Manipulation of the turntable allows for repetition, manipulation of pitch and tempo, control of volume, and live control of the level and degree of echo, using the Korg Kaoss Pad effects unit within the performance technique.

The three-part vocal sample corresponds with the beginning, middle and end of *TFF*. (Philip Glass / Scott Hicks – interviewer)

Part One:

I explained it actually, once in a long conversation about how, how we see (mumble) the field, the foggy field. *The Foggy Field, yeah, yeah, tell people that, about that.*

Part Two:

The field, the foggy field.

Part Three:

*The Foggy Field, yeah, yeah, tell people that, about that.* Well the idea was that (mumble) what do you hear? I said well, it was as if I looked out at a field, but there was a fog there, but I saw there was something there, but I couldn’t quite make it out. But, if I sit long enough I begin to see this shape. Of a building perhaps. And after a while I might see a few trees and



this and that. But basically, I'm straining to see. In the same way that I'm fighting to listen, trying to hear.<sup>384</sup>

All these elements were combined in a performance setting. Mike Booth played the melodic parts on trumpet and flugelhorn, allowing the timbre of the solo instrument to unfold through the fog, moving from muted trumpet, to unmuted trumpet, and finally to flugelhorn. The composer performed the turntable part, and the backing track was pre-recorded as a fixed media part.

Having captured the performative element of the piece, the second phase of composition began. In the background of the original backing track, subtle use of recordings of a tui, an indigenous New Zealand bird, were manipulated through various glitch effects. But these layers seemed to get lost in the overall texture and the piece risked portrayal of standard jazz fusion rather than a balanced hybrid. All the recorded elements of the performance were reimported into Pro Tools and reworked through studio-based sound composition.

The transformative glitch effects of the bird recordings were brought forward and the trumpet parts deconstructed through various audio effects. The backing track elements were readjusted in the mix and given more definitive spatial movement using panning<sup>385</sup> and reverb techniques. Musical layers were adapted and rearranged, and other elements added, including subtle alterations to the harmonic material, synthesized textural layers, manipulation of percussive elements, and inclusion of a synth-bass part and a sampled boys' choir in the fourth section. Only the turntable element remained unchanged in both renditions.

### **Concept and Aesthetic**

*TFF* is designed as an exploration of, and sonic response to, emerging from a fog. The musical ideas move in and out of a 'fog', using and manipulating audio effects. These are represented in the development of the melodic line, timbral changes in the trumpet, manipulation of bird song and trumpet lines into digital fog, and the emergence of new sounds and textures as the piece develops.

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<sup>384</sup> Transcribed from the *ForaTV* interview video discussed at the beginning of this chapter.

<sup>385</sup> Panning – is a technique in sound mixing used to position sound in a stereo soundstage, and to create the impression that a sound is moving from one side of the soundstage to the other.

Elements develop as they emerge into the foreground of the musical texture, much like the improvisational process that guides this piece.

*TFF* utilises a

type of phonographic staging [that] suggests a more abstract recording space, often in opposition to the ‘concert realism’ of recordings that stage liveness ... ‘studio consciousness’—elements of a recording that draw specific attention to the fact the given song was recorded in a studio.<sup>386</sup>

Working with an awareness of ‘studio consciousness’ means the timbral and spatial effects become an integral part of the final work. Even the live performance-based elements of *TFF* are subjected to these techniques, where improvisation forms the basis of the musical dialogue which is then reconstructed through careful studio manipulation.

*TFF* is unlike the other pieces in this portfolio in that the listening environment has been moved from the concert hall into the headphones, thus presenting ‘spatial music’:

a musical composition that involves any sort of compositional control over the apparent spatial location of sound is termed spatial music . . . In such music the spatial element is a compositional parameter subject to manipulation.<sup>387</sup>

*TFF* contains subtle spatial manipulation of sound, designed to highlight the inspiration of ‘searching for sound’ that informs the composition of this piece, particularly through the use of panning and reverbs. Designing this piece to be heard primarily by close listening on stereo headphones dictated that all of these elements will be heard without colouring or variation of room design and speaker placement. It also allows for the inclusion of very subtle sound layers that can go unheard if not presented in the pristine listening environment of headphones.

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<sup>386</sup> Williams (2011)

<sup>387</sup> Begault, Durand R. ‘The Composition of Auditory Space: Recent Developments in Headphone Music’ in *Leonardo*, Vol. 23, No. 1 (1990), pp.45-52: The MIT Press, p.46

## Structure

*The Foggy Field* is in five sections:

	Section A	Section B	Section C	Section D	Section E
<b>Time</b>	0:00 – 1:31	1:31 – 2:45	2:45 – 3:03	3:03 – 4:16	4:16 – 5:34
<b>Instrument</b>	Muted trumpet	Trumpet	(break)	Flugelhorn	Flugelhorn
<b>Melody</b>	Scored Part	Improvised	(break)	Improvised	Based on scored part
<b>Turntable<sup>388</sup></b>	Part One		Part Two		Part Three
<b>Tonal Centre</b>	D	G	Eb	Eb	D
<b>Other Elements</b>	Piano with effects, tui manipulation, synth wash	Piano chords + effects, drum breaks, synth motion pad, filter sweeps	Synth bass, tui manipulation, piano with effects, vibes with effects.	Synth Bass, Tui manipulation, drum breaks, vibes with effects, glock with effects, xylophone with effects, sampled boys choir,	Piano with effects, tui manipulation, synth wash.
<b>Effects Used</b>	Echo, delay, reverb, glitch, panning, phaser, pitch shift, EQ.	Echo, delay, reverb, glitch, panning, phaser, pitch shift, EQ, filter sweeps, chorus.	Glitch, reverb, echo	Echo, delay, reverb, glitch, panning, phaser, pitch shift, EQ, distortion	Echo, delay, reverb, glitch, panning, phaser, pitch shift, EQ.

Table 33. TFF: Structural plan

## Analysis

The elements in this piece are composed to feature the techniques of deconstruction and fragmentation. This works alongside Schnittke-esque distorted quotation, through sample manipulation, and stylistic reference, as well as the minimalistic repeated cell elements that form the bulk of the structural basis of the piece. Although *TFF* is essentially tonal, it is an extended tonality through the additional layers of microtonal shifts and noise elements present in the audio layers and effects.

Tempo remains constant throughout, with Section A showcasing the clearest sense of rhythmic pulse. This is outlined by the repeated note figure played by the piano from the beginning of the piece: an F, played as quavers, while a descending pattern moves G, F, Eb, D with a new chord every second bar. This is repeated and manipulated through layered reverb and delay elements throughout the first section. Around this constant pulse, the tui manipulation and turntable part provide constantly varied rhythmic accents. The hybridity of the piece is apparent from the opening section through the post-minimalist piano, the electronica bird song, the hip-hop turntablism and the jazz trumpet.

### Audio example 13. *The Foggy Field (TFF)*: Tui manipulation

<sup>388</sup> Refers to the vocal samples discussed in the ‘Composition Process’ section.

In Section B the sense of pulse is freer with the sampled percussive elements only playing fills and accent notes, allowing room for the synth motion pads to develop; synthesised layers slowly shift and transform as a further sonic representation of the foggy field. The trumpet improvisation is cut up into a range of motives that are layered, manipulated and rearranged into the new section. Here the hybridity has a more integrated character as the layers intertwine. The sound manipulations become part of one unified hybrid texture.

Audio example 14. TFF: Trumpet manipulation

Section C is the shortest section, originally designed as a moment to pause and change instruments, and also as a break from the melodic material where the manipulated bird song moves to the foreground. This section introduces a new sound to the piece, the synth bass, which restates the pulse and, as it develops through the next section, helps to determine the basic harmonic shape for Sections C and D.

Section D emerges out of Section C, as a continued development of these new ideas and sounds. The rhythm of the bass pulse is accented by the continuation of the sampled percussive elements from Section B. Again the trumpet part is constructed through the re-arrangement of the previous improvised elements, this time put through additional layering and various deconstructive effects.

Audio example 15. TFF: Rhythm backing section

A sampled boys' choir is introduced from the beginning of this section, adding to the harmonic shape, but it slowly moves into the foreground. The end of Section D marks the climactic point of the piece; as the boys' choir reaches the peak of its crescendo the drums and bird manipulations also are moved to the foreground of the mix and subjected to a delay/echo effect, transitioning into the final section.

Audio example 16. TFF: Sampled boys' choir

Section E returns the elements to the ideas of Section A. The backing track elements are recycled through the piano, audio effects and bird song

manipulations. The flugelhorn part is a variation on the scored elements played as part of Section A on the muted trumpet. The flugelhorn is subjected to fewer audio effects and manipulations. This is because as one stares at a foggy field, the images become clearer, thus the focus of this auditory foggy field is the trumpet/flugelhorn part which becomes clearer at the end of the piece. The turntable part in Section E also reflects the turntable part from Section A, but uses material from the third vocal sample providing the clearest account of the inspiration for the idea of the foggy field and its relationship to the process of composition.

### **Reflections on Hybridity**

Before *TFF* became a studio-based composition in its final rendition, there was an issue with the hybridity getting lost in the combination of the jazz-like structure (head + solos), and also in the obvious prevalence of the jazz-styled melodic performance. While elements of the originally designed hybrid were present, the musical arrangement didn't allow for that hybrid nature to be easily perceived.

Recognising this, then recomposing the piece, a much clearer sense of hybridity emerged. Manipulating sounds in the studio composition means that while strongly recognisable genre elements are still present, they can be mixed and transformed in order to present a more balanced synthesis of the constituent parts. The audio elements are very genre-specific, but the tools, techniques and technologies of the digital audio workstation enable the composer/producer to re-design those elements in a new way. Sampling gives an element of authenticity to the genre-based performance, but the new context provided by the technological manipulation creates a clearer sense of hybridity.

## Chapter Nine - Into the Nocturnal Sunshine

*Into the Nocturnal Sunshine* (hereafter, *ItNS*) is a short piece for flute, viola, cello, drum kit, electronics and backing track.<sup>389</sup> It is the only piece in the portfolio composed for a specific event; in this case, the 2012 University of Waikato Blues Awards.<sup>390</sup> *ItNS* hybridises the genres of 20<sup>th</sup> century chamber music, minimalism, electronic dance music and rock.

The committee who commissioned the piece wanted an opening performance that had both theatrical and musical impact for the awards dinner. The theatrical impact, developed through discussions with the event's technical manager, Brad Thomson,<sup>391</sup> featured: a kabuki drop<sup>392</sup> curtain to hide the drum kit and electronics from view until the climactic moment; and, lighting design to enhance the intensity of theatrical content at the same rate as the music – moving from calm, neutral chamber music concert lighting, to a full rock light show when the curtain is dropped.

### Genre and Hybridity

*ItNS* begins with twentieth century contemporary art chamber music, develops through minimalist repetitive instrumental textures on jazz 'colour' chords with glitch elements, reaches a climax and breakdown inspired by electronic dance music, dubstep, rock and film scoring techniques, then returns to a chamber music coda. As *ItNS* progresses a regular pulse becomes apparent, and after genre elements are introduced, the full balanced hybridity is revealed. Towards the conclusion this process reverses rapidly until the layers of hybridity are removed, leaving the chamber ensemble of flute, viola and cello.

Section Bars	Opening		A	B	C	D	E	F
	1 - 39	40 - 84	85 - 116	117 - 164	165 - 180	181 - 196	197 - 228	229 - 243
Twentieth Century Chamber Music								
Minimalism (+drone)								
Glitch								
Dubstep/Electronica								
Rock								

Table 34. Into the Nocturnal Sunshine (ItNS): Development of hybridity

<sup>389</sup> In performance the musical elements also have a cross-disciplinary, multimedia accompaniment in the form of an aerial silk performer and full theatrical light show.

<sup>390</sup> These awards celebrate excellence in sports and creative and performing arts on a national and international level amongst students at the University.

<sup>391</sup> Brad Thomson, technical manager at the University of Waikato Academy of Performing arts was also the drummer for this piece.

<sup>392</sup> A kabuki drop is a technique requiring a drape to be dropped quickly from the ceiling to reveal a stage/performers.

The hybridity is realised through a process best described as circular accretion, also apparent in outer space where an accretion disc is formed by diffuse material in orbital motion around a central body, typically a star. Gravitational forces cause material in the disc to spiral inward towards the centre. And so, *ItNS* is inspired by this process. The title, *Into the Nocturnal Sunshine*, attempts to reference the composer's imagination of an electrifying experience: starlight in the darkness of space; finding the sunshine in the night.

This accretion approach to cross-genre hybridity differs from other works in the portfolio where attempts are made to maintain a consistent hybridity, having at least two layers of source genre material at any one time. *ItNS* aims to achieve a similar sense of hybridity in a holistic sense. The source genre elements gradually intertwine as the piece unfolds, building layer-upon-layer until the full hybridity is realised. Thus the hybrid growth coincides with dramatic shape: beginning with single elements, slowly intertwining through additional layer, reaching a balanced hybrid climax, then rapidly reversing the process to end the piece.

The hybridity table for *ItNS* works similarly to previous pieces. Each genre is broken down into its constituent elements, then explored in terms of juxtaposition, synthesis or some other method of combination. These intended results for the hybrid genre piece are still present in *ItNS* at the point where all the genres are intertwined, near the climax. The difference between this piece and the others is purely in compositional approach after creating the hybridity table.

In addition to genre accretion, it is important to acknowledge that even though genres may appear independent of each other, *ItNS* is composed entirely with the hybrid genre in mind. Although initial elements seem far removed from electronica, the intention was to compose each part so that at the introduction of the next genre layer, they matched seamlessly, each part designed to work with the others.

## Hybridity Table

MetaGenre	Source Genres and their individual elements				Genre elements for use in Composition		
	Twentieth Century	Western Art Music	EDM	Rock	Hybrid Genre		
Sub Genre	Chamber Music	Minimalism	Dubstep/Glitch	Heavy Rock	Juxtaposed elements	Synthesised elements	Other use of elements
Construction	Meticulous scoring - strictly controlled.	Meticulous scoring - strictly controlled.	Rigidly Structured in repeating units- computer controlled. Loop based.	Controlled construction. Built upon band traditions.		Scored composition over a structured pre-recorded bed.	Some elements of improvisation in the drum kit part.
Form	Usually long forms - multi movement	Usually long forms	Short looped segments developed through repetition	Short forms – based around Song form ideas.			Short form (7mins) - single movement
Tempo	Closely specified	Closely specified	Rigid (usually within a small BPM range)	Solid and driving.	Strictly controlled base tempo with a sense of freedom in the opening sections.		
Freedom	Limited	Limited	Pre-recorded, so fixed	Song focussed. Sometime composed in studio.			Some freedom, but with a pre-conceived outcome
Complexity	Can be layered and complex	Can be layered and but often built on simple repetitive fragments	Some simple elements, but with layers of complex electronic manipulation	Often compositionally simple – but with virtuosic performance elements.		Moderate complexity with some virtuosic elements.	
Harmony	Strong, complex controlled harmonic progressions	Often tonal harmonic progressions. Sometimes drone based.	Very basic chordal harmony	Repetitive harmonic structures – often tonal or modal.		Minimal and restrained harmonic movement.	
Sonic design / timbre	Using acoustic instruments	Using acoustic instruments + synthesisers	Computer based sound design - often synthesised	Electric and acoustic instruments. Amplification.		Acoustic instruments (with mic) WITH drum kit and pre-recorded backing track	
Use of Technology / Notation	Traditional score	Traditional score / sometimes with studio construction	Recording	No score. Aural tradition.			Completely scored – with studio constructed backing
Rhythm	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Strict rhythms - drum machine. Often layered rhythms with internal rhythmic modulation.	Straight rhythms. Some variation according to song design and dramatic shape.	Layered rhythms - cross rhythmic ideas		
External References	Absolute or programme	Absolute or programme	Instrumental – but song based.	Programme – songs tell a story			Absolute.
Gesture	Gestural range restricted to instrumental techniques	Gestural range restricted to instrumental techniques - Repetitive	Punchy and driving. Small repetitive aggressive gestures. Use of sound manipulation.	Punchy and driving. Aggressive.		Restrained gestural range (with some subtle granular manipulation in backing)	
Purpose/ location	Formal - concert	Formal – concerts	Headphones /dance club	Bar, club			Formal - for an awards show
Thematic Material	Balanced and shaped, especially using development techniques	Balanced and shaped, especially using development techniques	Repetitive	Repetitive		Textural composition techniques that build into a climactic theme.	
Dynamic	Large range	Large range	Very loud or very soft.	Large range			Full range
Pitch	Specific methods of pitch organisation eg. clusters, harmonic field etc.	Specific methods of pitch organisation – often tonal	Tonal/modal. Largely consonant. Sometimes timbrally focussed.	Tonal with chromatic inflections.		Based around a harmonic field, that morphs into a tonal section for the climax.	
Ensemble	Varied	Varied	Studio producer/ composer / engineer	Guitar, bass, drums, vocals.			Flute, viola, cello, drum kit and backing track.

Table 35. ItNS: Hybridity table



## Composition Process

The performance context for *ItNS* dictated the first step in the compositional process. Dramatic shape needed to build up to the kabuki drop which likewise coincided with the full light show and the intended performance impact, all of which was suggested by the technical requirements.

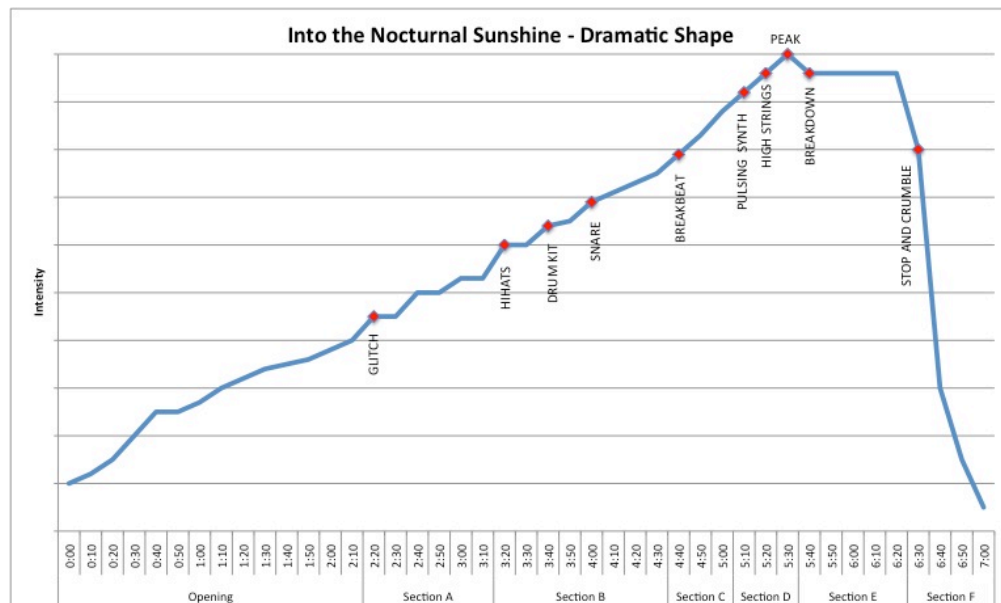


Figure 106. Into the Nocturnal Sunshine (ItNS): Initial dramatic plan for musical intensity

*ItNS* was built from the ground up, starting with the rhythmic bed, in Pro Tools. This established accuracy of performance time, where the key points of change would occur, and how the sections would link together. Then, from the rhythm track, the remainder of the backing track was composed in the studio through the layering of sound, using similar production and composition techniques that form part of the producer's role in much popular music.

Dealing with pitch organisation in hybrid music is complex. The tonality, or modality of the majority of popular music can render other systems of pitch organisation difficult to use effectively, while not abandoning the qualities of the popular music-styled melody. To resolve this issue, a combination of pitch organisation was devised. A harmonic field, used for the majority of the build section, culminated in a purely tonal climax section, moving the focus towards the virtuosic instrumental parts above the pounding rhythm. Standard tonality symbolises a release into the familiar.

The instruments using the harmonic field tend to focus around high G in the bass and high G in the treble. The G# notes are often only used in passing, creating a perceived G tonal centre in the harmonic field, thereby relating to the tonal sections of the piece. The drone elements in the synthesizer textures are all centred around G; the harmonic field notes allowing hints at this tonal centre throughout much of the piece. Starting from middle C, the ascending harmonic field is created by a repeating pattern of four whole tone steps and a tone and a half.<sup>393</sup> This is then reversed, descending from middle C.



*Figure 107. ItNS: Harmonic field*

The harmonic field provides the pitch material for all the elements in the majority of this piece, including backing track and acoustic instruments. Tonality is established largely through the backing track elements and their note repetition and looping elements. The constant restatement of specific pitches directs the ear toward tonality, even if certain notes don't strictly reflect traditional Western European tonality. The overall harmonic relationships are controlled by rhythm: as the rhythmic elements become more prominent, the tonal centre is increasingly established and is sucked into the rhythmic drive. At the climactic point the momentum shifts into a half-time tonal section beginning in D minor, moving to G minor, before finally returning to the ambiguity of the harmonic field.

After planning the pitch organisation, traditional scored parts for flute, viola and cello were composed. The piece builds from a spacious opening to a furious ending, and so the instrumental parts also reflect that. The live drum parts are performed over pre-recorded programmed drums in the backing track that provide solid rhythmic foundation and serve as a clear click track. Live drum parts are improvised on the pre-recorded rhythm, performing with more virtuosity and flourish than a standard drum machine part.

<sup>393</sup> The pattern is: maj2nd, maj2nd, maj2nd, maj2nd, min3rd. This can also be expressed as interval classes 22223

### **Concept and Aesthetic**

*ItNS* was originally conceived for dramatic purpose, to create an extended build-and-release throughout the work. This is achieved through tension in the musical materials, by progressing from an ambiguous harmonic field tonality, into the tonal harmony of the breakdown.

*ItNS* is also designed to morph purposefully from rhythmic ambiguity to rhythmic unity. The wash and slow rhythmic pulse of the opening idea is propelled through a sense of tempo increases, achieved by including more fast-paced rhythmic elements. This perceived increase in tempo together with a steadily rising pitch, adds to the tension that develops throughout. As each new layer and timbre is introduced, the density of the sound is increased which, in turn, adds to the building dramatic shape.

The final moment of release is marked by: a tempo change to half speed; a shift from a high-pitched fury to a punching, low-pitched thunder; and the introduction of the full drum kit and percussion fills. When these elements are combined with the dramatic elements of lighting design and the kabuki drop, the sense of release is intensified after the slow build of tension.

## Structure

*Into the Nocturnal Sunshine* is in seven sections.

	Opening	Section A	Section B	Section C	Section D	Section E	Section F
Bars	1 – 84	85 – 116	117 – 164	165 – 180	181 – 196	197 – 228	229 – 243
Time	0:00 – 2:23	2:23 – 3:18	3:18 – 4:40	4:40 – 5:08	5:08 – 5:35	5:35 – 6:29	6:29 – 7:00
Pitch	H.F	H.F	H.F + tonal centre G	H.F + tonal centre G	H.F + tonal centre G	Dm / Gm	H.F
Tempo <sup>394</sup>	Free	Free with clearer pulse	Constant tempo	Constant tempo	Constant tempo	Half time	Free
Other Layers <sup>395</sup>	Synth wash pad, timpani, piano	Synth wash pad, timpani, piano, glitch percussion	Synth wash pad, piano, glitch percussion, hi-hat, synth bass.	Synth wash pad, piano, glitch percussion, hi-hat, synth bass, synth pulse, synth low drone, programmed drums	Synth wash pad, piano, glitch percussion, hi-hat, synth bass, synth pulse, synth low drone, programmed drums, sampled string swell clusters, additional drum layers	Cymbal swell, distorted glitch elements, sampled brass (trombone/ horn / tuba), low synth pulse, timpani	Synth wash pad, low held brass sample, glitch noises.

Table 36. *ItNS: Structural breakdown*

## Analysis

*ItNS* opens with long held notes on cello, viola and flute, accompanied by a quiet synth wash pad in the backing track starting on beat one. The sparse piano and timpani parts moving throughout the opening section offset the opening held notes. There are no pitch-based motivic elements utilised. Some rhythmic devices move between instruments, but *ItNS* has been composed more as an exploration of colour and tension than as an exploration of memorable tunes. The chamber music instruments play largely without break, exploring subtle colour shifts in the interaction between the three parts.

<sup>394</sup> This refers to the sense of the tempo – the entire track is at a constant 140bpm, but the feel of the tempo changes throughout.

<sup>395</sup> Flute, viola and cello play throughout. This refers to all other sounds used in the track.

1 *Freely*  $\text{♩} = 140$  *lyrically*

Flute *mf* *mp* *mf*

Viola *mp* *mf*

Violoncello *mf* *mp* *mf*

12 *mf* *mf* *p* *mf*

19 *f* *mf* *mf*

Figure 108. ItNS: Opening section

In Section A, the instrumental parts become more rhythmic, following the scattered rhythmic pulse of the glitch percussion. The rhythmic elements are passed between instruments throughout the section.

Audio example 17. Into the Nocturnal Sunshine (ItNS): Glitch percussion

**A**

*Rushing*

85 *mf* *pp* *p* *mf*

93 *f* *pp* *mp* *mf* *arco* *pizz.*

99 *arco*

Figure 109. ItNS: Rhythmic parts, section A

The start of Section B is marked by the introduction of the hi-hats solidifying the rhythmic pulse and introducing the clearest sense of a steady beat so far in the piece. This is further enhanced by the first strong low-end element, the synth-bass. While the rhythmic pulse becomes more prominent in the backing track, the acoustic instruments return to longer held notes, providing an opportunity for the new rhythmic elements in the backing track to find their place. It also allows the live instrumentalists to catch-up if any timing issues occurred in previous sections.

Hold pause until  
hihats come in

**B** Hihats start - groove is set.

Figure 110. ItNS: Hi-hats start, section B

From the end of Section B leading into Section C, the instrumental parts become more rhythmic, adding to the increasing intensity and tension in the backing track.

Audio example 18. ItNS: Rhythm section



Figure 111. ItNS: Transition from section B to section C

Sections C and D continue to include more rhythmic elements from the acoustic instruments: the live drum kit part begins to be included with the programmed drum elements; and more layers of synthesized and sampled sound are included to increase the tension. The end of Section D marks the peak in the climactic shape, with building and repeated rhythmic ideas from all the acoustic instruments.

Figure 112. ItNS: End of section D

Audio example 19. *ItNS*: Climax section backing

Section E is the first truly contrasting element. The tempo has moved from a straight 140bpm to a half-time feel. The synth washes and other tension-building, sampled textures make way for strong low brass parts played by sampled trombones, French horns and tubas.

Audio example 20. ItNS: Half time backing, no drums

The programmed drum parts are much more spacious than in the previous sections, allowing more room for the live drum kit to become the focus. The drummer is instructed to play a solid rock-influenced groove with plenty of accent fills.

The acoustic instruments in Section E move from playing completely independent parts based on the harmonic field, into playing rhythmic and often pitched unison parts in a tonal system, essentially providing a counter melody to the strong brass pattern in the backing track.

The image shows a musical score for Section E, measures 197-205. The score is written for piano (left hand) and guitar (right hand). The key signature is one sharp (F#). The tempo is half-time. The score begins with a box labeled 'E' and the measure number 197. The piano part features a glissando (marked 'gliss.') and a forte dynamic (marked 'ff'). The guitar part features a glissando (marked 'gliss.') and a forte dynamic (marked 'ff'). The score continues with measures 201 and 205, showing complex rhythmic patterns and triplets (marked '3').

Figure 113. ItNS: Opening of section E



These elements continue, moving with the backing track from D minor for the first 16 bars, into G minor for the second 16 bars of the section. Throughout Section E, the backing track elements continue with the same forward momentum from the beginning of the section, until coming to a clear ending at bar 228, accented by drum hits on the first, second and third beats of bar 228.

The acoustic instruments begin to transition into the elements from Section F slightly earlier. Moving from the fast-paced rhythmic unison lines at the beginning of Section E, the instruments separate, playing individual lines based on the fast-paced material earlier in the section. Then the parts become calmer, beginning with the cello triplet pattern, and the viola descending into longer notes.

Figure 114. ItNS: Ending of section E

Section F is similar to the opening. The brass elements from Section E are extended out into a long held chord, and the synth wash pad from the opening re-emerges from the end of Section E. Over this the acoustic instruments continue to slow, tending to longer held notes towards the ending.



Figure 115. *ItNS: Section F*

### Reflections on Hybridity

Because *ItNS* is composed using an accretion process, the elements of hybridity may be difficult to perceive at first. The layers of cross-genre hybridity slowly develop then disappear throughout the course of the piece, ideally providing a perceptible hybridity. The actual source genres may express certain commonalities endowing the resulting hybrid music with a clear sense of cohesion between the parts.

Structurally this piece finds an acceptable balance in its hybridity. It moves away from the standard song form that persists in instrumental dance music. Electronic dance music is often structured around a ‘build and release’ pattern which this piece takes and elongates throughout, moving into a more classical music form where the musical ideas are developed over a longer time period.

This piece also deploys a unique ensemble of musicians which seems to be an essential element to the success of hybrid genre music. Flute, viola and cello paired with drum kit and electronics provide a broad range of timbres without any pre-existing repertoire for the composer to contend with. The various sounds and genres associated with them can be used with more freedom, allowing room for the exploration of hybrid music.

## Chapter Ten – *One Night, New Breath*

*One Night, New Breath* (hereafter, *ON,NB*) is a structured improvisation for taonga puoro, viola, drum kit and electronics.<sup>396</sup> The piece explores the hybridisation of taonga puoro music, contemporary Western European art music, jazz, electroacoustic soundscape, hip-hop, and ambient music. The idea of breath is central to the piece, and while the taonga puoro are the only instruments in the ensemble to use breath as a sound source, all the musicians involved have moments of breath between the gestures of performance, highlighting the conversational aspect of guided improvisation.

*ON,NB* was composed for a premiere performance at the University of Waikato Kingitanga Day.<sup>397</sup> The inclusion of taonga puoro in *ON,NB* relates specifically to the opportunity to perform with Dr. Richard Nunns;<sup>398</sup> and in turn, both the structure and scoring reflect his requirements.

### Instrumentation and Performance

The traditional Maori view is that:

all instruments are seen as individuals and so naturally have different voices, but these differences are kept within the boundaries of their family's origins. Innovation that crosses these boundaries is strongly discouraged as it could contravene the natural order of things as set down by the gods.<sup>399</sup>

As a player of taonga puoro, Richard Nunns, “is skilled in the execution of music on these instruments but also conversant with the relevant traditions and attached cultural values.”<sup>400</sup> Accordingly, he provided the necessary guidance and sensitivity in knowledge of performance practice and cultural awareness.

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<sup>396</sup> Electronics here refers to a combination of sound sources – synthesizers, iPad, turntables, ableton live, effects pedals and a range of pre-recorded sample snippets.

<sup>397</sup> Kingitanga Day is an opportunity to celebrate the University's distinctive identity, heritage and relationships. Various activities focus on the relationships with the Kingitanga and Maori communities, however the programme extends wider in order to embrace the University's cultural diversity and its various expressions of excellence across all areas. In 1858, the Kingitanga or Maori King Movement was established by the Maori tribes across the land. Its purpose was to put an end to Maori land alienation, to halt inter-tribal warfare and to preserve Mana Maori Motuhake, in effect to unite the people. (description adapted from the University of Waikato website: <<http://www.waikato.ac.nz/events/kingitanga/>>)

<sup>398</sup> Background information on Dr. Richard Nunns discussed in Chapter Four: *The Long White Cloud*.

<sup>399</sup> Flintoff, Brian. *Taonga Puoro: Singing Treasures*. Nelson: Craig Potton Publishing, 2004, p.16

<sup>400</sup> Lodge, Martin. ‘Analytical Notes on *Toru*’ in *Portfolio of Compositions*. PhD Thesis. University of Sydney, 2009. Print. p.102

From the various instruments played by taonga puoro musicians, the composer selected four for *ON,NB*:<sup>401</sup>

- pahu pounamu (jade gong)



*Figure 116. One Night, New Breath (ON,NB): Photograph of pahu pounamu*

- koauau (end-blown flute)



*Figure 117. ON,NB: Photograph of koauau*

- putorino (flute and trumpet)



*Figure 118. ON,NB: Photograph of putorino*

- putatara (conch shell trumpet – can also be played like a flute)



*Figure 119. ON,NB: Photograph of putatara*

*ON,NB* places traditional Maori instruments alongside Western instruments, chosen both for specific performers, and for the genre connotations associated

<sup>401</sup> Instrument pictures from Richard Nunns website: <<http://www.richardnunns.net.nz/a/instruments/>>

with each timbre: viola for contemporary art music; drums for jazz; electronics for electroacoustic/hip hop/electronica. These specific timbres play an important role in the hybridity of the music. All the performers have also had appropriate experience in the culture and performance of *taonga puoro*.<sup>402</sup>

Being a structured improvisation,<sup>403</sup> performers are given guidelines on motives to work with, timbres to explore, or a desired sound outcome; but within that framework, the individual voice of the performer is expected to be heard. Combining individual voices develops the conversational nature of *ON,NB* and guides its dramatic shape. The selection of each performer, their experience and musical voice is essential to realising the character of this piece.

## Precedents

The composer has an established working relationship with Richard Nunns on other collaborative improvised soundscapes such as: *Paaroretanga*,<sup>404</sup> *Ebb*,<sup>405</sup> *Nebula Puoro*,<sup>406</sup> *A New Communication*,<sup>407</sup> and *Tabula Chroma*<sup>408</sup> has provided the composer with an established personal tradition of composition and performance in this type of music. The composition of *ON,NB* differs from these previous works through the type of the compositional elements put in place prior to the performance of the work. Previous works relied more on a pre-performance discussion, a general concept, and a tradition of musical dialogue between the performers that guides the shape of the musical composition as it is performed. *ON,NB*, on the other hand, had its structure and sonic shape determined as a graphic score pre-performance.

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<sup>402</sup> Performers: Richard Nunns, *taonga puoro*; Adam Maha, viola (of Maori descent); Jeremy Hantler, drums (has studied the construction and performance of *taonga puoro*); Jeremy Mayall, electronics (previous performance practice with Richard Nunns and Horomona Horo)

<sup>403</sup> A structured improvisation is where there is some kind of guiding document (often a graphic score or musical sketch) A structured improvisation can take on many forms, but it generally means leaving predetermined aspects of both the performance and the piece up to the performers.

<sup>404</sup> *Paaroretanga* – for watering cans, found sounds, turntables and video (premiere performance by Richard Nunns and Jeremy Mayall at OKTA Contemporary Music Concert 2007)

<sup>405</sup> *Ebb* – for *taonga puoro*, found sounds, turntables, harmonica and effects (premiere performance by Richard Nunns and Jeremy Mayall at OKTA Contemporary Music Concert 2009)

<sup>406</sup> *Nebula Puoro* – for theremin, effects, *taonga puoro* (premiere performance by Richard Nunns and Jeremy Mayall at OKTA Contemporary Music Concert 2011)

<sup>407</sup> *A New Communication* – for 3 iPhones, light-table, *taonga puoro*, effects (premiere performance by Richard Nunns, Horomona Horo, Daniel Peters and Jeremy Mayall at OKTA Contemporary Music Concert 2011)

<sup>408</sup> *Tabula Chroma* – for light-table, turntables, synth, theremin, effects, *taonga puoro* (premiere performance by Richard Nunns, Daniel Peters and Jeremy Mayall at OKTA Contemporary Music Concert 2010)

The other precedent for this composition is *Toru* for taonga puoro, clarinet and cello by Martin Lodge,<sup>409</sup> which inspired elements of notation and instrumentation. Not only did Lodge's composition exemplify similarly combined elements, but also improvised-music-as-composition in an academic setting.

### **Genre and Hybridity**

*ON,NB* draws on the acclaimed taonga puoro performance practice of Richard Nunns; contemporary art music; jazz; electroacoustic soundscape; hip-hop; and ambient music. Because this piece was composed before the hybridity table was devised, genre hybridity was devised intuitively. As a structured improvisation *ON,NB* draws on the genre-informed performance techniques of the selected performers who are expected to perform with a clear awareness of the techniques and traditions associated with their source genre. They must also be open-minded towards synthesis, listening to each other in the context of improvised performance.

While the genre focus of this portfolio is specifically Western European, the composer felt it necessary to make an exception for Maori music given its indigenous status. To a New Zealand composer and performer, the sounds of taonga puoro are familiar and are therefore part of the sonic landscape. This familiarity provides a sense of location in the piece, reinforced by the recording of the indigenous ruru.<sup>410</sup>

### **Composition Process**

As *ON,NB* is a structured improvisation it is developed through performance, and relies for its essential musicality on the performers' interpretations of the composer's graphically notated sketches of dramatic shape and texture, built around a suggested flow.

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<sup>409</sup> Lodge, Martin. 'Toru' in *Portfolio of Compositions*. PhD Thesis. University of Sydney, 2009. Print.

<sup>410</sup> The ruru (morepork) (*Ninox novaeseelandiae*) is New Zealand's only surviving native owl. Often heard in the forest at dusk and throughout the night, the ruru is known for its haunting, melancholic call.

The title of this piece guided the structure and selection of sounds, particularly the inclusion of the recording of a ruru. *ONNB* is not explicitly programmatic, but it reflects the composer's interest in the life and breath of the New Zealand nocturnal sound world. Time spent late at night engaging with this sound world provided an appropriate, suggestive and dramatic approach to the composition.

The process began with the creation and selection of pre-recorded samples: either musical snippets performed by the composer, samples of previous performances of taonga puoro played by Richard Nunns, or snippets of location recordings of natural sounds. Combining the sound worlds of both studio and environment is an established New Zealand tradition, particularly as expressed by Douglas Lilburn; his *Soundscape with Lake and River* (1979) is a notable example.

The difference between this piece and a purely studio-based electroacoustic composition is that the found-sounds are played as an instrument. *ONNB* is not pre-constructed; every sound element is unique to that performance and must be controlled live. The sonic material is manipulated and physically controlled by a performer, similar to the way a violist controls sound. Pitch and rhythm can be adjusted in real-time and subtly controlled by the performer, even though the timbral elements are predetermined. In this situation the composer/producer is also the performer so the distinction between roles becomes even more blurred.

## Notation

After working through the sound design elements of this piece, it was necessary to determine how best to guide the structure and shape of the improvised elements. The first step was guided by the performance traditions of taonga puoro, which are

improvised within certain guidelines and culturally determined expectations according to the occasion of a given performance. There has never been a specifically musical system of notation for it – there still is not. The Western system of staves at first might seem convenient for notating Maori music but in fact conceals more than it reveals, particularly the fluid rhythmic and microtonal character of most playing.<sup>411</sup>

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<sup>411</sup> Lodge (2009), p.105

After careful consideration of the selected instruments, and the desired sound world for the composition, a graphic score seemed the most appropriate guide to performers, in combination with elements of traditional Western European notation.

The graphic score provides a concise description of the improvisational structure intended by the composer, while allowing the taonga puoro performer to observe traditional Maori performance practices specific to these instruments and their cultural context. Just as the use of the graphic score made sense for the taonga puoro player, it was similarly appropriate for the electronics/found-sound player, whose musical material was pre-determined in the selection of specific samples, and the graphic score element links directly to the tradition of graphic scores for electroacoustic music. But this method of scoring had implications for the viola and drum kit: the broad base of these instrumental traditions meant there is no specifically genre-based performance technique. To best guide the performers of these instruments the system of notation was designed to align viola and drum kit parts with the sound world and musical aesthetic of the taonga puoro, and provide elements of traditional notation as a guideline towards appropriate gestures in any given section. These traditional scoring elements warped, expressing the general shape and feel of the desired lines, and providing the clearest guidelines for the parts, still allow room for the inherent spirit of improvisation. Again, selection of performers is paramount: experienced, open-minded performers, willing to engage in the art of improvisation, are essential.

In a graphic score, bar lines are inappropriate timing guidelines so ensuring structural organisation without inhibiting the improvisatory creativity of the performers' required resolution. The most effective response is a timeline, where each section is graphed against the intended time scale. This timescale was intended to be flexible, suggesting time more in ratios than in specific minutes and seconds. This sectional timeline enabled separation of "the macrostructure of the piece – which is the business of the composer – from the microstructure – which is the province of the players."<sup>412</sup>

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<sup>412</sup> Lodge (2009), p.106



### **Concept and Aesthetic**

*ON,NB* is, at its core, grounded in traditional Maori improvised performance practice, a practice also clearly expressed in jazz music. These two traditions of improvisation are then hybridised into a structured improvisational soundscape combining taonga puoro, Western European instruments, and environmental sampling.

The composition and performance of *ON,NB* is a clear example of genre-informed performance that is critical to hybrid music. The genre traditions of respective performers and instruments are expected to contribute to the hybrid nature of the piece. The combination of timbres and genre practices in this unique ensemble helps consolidate the hybridity.

While aspects of the New Zealand lifestyle, especially landscape and natural soundscape, are referenced in a number of works in this portfolio, *ON,NB* has the most resolutely New Zealand sound. Much of this national identity is expressed in taonga puoro, but the inclusion of these instruments and timbres is not intended to be mere exotic decoration in a soundscape piece. The aesthetic aim, as it is in all the hybrid genre music in this portfolio, is to bring the various genre worlds together as equals. This piece, and the selected genre worlds, is closely linked to the composer's time and place in twenty-first century New Zealand.

In a piece such as *ON,NB* where there is strong reliance on improvisation for its musical material, the role of the composer alters; he is removed from the traditional position, where every element is precisely controlled and determined, well before the performance takes place. The performers themselves become part of the compositional process. Although guided towards a unified outcome as a consequence of macrostructural elements set in place by the composer, each performance will be remarkably varied, even when performed by the same musicians. In the performance recording of this piece included in the portfolio, the composer is also a performer and so the structure and performance of the piece can also be guided from within where the composer as performer makes musical decisions.

## Structure

The diagrammatic score for this piece is deliberately created in a simplistic manner, providing a visual representation where the macrostructure of the work is clear but the players are given appropriate freedom to improvise the detailed content of their parts effectively.

	Section A	Section B	Section C	Section D	Section E
Time on score	0:00 – 1:30	1:30 – 4:00	4:00 – 6:00	6:00 -7:00	7:00 – 9:00
Time in performance	0:00 – 2:22	2:22 – 4:52	4:52 – 7:16	7:16 – 9:00	9:00 – 10:40
General Dynamic	p	mp - mf	f	mp	p
Description	Lots of space.	Becoming fuller	Dense and strong	Rhythmic and sparse	Free and spacious. Combining elements from previous sections.
Layers of sound	Pahu, jade gong sample on turntable, viola repeated notes, cymbals and floor tom, ruru recording.	Piano sample, koauau, water recording, viola melodic figures, toms.	Putorino, turntable jade gong sample, full drum kit, viola harmonics, low synth bass, wind, putatara	Rims of drums, rhythmic viola fragments, pahu, and piano sample	Pahu, low bass, viola melodic figures, ruru recording, toms, slide viola, cymbal swells, turntable gong sample.
Transition	Pahu	Low sliding viola and cymbal swell	Low synth bass, putatara	Jade gong and piano	End.

Table 38. One Night, New Breath (ON,NB): *Structural plan*

## Analysis

Sections A and E are directly related, particularly through the ruru sample and pahu (jade gong). These sounds create timbral motifs that bookend the piece and help to provide a sense of shape and structure related to those in contemporary classical music.

Section A begins sparsely with a dialogue between the pahu and a sample of that same instrument manipulated by the turntable. The use of similar timbres creates a sense of ambiguity between acoustic and manipulated elements. As this timbral dialogue continues the viola and drums improvise on rhythmic gestures.

with delay effects

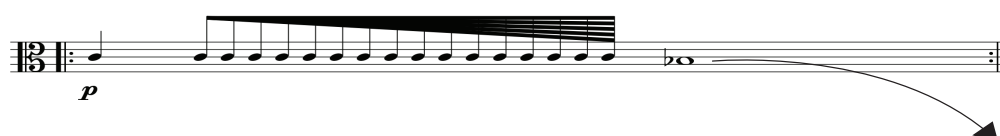


Figure 120. ON,NB: *Opening rhythmic gesture on viola*

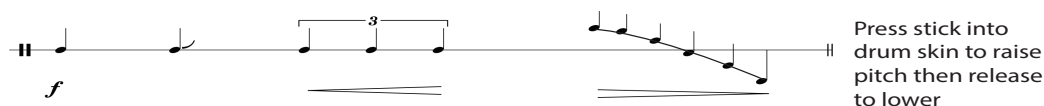


Figure 121. ON,NB: Opening rhythmic gesture on drums

In Section B the musical material becomes more melodic. The viola improvises on two melodic figures designed to be used interchangeably throughout the section.

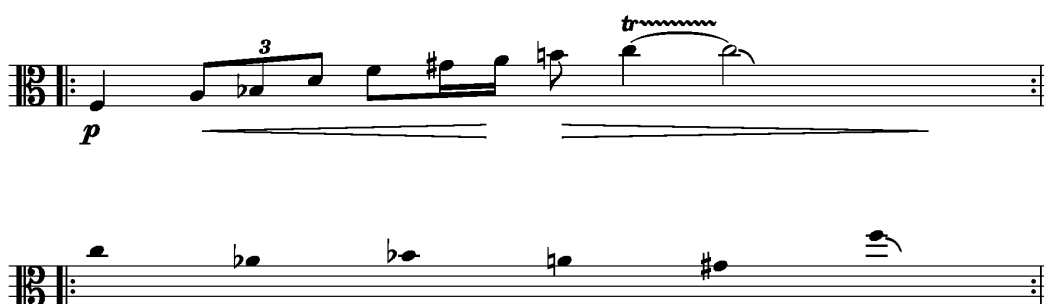


Figure 122. ON,NB: Melodic figures for viola, section B

This melodic figure is paired with melodic improvisation on the koauau (flute) together with a piano sample on turntables, and more rhythmic work on drums, based on the material from Section A. The end of section B is marked by a slow glissando figure on viola sliding around a sketched melodic contour.



Play section 3 only once. Take a lot of time here sliding with the sketched melodic counter. Play with the wood of the bow.

Figure 123. ON,NB: Slow extended glissando on viola

Section C contains the climactic point of the piece. The taonga puoro performer moves to the putatara (shell trumpet) and putorino (trumpet/flute) throughout the section – both capable of creating flute-like and trumpet-like sounds. As the arrangement intensifies, the performer shifts the sound to the more incessant

trumpet-like tones, increasing tension. The viola and drums continue to develop rhythmic elements; viola exploring extreme harmonics with added delay and distortion effects. The electronics part moves from sample-based manipulation into a monophonic analog synthesizer bass part. The timbre of this instrument changes throughout the section through the use of oscillator modulation and filter sweeps becoming more brash and abrasive throughout the section.

Section D begins with the drummer moving from a standard style of drumming to playing solely on the metal rim of each drum. This timbral change to a higher pitched, metallic and wooden sound provides relief from the density of Section C and is echoed by rhythmic, percussive elements from the viola playing both on the body of the instrument, and with the wood of the bow. The taonga puoro and electronics appear to transition directly from Section C into Section E, essentially bypassing the sparse rhythmic quality of Section D.

Section E returns to many of the elements introduced in Section A. The ruru and pahu sounds link the two sections together, along with the rhythmic gestures played by the viola and drums. The sense of variation in this section is achieved through the continuation of the piano sample from the end of section D, and the reintroduction of the low synth bass sound from Section C. The piece steadily declines in density and intensity from the end of Section C.

### **Reflections on Hybridity**

*ON,NB* is an innovative chamber work that brings together the divergent musical traditions of Maori music, Western European chamber music, jazz and electroacoustic soundscape. As with all hybrid genre music explored in this portfolio, care is taken to respect and utilise the performance traditions and cultural values of all genres, ideally acquiring a balance without compromise. These works rely on performers who are not only well-informed in their own musical traditions, but open-minded and accommodating in their approach to the hybrid music. *ON,NB* also relies on performers who are gifted in the sensitive art of improvisation which relies as much on listening and engaging with other performers as it does on playing.

One of the key issues revealed in the composition of *ON,NB* pertains to the pre-compositional phase. In creating new hybrid genre music the goal is to compose music which establishes an equal balance across the source genres. It is possible when composing intuitively, without set guidelines, for the overall balance of hybridity to become murky. Following the composition and performance of this piece, it became apparent that in order to balance the hybrid genres it is necessary to approach each composition systematically. This realisation lead to the development of a matrix system organised by genre elements, the hybridity table, created in an attempt to be balanced and reflective about blending diverse musical elements in compositions. The experience of composing *ON,NB* demonstrated that having an objective plan provided essential, external, clarity of thinking to balance the intuitive creative processes that were already being employed.

## Chapter Eleven – *Sketches of an Intergalactic Earworm*

*Sketches of an Intergalactic Earworm* (hereafter, *SoaIE*) is a suite in seven movements for piano trio and boombox. This piece hybridises the traditions of twentieth century piano trio chamber music, with funk, jazz fusion and minimalism. In performance the boombox forms part of the ensemble, and is positioned on stage, ideally where all performers can hear the speakers for timing purposes. The boombox part guides the tempo of each movement, containing a range of pre-programmed drum parts and vocal samples.

The composition of *SoaIE* followed a conversation with James Tennant regarding a New Zealand Chamber Soloists<sup>413</sup> commission for a multimedia piece, uncomplicated in set-up and diffusion, for ease of touring. The decision to include a boombox on stage was three-fold:

1. met the needs for consistent diffusion of sound and flexibility for touring performances
2. provided visual links to hip hop music, drawing directly on a key reference point – funk music influence
3. precedents with boombox in performance, including works by Jacob TV<sup>414</sup>

In the final presentation of *SoaIE*, the performers were filmed from multiple angles for a video version, thus moving standard live performance video into a realm where performance video meets music video and experimental film. The video follows the shape of the piece, where video effects and layering techniques reflect the performance journey and the palindromic nature of its structure. The video also takes inspiration from the “utopian imagery and surrealistic humour”<sup>415</sup> in the album art of Parliament/Funkadelic.

### Background

The approach for the composition of *SoaIE* follows the aims and methodology of hybrid music composition developed throughout the portfolio. Additionally, funk was specifically identified as a significant focal point for its rhythm and general

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<sup>413</sup> The NZ Chamber Soloists are a piano trio: James Tennant on cello, Katherine Austin on piano and Lara Hall on violin.

<sup>414</sup> Boombox pieces by Jacob TV include: *Billie*, *The Body of Your Dreams*, and *Pimpin’*

<sup>415</sup> Danielsen, Anne. *Presence and Pleasure: The Funk Grooves of James Brown and Parliament*. Connecticut: Wesleyan University Press, 2006, p.114

aesthetic. Funk music is percussive, polyrhythmic, syncopated dance music with minimal melody and often-static harmony. Its focus on rhythm dictates the key element that is groove and its manner of performance: “the musical qualities in funk are deeply embedded in performance, in the fact that a certain performer plays an actual groove in a way that makes it groove”.<sup>416</sup> In funk, all instruments are treated as percussive elements

forming small but significant rhythmic gestures that are linked in every direction. The groove has become an intricate fabric of sharp percussive sounds in which one sound brings on the next.<sup>417</sup>

Funk music is almost exclusively in 4/4 time, but the rhythmic pulse is not always consistent. Performers move around the beat, changing the pulse as part of the groove in individual songs, creating “a stable, repetitive framework ... for the tiniest variations to emerge.”<sup>418</sup> Through these variations, funk expresses fluctuating cross-rhythms, not necessarily as separate parts; the groove should appear as a single rhythm.

The point is not to combine a basic rhythm with the ‘right’ portion of independent counter-rhythm but to ‘deform’ those figures so as to make them both one and the other, both rhythm and counter-rhythm at the same time.<sup>419</sup>

This is where the importance of genre-informed performance comes into play.

Dealing with minimal differences and seemingly insignificant nuances, the funk player concentrates on giving her rhythmic figures exactly the right shape in time and space.<sup>420</sup>

Funk music significantly emphasises the ‘One’, the first beat of the groove. Sometimes this downbeat is played in anticipation, but the focus of the rhythmic elements is always on the ‘One’, regardless of where it is actually placed.<sup>421</sup> It is “continuously deep and heavy all the way, from its sharp attack far beyond any metrical limits”.<sup>422</sup> But it is not simply the idea of the ‘One’ and any counter-rhythmic metric syncopation that creates the funk groove.

A groove needs exactly the right combination of heaviness and forwardness, of the down-low and the up-tight, to move the body in a manner typical of funk. Both are necessary: the One – starting

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<sup>416</sup> *ibid.* p.17

<sup>417</sup> *ibid.* p.40

<sup>418</sup> *ibid.* p.56

<sup>419</sup> *ibid.* p.71

<sup>420</sup> *ibid.* p.72

<sup>421</sup> *ibid.* p.85

<sup>422</sup> *ibid.* p.139

with the early attack and swelling out in suspension before being ended, or closed off, very sharply – as well as some syncopated small notes to push one's body forward, hitting just enough across the expected, keeping the body in (dis)interested, relaxed motion on the way to the next One.<sup>423</sup>

Western European art music can be described as a teleological process: "The music seems to form large-scale curves of tension, often building up to a climax before reaching a conclusion that is felt to be well prepared and quite natural."<sup>424</sup> But this is not the only way of shaping musical time. Funk music moves away from the goal-directedness and expectation-guided structure of this process into a non-linear system of musical time. The groove is of potentially infinite duration, and so the elements become repetitive statements that occur without structural guidance, and may slowly change through the manipulation of the rhythmic elements. It is a music built upon a "structural ambivalence of their gestures".<sup>425</sup>

### Genre and Hybridity

*SoaIE* fuses the genre traditions of twentieth century chamber music, funk, minimalism, and jazz-fusion. It is influenced by the work and recordings of George Clinton & Parliament/Funkadelic,<sup>426</sup> James Brown,<sup>427</sup> Herbie Hancock,<sup>428</sup> Jacob TV,<sup>429</sup> Afrika Bambaataa,<sup>430</sup> and, Tower of Power.<sup>431</sup>

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<sup>423</sup> *ibid.* p.139

<sup>424</sup> *ibid.* p.150

<sup>425</sup> *ibid.* p.172 (This idea is discussed in depth throughout Danielsen (chapter 8) pp.150-171)

<sup>426</sup> George Clinton is an American singer, songwriter, bandleader, and music producer and one of the foremost innovators in funk music. His iconic bands are Parliament and Funkadelic.

<sup>427</sup> James Brown was an American recording artist and musician. One of the founding fathers of funk music and a major figure of 20th-century popular music and dance, he is often referred to as "The Godfather of Soul".

<sup>428</sup> Herbie Hancock is an American pianist, keyboardist, bandleader and composer. As part of Miles Davis's Second Great Quintet, Hancock helped to redefine the role of a jazz rhythm section. He was one of the first jazz musicians to embrace music synthesizers and funk music.

<sup>429</sup> Jacob TV (Jacob ter Veldhuis) is a Dutch avant-garde classical composer. TV favors tonal, melodic compositions, often built around samples of the human voice.

<sup>430</sup> Afrika Bambaataa (Kevin Donovan) is an American DJ and one of the originators of breakbeat DJing. He released a series of genre-defining electro tracks in the 1980s that influenced the development of hip hop culture. He is respectfully known as "The Godfather" and "Amen Ra of Hip Hop Kulture".

<sup>431</sup> Tower of Power is an American R&B-based band that have been performing since 1968. They are best known for their funky soul sound, highlighted by a powerful horn section, and precisely syncopated bass guitar lines.



## Hybridity Table

	Source Genres and their individual elements				Genre elements for use in Composition		
	Western Art Music	Funk	Twentieth Century Music	Jazz	Hybrid Genre		
Meta Genre	Minimalism	Funk	Chamber Music	Fusion	Juxtaposed elements	Synthesised elements	Other use of elements
Sub Genre	Meticulous scoring - strictly controlled.	Short form, groove-based with performer controlled variations.	Meticulous scoring - strictly controlled.	'Head' sheet with improvisations. Loop elements.			Scored composition. With pre-recorded backing track elements.
Construction							
Form	Usually long forms	Built on extremely short forms, but can be extended indefinitely in performance.	Both short and long forms. Carefully controlled.	Short forms – that are developed (and expanded) in performance – almost loop based		Long form – built from multiple short movements.	
Tempo	Closely specified	Usually consistent. Very rhythmic.	Closely specified	Free but rhythmic. Trance-like.		Strictly controlled tempo constructed in studio to coincide with pre-recorded backing track.	
Freedom	Limited	Freely manipulated within the groove context.	Limited	Freely improvised within genre constraints			Limited freedom. Traditional notation and backing track.
Complexity	Can be layered and but often built on simple repetitive fragments	Extremely nuanced. Rhythmically complex through layered syncopation.	Can be layered and complex	Varies, but often complex and nuanced in performance		Moderate complexity, with groove-based nuance.	
Harmony	Often-tonal harmonic progressions. Sometimes drone based.	Often-static harmony. Drone-like.	Strong, complex controlled harmonic progressions	'Colour' chords. Simple structures. Drone based.		Minimal and restrained harmonic movement.	
Sonic design / timbre	Using acoustic instruments + synthesisers	Acoustic and electric instruments. All instruments used percussively.	Using acoustic Instruments	Acoustic and electric instruments		Acoustic instruments with boombox.	
Use of Technology / Notation	Traditional score / sometimes with studio construction	Aural tradition. Improvisation. Live use of audio effects.	Traditional score	Head sheet. Improvisation. Aural tradition. Use of effects.		Notated score with backing track.	
Rhythm	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Based on simple steady pulse, but can be rhythmically dense through cross-rhythm syncopation	Strict rhythmic control - can be rhythmically dense (poly-rhythms etc)	Rhythm fluidity in melody but strict in accompaniment. (Rock/latin/funk influence)		Carefully controlled rhythmic variation. Elements of groove-based syncopation and variation notated in the score.	
External References	Absolute or programme	Absolute or programme. Often with simple repeated lyrics.	Absolute or programme	Absolute or programme		Not explicitly programmatic, but based on an overarching concept. Based on psychedelic and intergalactic ideas found in funk. Some lyrical elements.	
Gesture	Gestural range restricted to instrumental techniques - Repetitive	Gestural range restricted to instrumental techniques. Repetitive with internal variation.	Gestural range restricted to instrumental techniques.	Gestural range restricted to instrumental techniques.	Gestural range based on acoustic instruments with some extended techniques, and sound elements provided in backing track.		
Purpose / location	Formal - concert	Bar, club, recording.	Formal - concert	Bar, club, recording			Concert hall
Thematic Material	Balanced and shaped, especially using development techniques	Repetitive groove with instrumental flourishes and breaks.	Balanced and shaped, especially using development techniques	Repetitive 'head' with improvised solos.		Repetitive themes and elements with some use of extended development techniques. Quite sectional.	
Dynamic	Large range	Large range	Large range	Large range			Full range
Pitch	Specific methods of pitch organisation – often tonal	Tonal or Modal with chromatic inflections.	Specific methods of pitch organisation eg. clusters, harmonic field etc.	Tonal or Modal with chromatic inflections		Tonal/Modal – with some chromatic inflections and sound based elements.	
Ensemble	Extremely varied.	Bass, drums, guitar, trumpet, trombone, saxophone, keyboards, vocals.	Extremely varied.	Trumpet, saxophone, keyboards, piano, bass, guitar, drums.			Piano Trio and boom box.

Table 39. Sketches of an Intergalactic Earworm (SoaIE): *Hybridity table*

## Composition Process

The early stages of composition for *SoaIE* addressed its structure: how to build non-linear ideas, and how to best approach the funk groove in a contemporary classical setting and ensemble. It was determined that a series of short sketches would best suit these groove elements. The individual sketches would allow for each new groove to be expressed as intended, but the short form grooves could be presented in a larger form through the use of a multi-movement macro structure.

The macrostructure was developed into a palindromic arch form leading to the central point in Movement Four, then reversing the journey to the end. The qualities of the palindrome are not in phrase length, melodic shape or time, but in sonic design, genre focus and groove. Movements One and Seven are polyrhythmic, with furious drum parts, jagged melodic themes, specifically influenced by the work of James Brown. Movements Two and Six are more minimalist, solidly rhythmic, and utilise vocal quotations from the work of Afrika Bambaataa and George Clinton. Movements Three and Five have a stronger Latin/Cuban jazz fusion influenced feel providing the sense of travel and journey in the piece. The central point, Movement Four, features original poetry<sup>432</sup> written for the piece by screenwriter Scott Granville. It draws on the slightly militant-meets-utopian imagery and sound world found in the recordings and live performances of the band Funkadelic.

After developing the macrostructure the compositional elements focused on the grooves. The internal repetitive elements were composed and refined, then the piece developed and built on these grooves. Crafting the notation was complicated because some of the genre-informed performance rhythmic inflections needed to be included in the notated part to provide the sense of groove the piece required from performers more accustomed to the strict performance traditions of contemporary classical music. The composition process involved considerable time writing lines, performing them as a funk musician, then re-notating those parts to capture the groove, in as much as it is possible to capture those elements and maintain clarity in the notated score.

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<sup>432</sup> Poetry inspired by both the traditions of: beat poetry from the 1940s by Allen Ginsberg and William S. Burroughs; and spoken-word poetry of the 1970s by Gil Scott-Heron. This is also combined with the monologues of George Clinton in the Parliament/Funkadelic recordings.

The funk groove is, in essence, a physical thing. The performer must be at least familiar with funk music in order to feel the groove. This physicality creates difficulties in analysing and notating a groove which will always be more than can be specified in the notation. The tools are insufficient to effectively describe all the elements; if the score completely annotated all the subtle rhythmic nuances, it would quickly become unintelligible. The funk groove is also

probably deeply dependent on the quality Adorno calls *die Kategorie des Einfalls*, the quality of hitting at something special, something unmistakable. One has to find a particular matter and cultivate it to its optimal shape.<sup>433</sup>

### Concept and Aesthetic

Aesthetically, this piece aims to introduce the feel and atmosphere of funk music to the concert hall, moving the musical elements away from structural and harmonic focuses, into a rhythmic focus based on groove. The title, *SoaIE*, was inspired by the sci-fi imagery found in the 1970s psychedelic funk of the band Parliament (later also known as Funkadelic and P-Funk), particularly such albums as *Mothership Connection* and *The Clones of Dr. Funkenstein*.<sup>434</sup>



Figure 124. Album covers for 'Mothership Connection' and 'The Clones of Dr. Funkenstein' by Parliament

This sci-fi imagery flows through much of Parliament's recorded work and stage shows. Conceptually, the works tell the story of 'Starchild', a divine alien being who comes to earth from a spaceship to bring the holy Funk, the source of energy and all life, back to humanity. The ongoing P-Funk mythology created by George

<sup>433</sup> Danielsen (2006), p.140

<sup>434</sup> Parliament, *Mothership Connection*. Casablanca, 1975;  
Parliament, *The Clones of Dr. Funkenstein*. Casablanca, 1976

Clinton can be traced through the albums and stories. *SoaIE* draws on some of these ideas, and some of the conceptual elements behind the piece are apparent in the video presentation.

‘Groove’ and ‘feeling’ are the other key aesthetic elements in both the compositional approach, and performance of this piece.

In this musical context, feeling has nothing to do with an extrovert style of performance or with expressing actual innermost feelings. It is about cultivating the right swaying motion; about accurate timing; about being in place, in time; about precision and relaxation at once. Playing all the correct figures means nothing unless it is carried through in the right way. If this is not achieved the whole ‘body and soul’ of funk immediately collapses.<sup>435</sup>

The funk music feel proved to be an essential characteristic and aesthetic consideration for this piece, where the music aims to both appeal on an intellectual and emotional level, and also affect the audience on a physical level. The music should ideally make you want to move, or at least sway a little in your seat or bob your head. Funk music provided a flexible means to combine intellectual art music with physical dance music. Quite simply, “Funk is whatever it needs to be, at the time that it is.”<sup>436</sup>

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<sup>435</sup> Danielsen (2006), p.198

<sup>436</sup> George Clinton, as quoted in: Danielsen (2006), p.204

## Structure

As previously stated, *SoaIE* is in seven separate movements:

	Movement 1	Movement 2	Movement 3	Movement 4	Movement 5	Movement 6	Movement 7
Subtitle	Take ‘em to the bridge	MnmlFnk	Lonely cruise down afro highway	Searching for the promised land	Rockmelon drive	Directly from the mothership	Until the cape man appears
Tempo (bpm)	140bpm	80bpm	110bpm	90bpm	105bpm	105bpm	105bpm
Tempo (feel)	Fast	Relaxed	With motion	Strict and moderate	With motion	Relaxed	Fast
Length (bars)	119	42	39	77	63	27	22
Length (time)	3:33	2:08	1:28	3:32	2:25	1:02	0:49
Groove genre elements	Funk – James Brown	Electro-funk – Afrika Bambaataa	Funk jazz fusion – Herbie Hancock	Psychedelic funk – Parliament/Funkadelic	Funk jazz fusion – Herbie Hancock	Electro-funk – George Clinton	Funk – James Brown
Backing Track Elements	Full drum kit	Cowbell, synth pad + effects	Full drum kit + cowbell	Snare drum, synths, effects	Full drum kit + cowbell	Full drum kit	Full drum kit and horn swells
Vocal Elements	Vocal stabs, and direction fragments like James Brown	Vocal elements from “Planet Rock”	None	Beat poetry written by Scott Granville	None	Vocal elements from “P-Funk (wants to get funky up)”	Vocal grunts

Table 40. *SoaIE*: Macro structural plan

Each movement is its own musical vignette: the fictitious explorations of an intergalactic funk earworm, being both an alien-like creature, and the ability of catchy melodic fragments to stick in one’s mind.

## Analysis

Movement One, *Take ‘em to the bridge*, begins with a voice part, stylistically influenced by the call-and-response vocal parts often used by James Brown on recordings and in live performance. This vocal section should create a sense of interaction between a band leader/vocalist and his band. The trio is encouraged to join in on the ‘YEAH!’s’ and ‘GO AHEAD’:

*Well, ahh, I'm about ready to get up and do my thing...*  
*I wanna get into it* - YEAH!  
*Turn around* - YEAH!  
*Shake it out* - YEAH!  
*Well.... can I count it off??* - GO AHEAD!  
*1, 2, 3, 4*

This count-in sets the tempo for the movement, and provides the trio an easily identifiable starting point in the backing track. From then, the tempo is constant.

Following the vocal parts, the trio plays a rhythmic gesture in unison before the vocal sample instructs the performers and the groove to begin:

*'Come On! 1, 2, 3, Groove!'*

2 **Punchy and precise**

The musical score is written for Piano (Pno.), Violin (Vln.), and Cello (Vc.), with a Tape track at the bottom. The Piano part begins with a 'Punchy and precise' instruction. The Violin and Cello parts follow with 'sfz' and 'fff' dynamics. The Tape track includes drum hits and vocal samples: 'Hit me', 'Do It Again', and 'Come on 1, 2, 3, groove!'.

Figure 125. Sketches of an Intergalactic Earworm (SoaIE): *Opening rhythmic flourish*

Then the groove is introduced; the piano plays a repeated chordal figure, while the violin and cello play the melodic fragments in harmony.

7 **Groove. Funky groove.**

The musical score for measures 7-10 shows a piano (Pno.) part with a steady eighth-note bass line and chords. The violin (Vln.) and cello (Vc.) parts play a melodic line with eighth-note patterns. The tape part shows a drum pattern with a consistent groove. The key signature has one flat (B-flat), and the time signature is 4/4.

11

The musical score for measures 11-14 continues the groove. The piano part maintains the eighth-note bass line. The violin and cello parts continue their melodic variations. The tape part shows a drum pattern with a consistent groove. The key signature has one flat (B-flat), and the time signature is 4/4.

HUH!

Figure 126. SoaIE: Main groove, movement one

From this point, the groove remains relatively consistent throughout the section, except for some rhythmic displacement. The violin and cello continue to play variations on the main melodic idea.

15

The musical score for measures 15-18 shows a piano (Pno.) part with a steady eighth-note bass line and chords. The violin (Vln.) and cello (Vc.) parts play a melodic line with eighth-note patterns. The tape part shows a drum pattern with a consistent groove. The key signature has one flat (B-flat), and the time signature is 4/4.

Figure 127. SoaIE: Rhythmic displacement of the groove, movement one

At the end of this opening groove section, the first rhythmic turn-around phrase, marking transitional moments, is introduced.

27 **Relentlessly**

Pno.

Vln.

Vc.

Tape

30

It is time for us YEAH! to take it on down now

*Figure 128. SoaIE: First turn-around phrase, movement one*

Following the transitional phrase the groove is adapted, becoming more minimalist in the piano part. The violin and cello lines change from short percussive rhythmic fragments to a more extended melodic line. This provides a variation from the heavy funk influence of the earlier sections, and allows for an expansion of the main thematic elements.



32 With a powerful lightness

Pno. *mp*

Vln.

Vc. *mf*

Tape drums

36

Pno.

Vln.

Vc.

Tape

41

Pno.

Vln.

Vc.

Tape (drums) YEAH!

Figure 129. SoaIE: Extended melodic lines and minimalism, movement one

Directly following this minimalist section, the piece moves back to the opening groove. The piano part remains the same from the first version of the groove, but the cello part changes to a counter-rhythmic pedal.



*Figure 130. SoaIE: Counter-rhythmic cello part, movement one*

The violin becomes the soloist, playing the main melodic line which is rhythmically driven, and ascends chromatically throughout the section. This solo part is inspired by saxophonist Maceo Parker's<sup>437</sup> improvised solo on 'Shake Everything You've Got' from the *Life on Planet Groove*<sup>438</sup> album.

56 **Strong Funky groove.**

60

64

68

72

*Figure 131. SoaIE: Rhythmic violin solo, movement one*

*Figure 131. SoaIE: Rhythmic violin solo, movement one*

At the end of the solo, a variation of the turnaround phrase is introduced, serving as a transitional moment into the bridge which, in funk music, provides a marked

<sup>437</sup> Maceo Parker is an American funk and soul jazz saxophonist, best known for his work with James Brown in the 1960s, as well as Parliament-Funkadelic in the 1970s.

<sup>438</sup> Maceo Parker. *Life on Planet Groove*. Minor Music, 1992

moment of difference from the rest of the groove, often both rhythmically and harmonically. The bridge in Movement One aims to achieve both. The trio plays in rhythmic unison, accompanied by hits on the drums. In the breaks within the main rhythm of this section, the drum part plays various fills to add to the drum-centric feel of most funk breaks.

79 **Extremely short**

Pno. *p*

Vln. *pizz.* *p*

Vc. *pizz.* *p*

Tape

85

Pno. *ff*

Vln. *arco* *ff*

Vc. *arco* *ff*

Tape (drum fill) *Back to the one time*

Figure 132. SoaIE: Bridge section, movement one

The remainder of Movement One explores variations on these main thematic elements, ending with a variation on the bridge material.

The musical material in Movement Two, *MnmlFnk*, moves away from straight funk grooves into more minimalist elements. The pianist plays a single-handed part, centred on A. This part performs in rhythmic interplay with the cowbell rhythm on the backing track. The rhythmic pulse, and vocal sample elements, are inspired by the track ‘Planet Rock’ by Afrika Bambaataa and the Soulsonic Force, a 1980s electro hip hop group.

121 **Mechanically smooth**

123 *p*

125

127 *mf* *pp*

Figure 133. SoaIE: Piano part, movement two

Against this rhythmic pulse, the violin and cello play a combination of chordal swells ...

122

Vln. *ppp* *mf*

Vc. *ppp* *mf* *p* *mf*

Figure 134. SoaIE: Chordal swells, movement two

... and rhythmic flourishes.

129

Vln. *f*

Vc. *f*

Figure 135. SoaIE: Rhythmic flourishes, movement two

*“Rock It. Don’t Stop It. Let your soul lead the way.”<sup>439</sup>*

142

Vln.

Vc.

*ppp* *mf* *p* *mf*

*ppp* *mf* *pp* *f* *p*

gliss.

147

Vln.

Vc.

*ppp* *mf* *pp* *f*

pizz.

*pp*

Movement Three, *Lonely Cruise down Afro Highway*, is the first of the latin/jazz/fusion influenced movements, inspired by such Herbie Hancock tunes as ‘Watermelon Man’,<sup>440</sup> and ‘Cantaloupe Island’;<sup>441</sup> the piano parts reflect the grooves and repetitive patterns of these tunes. The groove of Movement Three is created through interplay between piano and cello. The pianist plays a rising bass figure ending in a chord, against which the cello plays a bouncing, rhythmic, scalar loop.

<sup>441</sup> Herbie Hancock, 'Cantaloupe Island' on *Empyrean Isles*. Blue Note. 1964. CD

167

Pno.

Vc.

*mf*

170

Pno.

Vc.

V.S.

*Figure 137. SoaIE: Main groove, movement three*

The structure of this movement is quite simple: the groove loops around for 16 bars, is followed by a five-bar bridge section; then the groove resumes for the final 17 bars with a few subtle rhythmic variations. Against this pattern the violin plays a long slow-moving melodic line throughout. As for each movement, the harmonic material is tonal with chromatic inflections; but it does not follow traditional ideas of tonal harmonic movement due to the drone-like harmonic stasis of the accompaniment.



Figure 138. SoaIE: Violin melody, movement three

The bridge section changes the rhythmic pulse from a straight four into an ‘almost-swung’ three. The piano part provides the change in pulse, while the cello takes the melodic lead for the five bars of the bridge.

This musical score shows the bridge section for measures 179 through 196. It includes staves for Piano (Pno.), Violin (Vln.), Cello (Vc.), and Tape. The Piano part is marked *Expansively* and features a series of chords. The Violin part is marked *f* and features a series of eighth notes. The Cello part is marked *f* and features a series of eighth notes. The Tape part features a series of eighth notes. The score includes various musical notations such as slurs, ties, and articulation marks.

Figure 139. SoaIE: Bridge section, movement three

This swung-three feel from the bridge is readapted for the end of the piece, where the pulse moves from three crotchets to a pattern of two dotted quavers and a quaver to create the three-beat phrase.



Figure 140. SoaIE: Ending of movement three

Movement Four, *Searching for the Promised Land*, is the central part to *SoaIE*. It is the moment where the backing track elements on the boombox move into prominence and the piano trio accompanies the vocal elements. The vocal part is built on beat poetry written especially for this project by screenwriter Scott Granville. Inspired by the proposed title of the movement, ‘*Searching for the Promised Land*’, and from the given musical references for the piece. Granville crafted the poem, in correspondence with the composer.

*I find love in the smallest  
And in my mind create mountains  
Create worlds  
Splash colour on dark horizons  
Make beginnings not endings*

*Don't try to make this world smaller.  
Don't try to make this world smaller  
I break down walls with thought.*

*The places I go, the places I see  
They open my mind and carry me  
The places I go, the places I see  
The open my mind and carry me to the Promised Land.*

*Lights, EXPLODE! Sound.  
Don't turn it down.  
I am floating in it all  
Luxuriating.*

*Free. Free. Time does not exist  
And when the clock stops I start.  
Time does not exist  
And when the clock stops I start to tune in*



*To what I heard and what I felt.*

*It started yesterday, and today, and tomorrow.*

*Don't try to make this world smaller.*

*Don't try to make this world smaller*

*I break down walls with thought.*

*I break down walls with thought.*

*The places I go, the places I see*

*They open my mind and carry me*

*The places I go, the places I see*

*The open my mind and carry me to the Promised Land.*

The poem was recorded with the rhythm of the drum track, then the audio manipulated using various transformational effects: glitch, pitch shift, distortion, delay, and phasers. From here the parts for the piano trio were composed to support the vocal recording. The creation of parts in a more subdued, post-minimalist manner might not be directly related to the edgy quality of the vocal timbre and effects; an unanticipated contrast that moves the piece forward and typifies this hybrid genre context.

Audio example 21. *Sketches of an Intergalactic Earworm*: Transformed vocals

The piano part is based on fragments and variations of a repeated scalar pattern,

202 ♩=90

*mp*

Lots of pedal - washy. At your judgement

let ring-----|

let ring-----|

*Figure 141. SoaIE: Opening piano part, movement four*

eventually achieving greater independence between left and right hands.

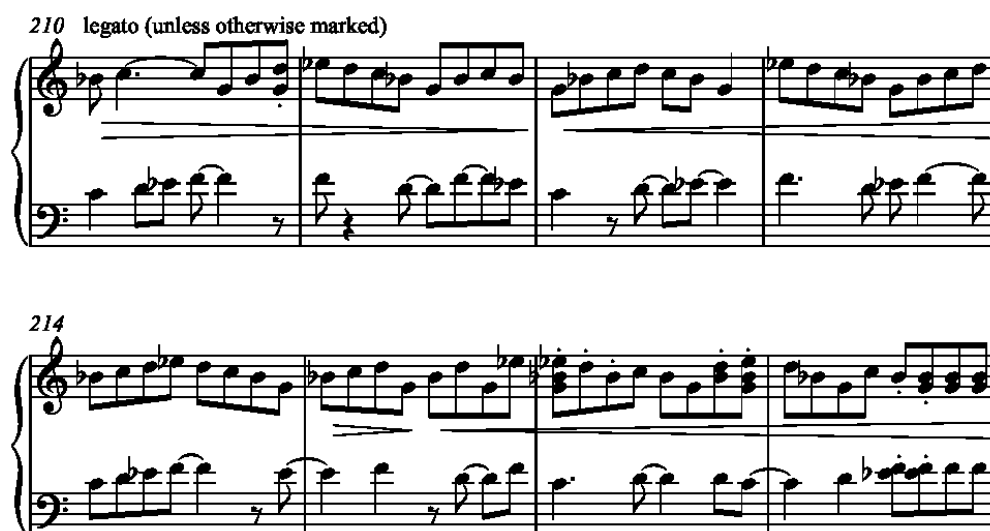


Figure 142. SoaIE: *Piano part, movement four*

The looping scalar figures then change to become more minimalist, two-note repeating fragments.



Figure 143. SoaIE: *Minimalist piano part, movement four*

Finally, the part shifts to rhythmic unison playing these minimalist two-note fragments.



Figure 144. SoaIE: *Ending of piano part, movement four*

The violin and cello parts play long, slow, melodic lines that develop throughout the movement, providing some tonal harmonic interplay between the parts, especially against the essentially static harmonic material in the piano. Violin and cello also share short rhythmic ideas and gestures, sometimes moving in freely canonical imitation.

The image displays three systems of musical notation for Violin (Vln.) and Cello (Vc.) parts. The first system starts at measure 210 with a mezzo-piano (mp) dynamic. The second system starts at measure 217. The third system starts at measure 221 and ends with a mezzo-piano (mp) dynamic. The notation features long, flowing melodic lines with various articulations and dynamics.

Figure 145. SoaIE: Violin and cello, beginning, movement four

This continues until the vocal part assumes the line “Free. Free. Time does not exist.” At this point the string parts become more rhythmic and minimalist, picking up elements from, and playing in rhythmic unison with, the piano part. The pattern starts in the violin, with the cello playing a bass line figure, but at bar 249 the part moves from the violin to cello.

242

Vln.

Vc.

246

Vln.

Vc.

*mf*

*mp*

250

Vln.

Vc.

Figure 146. SoaIE: Violin and cello, mid-point, movement four

Following this short section, when the vocals move into the second statement of the “Don’t try to make this world smaller” lyric, the violin and cello parts move back to the long melodic lines which continue to the end of the movement, culminating in an independent contrary motion scalar line in both instruments and a violin solo against the final bars of piano.

267

Vln.

Vc.

272

Vln.

Vc.

Figure 147. SoaIE: Violin and cello, ending, movement four

Movement Five, *Rockmelon Drive*, is the second of the latin/jazz/fusion-influenced movements, drawing on the same musical inspiration for Movement Three. In Movement Five the groove is controlled by the piano part, with the violin and cello playing counter-melodies. The groove here is divided into three: Section A, the main groove comprising an arpeggiated rhythmic bass line with accompanying chords whose rhythm changes throughout while the bass part stays largely consistent.



Figure 148. SoaIE: Main piano groove, movement five

Section B; the bass line becomes more scalar. This second groove, of just two bars, is essentially a turnaround to the main groove, while also providing some variation. This second groove appears three times in the piece, each time slightly different.

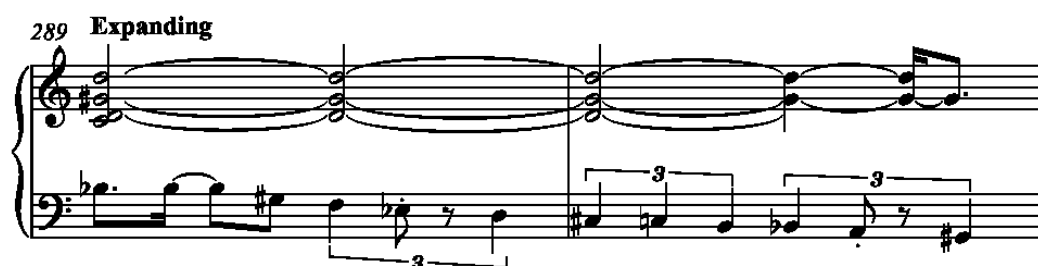


Figure 149. SoaIE: Piano part, section B version 1, movement five



Figure 150. SoaIE: Piano part, section B version 2, movement five



Figure 151. SoaIE: Piano part, section B version 3, movement five

Section C is like a bridge section, where the pulse changes to a repeated pattern of two dotted quavers and quaver, each version of the pattern with a new chord. This section occurs twice in Movement Five.

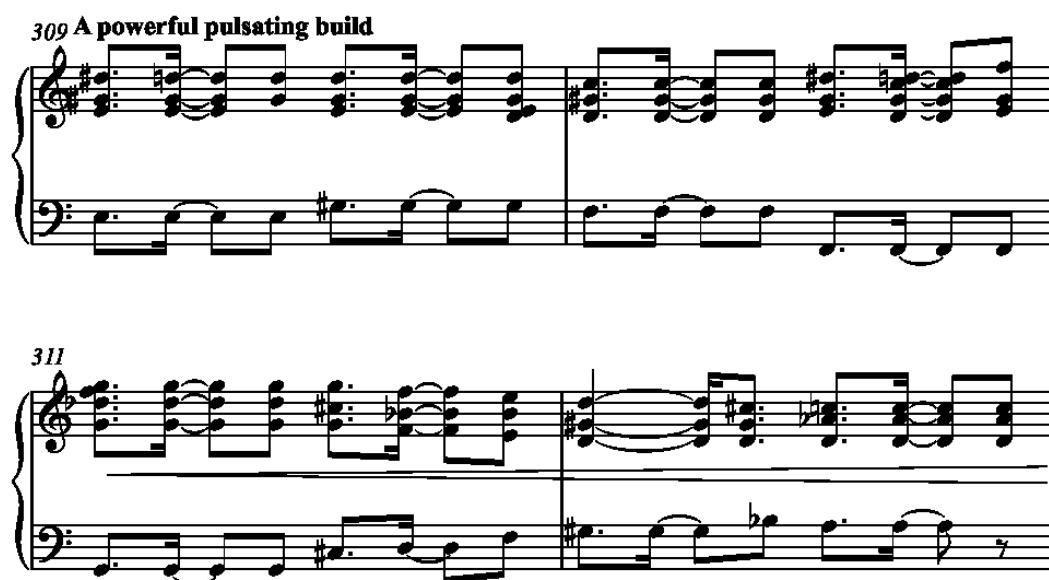


Figure 152. SoaIE: Piano part, section C, movement five

Following the second version of Section C, the piano part moves back to the main groove of Section A, but the chordal parts become even more rhythmic and dissonant, leading into the coda.



Figure 153. SoaIE: Piano part, section A final version, movement five

Against this piano groove, the violin and cello add counter-rhythmic figures to the groove. There isn't a clear melodic figure in this movement, other than the shape of the main groove. For Section A, the violin and cello play variations on two main rhythmic gestures: a bouncy four-note pattern taken from some of the piano chords; and an oscillating semiquaver pattern with large dynamic swells.

Figure 154. SoaIE: Violin and cello, section A, movement five

In Section B, the cello plays in unison with the bass line of the piano part, adding further strength to the shape of that line. Against this the violin plays melodic flourishes independent of the rhythmic groove.

289 Expanding

Vln.

Vc.

*f*

*p*

295 Almost coming to a boil

Vln. *mf*

Vc.

305 With a Passionate Fire

Violin (Vln.) and Viola (Vc.) musical score for measures 305-306. The key signature has one sharp (F#). The Violin part (treble clef) has a whole note chord of D5 and F#5 in measure 305, and a half note chord of G#5 and B5 in measure 306. The Viola part (bass clef) has a half note chord of D4 and F#4 in measure 305, and a half note chord of G#4 and B4 in measure 306. A triplet of eighth notes (D5, E5, F#5) is marked in measure 306.

In both versions of Section C, the violin and cello play in rhythmic and harmonic unison with the piano part. Throughout this section there is a steady crescendo, building towards the climactic points of the movement.



**Letting it all come out.**

321

Pno. *mp* *mf*

Vln. *pizz.* *p* *mf*

Vc. *p* *mf*

Tape

325

Pno. *f*

Vln. *arco* *f*

Vc. *f*

Tape

drum fill

Figure 158. SoaIE: Section C version 2, movement five

After the final restatement of Section A, the piano leads into the coda with a descending cluster-filled solo part.

**Furious and Uncompromising**

336

9

7

Figure 159. SoaIE: Piano lead-in to coda, movement five

A completely new groove is introduced in the coda. This groove is heavy, placing significant emphasis on the ‘One’. Piano, violin and cello all play heavily accented first beats, then the piano plays an answering phrase for the second half of each bar. This section is intended to be powerful and abrupt, lasting just four bars.

337 **Heavy, Crunchy and Aggressive - but with groove**

Pno. *f*

Vln. *ff*

Vc. *ff*

Drum groove

Tape

Figure 160. SoaIE: Coda, movement five

In Movement Six, *Directly from the Mothership*, the cello takes control of the groove, playing a percussive figure together with the drum track from the boombox. This involves foot stomps, snap pizzicato, hitting the body of the cello and *col legno* flourishes that are more about sound than actual pitched material.

341  $\text{♩} = 105$

Snap Pizz

Hit body

Foot Stomp

*f*

Funkadelic

col legno

col legno 3

Figure 161. SoaIE: Cello percussion groove (plus guide), movement six

The thematic inspiration for this movement is a vocal quote from a Parliament song, ‘P-Funk (Wants to Get Funked Up)’<sup>442</sup> from the album *Mothership Connection*. The lyrics are in the form of a chant:

*Make my funk the P-Funk, I want my funk uncut  
 Make my funk the P-Funk, I wants to get funk'd up  
 I want the bomb, I want the P-Funk, I want my funk uncut  
 Make my funk the P-Funk, I wants to get funk'd up*

<sup>442</sup> Composed by George Clinton, Bootsy Collins, and Bernie Worrell, 1975

This chant has been adopted by a number of bands, particularly in live performance, even when not playing the same groove from the original song. The percussive qualities of the lyrics make for an interesting addition to any funk groove. The version of the lyrics used in Movement Six is slightly altered from the original, based on a version of the chant used in the live performance of a song called ‘Pass the Peas’;<sup>443</sup> played by Maceo Parker and his band on the album *Life on Planet Groove*.<sup>444</sup> This version seemed appropriate for Movement Six because it brought together, in one place, the two main influences for *SoaIE*.<sup>445</sup>

This live version of the chant is:

*Make my funk the P-Funk, I want my funk uncut  
 Make my funk the P-Funk, I wants to get funky up  
 I want the bomb, I want the P-Funk, I want my funk stepped on  
 Make my funk the P-Funk, so I can take it home.*

This version of the chant runs throughout Movement Six and is repeated twice with some subtle variations. The rhythm of the chant provides some of the rhythmic material for the violin and piano. Throughout this movement they are either playing answering phrases to the chant, or in rhythmic unison with it.



Figure 162. *SoaIE*: Piano and violin answering phrases, movement six

<sup>443</sup> ‘Pass the Peas’ originally written by James Brown, John Stanks and Charles Bobbit

<sup>444</sup> Maceo Parker. *Life on Planet Groove*. Minor Music, 1992

<sup>445</sup> George Clinton – the main songwriter and leader of Parliament/Funkadelic, provides the chant element. This is performed in a cover of the James Brown song ‘Pass the Peas’. And, also Maceo Parker was the saxophonist for the James Brown Band.



Figure 163. SoaIE: *Rhythmic unison with 'I want to take it home', movement six*

Between the first and second versions of the chant, a short instrumental interlude marks the transition. This includes a break from the percussive parts for cello and features rising melodic parts from the piano and violin, providing added propulsion into the second version of the chant section.

Figure 164. SoaIE: *Interlude section, movement six*

The first version of the chant progresses, as it would be heard in any other funk context, maintaining the rhythmic pulse and emphasis on words. The second version of the chant plays with the rhythm, using the explosive qualities of the word “bomb”, and repeating the phrase “I want the bomb” to create the climactic point.



366

Pno.

Vin.

Vc.

Tape

col legno

3

3

3

want to take it home

Figure 166. *SoaIE*: Final contrary motion phrase, movement six

Movement Seven, *Until the Cape Man Appears*, is a reference to James Brown's live show. Known as the 'Hardest Working Man in Show Business', he had a reputation for hugely energetic live shows. A trademark feature<sup>446</sup> involved Brown dropping to his knees from exhaustion, prompting the show's MC, Danny Ray, to come out, drape a cape over Brown's shoulders and attempt to escort him off stage. The backing vocalists continued singing "Please, please don't go-oh-oh", during which Brown would shake off the cape, and with new-found energy continue to perform. This was typically repeated throughout the end of the act.<sup>447</sup> This final movement of *SoaIE* has been composed to echo the energetic performance of James Brown.

After a one-bar drum fill the piano part starts its relentless chordal pattern: a rhythmic pulse of chords continuing throughout the short movement.

<sup>446</sup> Usually during the song *Please, Please, Please*

<sup>447</sup> A version of this cape routine can be seen in the closing credits of the film: *Blues Brothers 2000*. dir. John Landis. Universal Pictures, 1998



Figure 167. SoalE.: Opening piano part, movement seven

Against this furious piano part, the violin and cello play independent melodic lines that become more intense.

Figure 168. SoalE.: Opening violin and cello part, movement seven

The boombox part plays a constant stream of different drum fills providing further counter-rhythmic parts to the material played by the piano, violin and cello. The result is furious, relentless high-energy music. At the end of the movement the different rhythmic layers from the backing track and the instruments become more

intertwined; the last two bars are in rhythmic unison leading up to the final impact chord to close the piece.

The image displays a musical score for the ending of movement seven, spanning measures 384 to 388. The score is written for four staves: Piano (Pno.), Violin (Vln.), Viola (Vc.), and Tape. The key signature is B-flat major (two flats). The time signature is 4/4. The Piano part features a complex, syncopated rhythm with many beamed sixteenth and thirty-second notes. The Violin and Viola parts have a more melodic, flowing line with some syncopation. The Tape part provides a rhythmic accompaniment with a steady pulse. The score concludes with a final impact chord in measure 388, marked with a double bar line and a repeat sign.

Figure 169. SoalE.: Ending of movement seven

## Reflections on Hybridity

One of the most difficult issues to deal with during the composition of this piece was how to address and notate the groove. Funk groove seems so natural to those engaged in regular performance of the music and thus genre-informed performance techniques assume an important role in the presentation of a groove.



So, the decision to compose this type of music for classical musicians necessitated optimal accuracy when notating the groove elements, and trust in performers to take some guidance from the rhythmic patterns of the backing track, as well as an expectation to listen to relevant recordings from the referenced works. In the performance of this piece, the composer was extremely fortunate to have open-minded performers who approached these elements with consideration and grace. James Tennant, having had previous experience recording with various Motown artists, immediately understood where the groove should be felt and helped guide the other members of the trio. To write for such high-calibre performers was both an honour and a privilege.

The commission for an easily transportable performance that would work equally well as a concert finale seems to have been met in *SoaIE*. The compositional approach provided a solid structural means to address the hybridity in this context, without losing the vital groove-driven elements of funk music.

The video for *SoaIE* also solidifies the hybridity of the work, both in total realisation of the conceptual elements informing the piece, and in the completion of multimedia work with acoustic instruments and pre-recorded boombox track. The video also hybridises the forms of performance record, music video and experimental film in this unique, specially-crafted combination.

## **Chapter Twelve – Concluding Reflections on the Portfolio**

The aim of this portfolio of work is to offer a creative solution to the artistic question of how a contemporary New Zealand composer might navigate and hybridise different musical genres into artistically credible new works.

The proposed solution involved working systematically using the hybridity table, completed during the pre-composition process by delineating key musical elements in each genre from which the composer selects, juxtaposes and synthesises to hybridise a new set of genre parameters. These parameters address musical, aesthetic and technical matters and are designed to be uniquely appropriate to each individual work. The hybridity table provides the composer with a genre map from which the organisation of pitch, rhythm, timbre, notation and formal design of works may be determined to suit artistic ends on a case-by-case basis. The hybridity table provides a new clarity for the creation of balanced, hybrid genre music, whilst still allowing room for intuition and creativity in the compositional process.

The nine principal compositions of the portfolio display how a wide spectrum of artistic demands has been addressed in practice, and in response to the research question. The compositions in the portfolio range from solo showcase pieces, to chamber works involving multimedia elements, to orchestral music. They demonstrate how the hybridity table, used as a guide for composition, enables the composer to navigate and hybridise different musical genres. Thus, the established genres of both Western popular and classical music are reinvigorated and extended, not contradicted.

### **Emerging Themes and Issues**

Initially, the main issue was finding a balance between the constituent genres. Where does the composer start when composing hybrid genre music? After experimenting with purely intuitive composition<sup>448</sup> it was determined that a systematic approach would provide an appropriate way forward. This initiated the creation of the hybridity table.

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<sup>448</sup> In both previous work by the composer and in early works for this portfolio.

The second important issue raised during the compositional process of the works for this portfolio was that of ensemble selection. To achieve a clear sense of hybridity, it seemed necessary to write for a unique ensemble of musicians. Many genre elements are specific to the timbres and performance traditions of certain instruments, and so, selecting these instruments for the hybrid work provides a clearer sense of the intended hybridity. This issue also prevailed in composing for ensembles with an established tradition: composition of hybrid music for orchestra or string quartet was complicated by the need to accommodate traditions, extended repertoire and cultural context of those ensembles. In these contexts, hybridity can become lost or seem a parody. It is more difficult to radicalise the traditional orchestra but adding an electric guitar or turntables to the orchestral ensemble makes an immediate and powerful difference.

The presentation of hybrid music relies as much on genre-informed performance practice as it does on compositional structure. The inclusion of a unique instrumental ensemble is vital to the compositional hybridity, and the GIP practice vindicates the considered and careful use of genre clichés; if those elements are removed the hybridity and genre-balance may be lost. The necessary inclusion of genre cliché in a hybrid composition wasn't apparent at the beginning of the research process; rather, it developed during the composition process.

The final consideration to emerge from the creative research component is the importance of openness towards interpretation of the score in hybrid music. Because genre-informed performance is essential to the success of hybrid music, the composer must be receptive to including performance suggestions and guidelines in the score rather than definitively prescribing performance elements. Successful hybrid music is achieved through collaboration. The score acts as a guide, sometimes quite specifically, to the outcome of the piece; the performer freely interprets the rest of the music.

### **Revisiting Research Questions**

In exploring how a contemporary New Zealand composer might navigate and hybridise different musical genres into artistically credible new works, it proved necessary to move beyond previous intuitive compositional experiences, and create a systematic method for genre hybridisation. The hybridity table identifies

the various musical elements in the original genres, then each element is individually hybridised to achieve an overall balance between the constituent genres.

The hybridity table allows the composer to select those genre elements most useful in composition. This means that problems of apparently incompatible genres can be addressed immediately, and by breaking down each genre into its constituent parts, the composer is able to utilise each part on a purely musical level. The hybridity table also identifies the techniques, tools and technology required for each individual piece. This means that the compositional approach is developed on a case-by-case basis depending on arrangement of the hybridity table. The inclusion of specific performers, multimedia elements and the artistic goals for each piece can also be addressed through the creation of the hybridity table.

Another initial concern was how to deal with text/narrative in hybrid music. While many popular music styles are based on text or lyric, contemporary art music is often not programmatic. Text elements required for works in this portfolio are sourced from pre-recorded samples. The text-based elements are often heavily manipulated, and there are no proper songs addressing the role of ‘storyteller’ as found in much popular music. The only piece to include an extended narrative text is *Sketches of an Intergalactic Earworm* where the text conveys a general mood, rather than providing a specific narrative.

The works in the portfolio are essentially quasi-programmatic: certain elements convey an underlying concept or narrative structure, but they are neither the focal point of the composition, nor do they contribute to the overall comprehension of the music. These elements merely provide inspiration and forward momentum in the compositional process.

### **Revisiting Compositions**

The nine original compositions in this research portfolio establish the core response to the main research question. Throughout the composition and research process, the hybridity table and its application have been refined to generate a method for using genre as a compositional tool. As a result of this, it has become

clear that the role the performer plays in the effective transmission of hybrid music is paramount. The ideas of ‘authentic performance’ or ‘historically informed performance’, as heightened awareness of style and practice, are analogous to the performance approach required for hybrid music. This may be termed ‘genre-informed performance’, in which both the performer and the composer each have a clear awareness of the specific performative and musical qualities of each constituent genre, and how this awareness informs the necessary musical decisions. Each of the compositions in this portfolio requires a willingness on the part of the performer to explore new genre combinations with an open mind and an ear to interpret different forms of musical expression.

### **Limitations of the Research**

As the concepts of genre and genre definitions are to some extent subjective, justification of balanced hybridity is difficult to assert because it depends on an audience’s genre familiarity and therefore the genre elements able to be perceived by that audience. The intention of this research process is the creation of balanced hybridity in composition; interpretation of the result remains with wide-ranging audience perception, as it always is within the genre contract. This research focuses specifically on the compositional process and the use of genres from a musical perspective. The role and opinions of the audience are not addressed because they lie beyond the scope of this research.

### **Further Recommendations**

Any continuation of this research should ideally address audience perception of hybridity in relation to composer intention. This has the potential to further refine the process of composing hybrid music and assessing the success of genre combinations. This process would, in turn, provide the tools and techniques to continue refining the hybridity table, and determining best possible utilisation of various elements. The use of the hybridity table has also been limited to the compositional process of just one composer; introducing this tool to other composers has the potential for further refinement of the table in the provision of other elements and alternative approaches to the control of intuitive elements inherent in the composition process.

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## **Appendix I - Software and compositional tools**

Pro Tools 10 HD (plus bundled effects and instruments)

Sibelius 7

Ableton Live Suite 8 (plus bundled effects and instruments)

Various additional plug-in effects made by Waves and iZotope.

East-West Quantum Leap software instruments

Addictive Drums

iPad (with various music making apps)

Korg Kaoss Pad 3

Numark CDX1 (CD turntable)

Moog Little Phatty monophonic analog synthesiser

Korg Triton Extreme synthesiser

Various microphones and recording devices

## **Appendix II - List of previous genre fusion work**

*Symphony No.1* – orchestra and turntables (Composed 2003-2004. Selected for Auckland Philharmonia Orchestra and NZ Symphony Orchestra rehearsed readings / Performed by NZ Secondary Schools Symphony Orchestra, Wellington Youth Orchestra and Dunedin Youth Orchestra)

*Electric Bass Concerto* – orchestra and electric bass (performed as part of the NZSO-SOUNZ Readings)

*Fanfare for a New Generation* – for orchestra, turntables, electronics and rapper (performed as part of APO Remix the Orchestra concert, arranged from original recording by Kenneth Young)

*To Entertain a Wolf* – for string quartet (performed by the Taiaha Quartet at the 2012 ROSL Chamber Music Competition finals)

*Today is the Tomorrow* – for turntables, electronics and keyboard (1st place at the 2006 Waikato Lilburn Composition Competition, multimedia section)

*The Birth* – for chamber ensemble, video, dancers and pyrotechnics (performed at the 2011 Waikato Blues Awards Ceremony, conducted by Adam Maha)

*A Pulse Worth Fighting For* – for flute, trumpet, viola, cello, keyboards, guitar, bass, drums, and electronics (premiere performance at Hamilton Gardens Arts Festival 2013)

*Not a One Way Street* – for piano, viola, cello and synth (premiere performance at Waikato University Showcase 2013)

*Lost* – for chamber ensemble (premiere performance at Hamilton Gardens Arts Festival 2013)

*Flow* – moving image video and sound piece (finalist in the National Contemporary Art Awards 2013)

*Paaroretanga* – for watering cans, effects, turntables and video (premiere performance by Richard Nunns and Jeremy Mayall at OKTA 2007)

*A New Communication* – for 3 iPhones, light-table, taonga puoro, effects (premiere performance by Richard Nunns, Horomona Horo, Daniel Peters and Jeremy Mayall at OKTA Contemporary Music Concert 2011)

*Nebula Puoro* – for theremin, effects, taonga puoro (premiere performance by Richard Nunns and Jeremy Mayall at OKTA Contemporary Music Concert 2011)

*Tabula Chroma* – for light-table, turntables, synth, theremin, effects, taonga puoro (premiere performance by Richard Nunns, Daniel Peters and Jeremy Mayall at OKTA Contemporary Music Concert 2010)