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Projects in Cross-Cultural Music Composition

by

Anton Killin

A thesis and portfolio

submitted to the New Zealand School of Music
in fulfillment of the requirements for the degree of
Master of Music in Composition

New Zealand School of Music

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ABSTRACT

The creation of music cross-culturally is a rich, cutting-edge field in contemporary music studies. This thesis examines the practice of cross-cultural music composition through the lens of the tradition of Western art music and my own perspective as a composer representing that tradition. This portfolio comprises original compositions for various musical instrumentations including Indonesian gamelan and Chinese *yangqin*, and which utilise a range of technical and contextual approaches that are described in the thesis. Reference is made to historic precedents (mainly twentieth-century) including a case study of one composer (Lou Harrison), in order to give a context to my own work and musical thinking.

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CHAPTER ONE

INTRODUCING THE NON-WESTERN INSTRUMENTS AND CONTEXTS

I. Introduction

The purpose of this thesis is to support the new works in my composition portfolio. The motivation of much of my composition is twofold. First, I explore the creative possibilities that arise from combining instruments of the Indonesian gamelan¹ with instruments from the West (including electronic media) in new compositions. Second, I incorporate recordings of Western and non-Western instruments, especially gamelan, in acousmatic music. I do not always use gamelan in my music however – my portfolio also includes a clarinet solo composed for Andrzej Nowicki, a short piano piece, and an electroacoustic piece comprising environmental recordings. Moreover, I could not resist supervisor Jack Body's invitation to compose for *yangqin*, a Chinese dulcimer; in one piece I combine this instrument with violin, and in another I combine it with live electronics.

In the chapter that follows, I introduce the non-Western instruments that I have been working with, and I also discuss the influences of Asian music in the Western art music tradition, the context in which I am situated both as a composer and a researcher, inspired by leading figures from the Western art music tradition. I develop a taxonomy of ways in which Western composers have incorporated folk and non-Western music influences, materials, and concepts in their own compositions. I connect this taxonomy with the compositions in my portfolio. In Chapter Two I consider the issues that composers face when engaging in cross-cultural practice. This discussion is from my own perspective as a composer. It represents the issues that I was thinking about whilst composing these works, and how I resolved them both in my mind and in my practice. I argue in favour of participant observation² as a research strategy. I develop a cross-cultural aesthetic, and I explain how my adoption of musical materials and concepts from other cultures is approached with sensitivity and respect. In Chapter Three I provide extended programme notes for the works in my portfolio. In Chapter Four I summarise and conclude.

To support my composition practice and cross-cultural research, I provide several appendices. The first appendix is a case-study on Lou Harrison, a vital figure in cross-cultural music composition, showing that he has taken several approaches to cross-cultural composition, developing the field and paving the way for future Western cross-cultural composers. The

¹ Ensembles of predominantly bronze and wooden percussion instruments from Indonesia. Because of the word's regular usage and English-language adoption I do not italicise it, despite italicising other Indonesian gamelan terms.

² By which I mean studying the music (at least partially) by learning to play it.

second appendix surveys the history of the practice of incorporating folk and non-Western musical materials in the Western art music tradition. This places my composition and research in its historic context. The third appendix is support for my development in Chapter Two of a pluralist aesthetic, though it is based on Western ideas of philosophy.

It is important to note that my own experiences of non-Western music, especially learning to play Javanese and Balinese gamelan, comes from studying at university in New Zealand. See Chapter 2 Section I for a discussion of my own involvement in gamelan music making. My gamelan teachers, Budi S. Putra and I Wayan Gde Yudane, to whom I am greatly indebted, are indigenous maestros of Javanese gamelan and Balinese gamelan, respectively. I spent three weeks in Indonesia (mostly Yogyakarta, Jakarta, and Solo) with my gamelan teachers (and other fellow students) in 2007. As a composer and researcher I am firmly placed within the context of the Western art music tradition. My offerings in this thesis are thus from the perspective of a composer situated within that tradition.

It is also important to acknowledge several composers whose cross-cultural music composition has informed my own. In this respect, I am most indebted to my primary supervisor Jack Body, my secondary supervisor Michael Norris, and to David Sanders and Gareth Farr.

II. Indonesian gamelan in New Zealand

Gamelan first arrived in New Zealand when, in 1975, ethnomusicologist Allan Thomas imported an antique set of instruments from Cirebon, northern Java, to Victoria University of Wellington's music department, now the New Zealand School of Music.³ The gamelan set was used to support ethnomusicology courses and teach traditional repertoire. A performing ensemble was soon formed, initially directed by Thomas. New compositions by some New Zealand composers who were intrigued by the sounds of the ensemble appeared, such as David Farquhar's *Ostinato for Gamelan* (1975) and *Palindrome for Gamelan* (1979). Farquhar encouraged his composition students at the university to consider writing for the gamelan, a tradition continued by Jack Body.

In 1980, the Indonesian Embassy made a central Javanese gamelan set available to Victoria University, on permanent loan. The set consisted only of *pelog* (Javanese 7-note scale) instruments, so in the mid-eighties the construction of a matching *slendro* (Javanese 5-note scale) set was commissioned to complete the ensemble (traditionally, each ensemble comprises instruments of both scales). In the mid-1980s, the Indonesian Embassy also supplied the group's first teacher from Indonesia, Midiyanto, and they continue to supply teachers for the group – Joko Sutrisno between 1988 and 1995, and presently, Budi S. Putra from 1996 onwards. The group's name, *Gamelan Padhang Moncar*, was given by Sutrisno, "*Padhang Moncar* can refer to the sunrise (the growing light), and the fact that in Aotearoa we are the first gamelan in the world to see the new day. *Padhang Moncar* can also be interpreted as harmony and growth and thus the name can reflect the aspirations of the group."⁴

After extensive touring around New Zealand, interest in gamelan grew and now there are several sets throughout the country – Javanese gamelan sets exist now at University of Otago, Clyde Quay Primary School in Mount Victoria, the New Zealand School of Music, and in Auckland, owned by Miranda Adams; Balinese gamelan sets exist at University of Canterbury and the New Zealand School of Music; and the Cirebon set has been returned to the care of the Thomas family, presently housed in the Long Hall, Point Jermingham in Roseneath, Wellington.

Because Body's persuasive enthusiasm for the ensemble spread amongst his composition students, and because other composers were attracted to the gamelan for whatever reason, many New Zealand composers have indeed composed music for gamelan. New Zealand composers Gareth Farr, Chris Watson, Judith Exley, Jack Body, Dan Beban, Michael Norris, Naomi Singer,

³Jack Body, pers. comm., 2009.

⁴Gamelan Padhang Moncar, <<http://www.gamelan.org.nz/>> Accessed 29/01/2010.

Emma Carlé, Steve MacDonald, Ross Carey, David ‘Treefrog’ Sanders, Megan Collins, and myself have all had compositions released on CD by Gamelan Padhang Moncar. Body’s 2009 concert series, ‘Gong Crazy’, which celebrated the end of his 30 years of teaching at Victoria University of Wellington/New Zealand School of Music, comprised new works involving gamelan by Helen Bowater, Ross Harris, John Psathas, Andrzej Nowicki, Irwan Harahap, Megan Collins, Gareth Farr, Leon DeLorenzo, Thomas Lambert, David ‘Treefrog’ Sanders, Jack Body and I Wayan Gde Yudane, and myself. Gamelan Padhang Moncar has toured Indonesia three times with repertoires that comprised both traditional gamelan pieces and new works by New Zealand composers – in 2000, 2002, and 2007 along with members of *Gamelan Taniwha Jaya* (the Balinese gamelan based at the New Zealand School of Music, owned by Gareth Farr). The Balinese gamelan ensemble’s name was chosen by Farr, meaning ‘Victorious Taniwha’ – ‘monstrous in so many ways!’⁵ (Farr, pers. comm., 2010) – alluding to the dynamic and rhythmic complexities of Balinese-style playing.

Henry Johnson (2008) reports on much of the new music created in New Zealand either *for* gamelan, or *from* (or, inspired by) gamelan. Jack Body’s *Musik Dari Jalan* (1975) is an electroacoustic piece that samples Allan Thomas’ field recordings of Indonesian musicians and environments. The piece won first prize at the 1976 Bourges International Electroacoustic Music festival, and in 1992 was selected for the *Disc d’or*, alongside nine other Bourges prize winners, as one of the ten most highly acclaimed winning pieces over 25 years.⁵

Furthermore, Body has written Indonesian-inspired works, such as the second movement from *Melodies for Orchestra* (1983), which features melodic material transcribed from solo *saluang* (Sumatran bamboo flute) music:

⁵ SOUNZ The Centre for New Zealand Music, < <http://sounz.org.nz/works/show/10399/> > Accessed 02/02/2010.

Fig. 1.1: Jack Body: *Melodies for Orchestra* (1983), published by Waiteata Music Press, NZ (1991) p. 41

Moreover, the work's first movement is based on a transcription of Greek folk music, and the third on a transcription of Indian street music. On his approach, Body explains his attempt to capture something of the style of playing and timbre of the original performances. Around these more or less literal reproductions I have added an orchestral fabric whose purpose is to create coherence and continuity within the work ... [M]y intention is simply to try to convey something of the joy and excitement I experienced when I encountered each one for the first time.⁶

⁶ Body (1983) quoted on SOUNZ The Centre for New Zealand Music, <<http://sounz.org.nz/works/show/10415/>> Accessed 03/02/2010.

I believe musical composition should be the exploration of new worlds of aural sensibility. This is why I ‘travel’ a great deal, musically speaking, even when at home, by listening obsessively to recordings of the music of other cultures.⁷

Consider several of Body’s other pieces: *After Bach* (2001) combines Javanese gamelan with massed violas and four viola soloists. *Campur Sari* (1996) comprises new music composed for string quartet and traditional music played by a master Javanese musician (*gender*, *kendhang* and voice). In *Polish Folk Dances* (2007), Body’s transcriptions of Polish folk melodies are played by a clarinet, and accompanied by Javanese gamelan which switches between *pelog* and *slendro* scales, harmonising the tunes with a skewed temperament approximating that of the West. *A House in Bali* (2009) tells of various amusing experiences of Balinese life, by narrating passages from Colin McPhee’s seminal text of the same name, reflecting on his living there in the 1930s. Body carefully ornaments and punctuates McPhee’s accounts by interweaving new music composed for string quartet and *sheng* (Chinese mouth organ), with the new music composed for Balinese gamelan by the work’s co-author (and Balinese gamelan maestro), I Wayan Gde Yudane.

Another prominent New Zealand composer who has worked extensively with gamelan is Gareth Farr. Johnson (2008) notes the gamelan influence in pieces such as *From the Depths Sound the Great Sea Gongs* (1996) for orchestra, *Kembang Suling* (1995) and *Sepuluh Jari* (1996) for piano solo.⁸ While Body often reconstructs traditional musics in new compositions, Farr does not attempt to achieve any kind of robust authenticity – he is simply composing new pieces for the Western art tradition, and gamelan happens to be a major influence. Consider the opening section of *From the Depths Sound the Great Sea Gongs*, with its pentatonic gamelan-esque textures evoking the *slendro* scale, and its virtuosic percussion passages, in a Balinese *kotekan* (interlocking) style:

⁷ Jack Body (2001) quoted on SOUNZ The Centre for New Zealand Music, <<http://sounz.org.nz/manifestations/show/7424/>> Accessed 20/04/2010.

⁸ See also Farr (2001), <<http://www.garethfarr.com/depths.html/>> Accessed 08/02/2010.

Flute 1&2
Clarinet in Bb
Bassoon 1
Piano
Harp
Cello
Viola
Violoncello
Double bass

♩ = 120

From the Depths Sound the Great Sea Gongs (1996), published by Promethean Editions, NZ (1998) p. 7

Flute 1&2
Clarinet in Bb
Bassoon 1
Piano
Harp
Cello
Viola
Violoncello
Double bass

♩ = 120

From the Depths Sound the Great Sea Gongs (1996), published by Promethean Editions, NZ (1998) p. 16

Farr has also written for both Javanese and Balinese gamelan, and even for both ensembles combined. His output includes *Sieran* (1990) for Javanese gamelan and harp solo, *Chengcheng* (1992) for Balinese gamelan, two harps, and percussion, *Reongan* (1992) for Javanese gamelan, *Kebyar Moncar* (1993) for Javanese gamelan, *Tabuh Pacific* (1995) for Balinese gamelan and symphony orchestra, *Taikon* (1994) for Javanese gamelan and Taiko

drums, *Beart*⁹ (1999) for Javanese gamelan and percussion trio, *Uri Taniwha* (2002) for Javanese gamelan, *taonga pūoro* (Māori musical instruments), and soprano solo, *Twin of Sleep* (2005) for Balinese gamelan, choir, and *karanga* (Māori vocal style – a ‘welcome call’), and *Rona e te Marana* (2007) for Javanese and Balinese gamelans combined. Farr is very interested in combining gamelan with Western instruments, and even considers it a “social analogy”⁹ – by combining musics of different cultures together, he believes he is contributing to the strength of those cultures. (The topic of cultural appropriation is pursued in Chapter 2 Section III.)

Furthermore, Johnson (2008) also notes that prominent New Zealand composer Anthony Ritchie shows a gamelan influence in pieces such as *Boun* (1993) for symphony orchestra, and the ninth (‘Slow and Floating’) and twenty-third (‘With urgency’) of his *24 Preludes* (2002) for piano solo. Ritchie has composed one work for gamelan, *Echoes* (2009), for Javanese gamelan, in which melodic themes are presented and then developed through canons and variations.

Before gamelan even arrived in New Zealand, Douglas Lilburn, inspired by the sounds of gamelan, composed *Gamelan for Six Hands* (1965) for three players at a piano, which closely approaches the textures of Javanese gamelan, with low notes reminiscent of gongs, and a core melody which is decorated in a gamelan-like fashion:

Gamelan for Six Hands
for Maisie Kilkelly

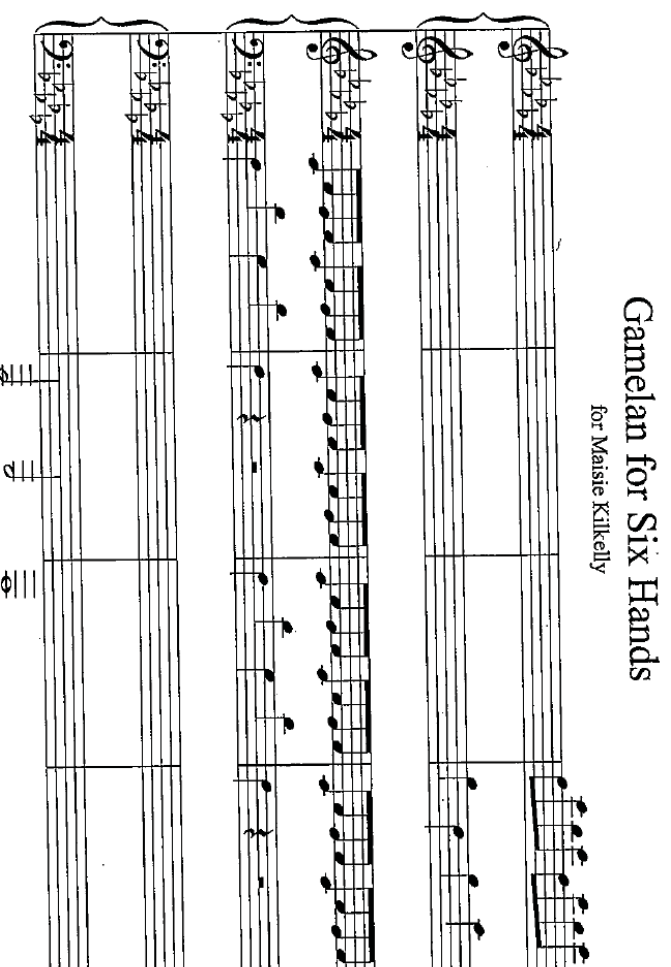


Fig. 1.4: Douglas Lilburn: *Gamelan for Six Hands* (1965), published in *Crotchety at 51* by Waiteata Music Press, NZ (2004) p. 42

⁹ Pilcher (2006), p. 13.

Other prominent New Zealand composers' works include Michael Norris' *Mandala* (1999) for Javanese gamelan and *Zanam Solvere* (2002) for chromatic gamelan and saxophone quartet, Mark Langford's *The Sycamore Tree* (1981) for Javanese gamelan and percussion and ... *But It Only Makes a Small Shadow* (1987) for choirs, synthesizer, percussion and gamelan, Phil Dadsen's *Pagodadagap* (1987) for Javanese gamelan, Chris Watson's *Jangeran* (2005) for Balinese gamelan and Western orchestra, Andra Patterson's *Membiski* (1986) for Javanese gamelan and *MaJU Terus* (1987) for choir, Javanese gamelan and Western orchestra, and Helen Bowater's *Tembang majapat* (1999) for gamelan, string orchestra, marimba, tam-tam and voices and *Sun Wu Kong "Monkey"* (2009) for gamelan, Chinese *sheng* (mouth organ) and string quartet. Moreover, composer Nigel Keay embraces the influence of gamelan in many of his works, such as *Symphony for Strings – Three Images of Java* (1989) for string orchestra and *Symphonic Poem: Ritual Dance of the Unappeasable Shadow* (1994) for symphony orchestra.

Gamelan music has played a substantial role in the influences and musical directions of many of New Zealand's most prominent Western art music composers. My works follow in their footsteps.

III. Instruments of the Javanese gamelan¹⁰

Gamelan music is a stratified, multi-level polyphony. The “*balungan*” instruments play a line which acts as the back-bone of the piece, which the elaborating instruments ornament in specific ways. Structural instruments mark the colotomic structure¹¹ of the piece’s form, and the drums (*kendhang*) set the tempo, guide tempo changes, and give structural cues. Often, gamelan accompanies a female singer (*pesindhèn*) or a male chorus (*gerong*).

Traditionally, the *balungan* is learned aurally and memorised. Those playing more advanced instruments must have also memorised the appropriate elaborations or structural patterns relevant to their instrument. Even now most professional gamelan ensembles still memorise their music for performances, but use cipher notation¹² as an aid in teaching and rehearsals (see Sumarsam, 2002). For example, here is the first line of *Ketawang Wigena [laras] pelog [pathet] nem*, as it is performed by Gamelan Padhang Moncar (sometimes minor regional differences occur in Javanese repertoire, especially between Solo and Yogyakarta), in cipher notation:

° + °	° + ° ∩	° + ° V	° + ° ∩
1 2 1 6	2 1 6 5	1 2 1 6	2 1 6 (5)

The *balungan* instruments play the notes of the numbers, the elaborating instruments ornament this melody according to the conventional techniques for that instrument, and the instruments that mark the colotmic structure play on the notes that correspond with their symbol: + for *ketuk*, ° for *kempyang*, ∩ for *keneng*, V for *kempul*, and () for *gong ageng*.

Thus, the above cipher notation can be reinterpreted into Western notation (showing the pitches of the *balungan* and the placement of the instruments outlining the colotomic structure):

Fig. 1.5: Colotomy and *Balungan* in *Ketawang Wigena*

The colotomic structure repeats unchanging throughout the piece, as the *balungan* moves on to subsequent lines.

¹⁰ All photos of gamelan instruments herein taken by myself. They are part of Gamelan Padhang Moncar.

¹¹ The structure of a conventional Javanese gamelan piece is defined by the rhythmic organisation of specific instruments whose function is to mark specific time intervals in relation to the piece’s *balungan*.

¹² A notation system comprising numbers (representing pitches) and symbols.

The piece's full title, *Ketawang Wigena [laras] pelog [pathet] nem*, as well as containing its individual title, *Wigena* (sad, sorrowful),¹³ gives its form/colotomic structure (*bentuk* – which in this case is *ketawang* – indicating where the structure-marking instruments need to play in relation to the *balungan*, and indicating to the *kendhang* player which style to drum in), its scale (*laras* – which in this case is *pelog*), and its mode (*pathet* – which in this case is *nem*). Both scales, *slendro* and *pelog*, are conventionally organised into three *pathet* each, which have different 'cadential' patterns, ranges, and also they tend to emphasise and avoid certain pitches, relevant to that *pathet* (see Spiller, 2008). Players sit cross-legged and for this reason, perform without wearing shoes. It is also customary never to step over the instruments, but rather to walk around them – a sign of respect for the gamelan. These two customs are still upheld today. In the past, the performers who play instruments that require just a single beater (*tabuh*) hold it in their right hand – even today, Indonesians are disconcerted by seeing performers play gamelan left-handed (Body, pers. comm., 2010).

The instruments of the Javanese gamelan span several octaves:

	Slendro						
	I	II	III	IV	V	VI	VIII
gong ageng ^a	2	3	5	6	1	2	3
gong saron	1	2	3	5	6	1	2
kempul	1	2	3	5	6	1	2
kenong	1	2	3	5	6	1	2
kenong jajan ^b	1	2	3	5	6	1	2
ketuk	1	2	3	5	6	1	2
enggak-kemping ^c	1	2	3	5	6	1	2
kemping ^b	1	2	3	5	6	1	2
kenonok	1	2	3	5	6	1	2
sona panurat/paling	1	2	3	5	6	1	2
sona alang ^d	1	2	3	5	6	1	2
sona barung	1	2	3	5	6	1	2
sona demung	1	2	3	5	6	1	2
gender panerus	1	2	3	5	6	1	2
gender doneng	1	2	3	5	6	1	2
genderan	1	2	3	5	6	1	2
boneng panerus	1	2	3	5	6	1	2
boneng barung	1	2	3	5	6	1	2
boneng panembung	1	2	3	5	6	1	2
slar pelag	1	2	3	5	6	1	2
slar	1	2	3	5	6	1	2
obonglung	1	2	3	5	6	1	2
genderang	1	2	3	5	6	1	2
suling	1	2	3	5	6	1	2
rebab	1	2	3	5	6	1	2
slendran	1	2	3	5	6	1	2
widradid	1	2	3	5	6	1	2

	Pelog						
	I	II	III	IV	V	VI	VIII
gong ageng ^a	2	3	4	5	6	7	8
gong saron	1	2	3	4	5	6	7
kempul	1	2	3	4	5	6	7
kenong	1	2	3	4	5	6	7
kenong jajan ^b	1	2	3	4	5	6	7
ketuk	1	2	3	4	5	6	7
kemping ^c	1	2	3	4	5	6	7
kenonok	1	2	3	4	5	6	7
sona panurat/paling	1	2	3	4	5	6	7
sona barung	1	2	3	4	5	6	7
sona demung	1	2	3	4	5	6	7
gender panerus	1	2	3	4	5	6	7
gender panerus, boneng scale	1	2	3	4	5	6	7
gender boneng, boneng scale	1	2	3	4	5	6	7
gender boneng, boneng scale, widradid	1	2	3	4	5	6	7
boneng panerus	1	2	3	4	5	6	7
boneng barung	1	2	3	4	5	6	7
boneng panembung ^b	1	2	3	4	5	6	7
slar pelag, boneng scale ^d	1	2	3	4	5	6	7
slar, boneng scale ^d	1	2	3	4	5	6	7
slar, boneng scale ^d	1	2	3	4	5	6	7
obonglung, boneng scale ^e	1	2	3	4	5	6	7
obonglung, boneng scale ^e	1	2	3	4	5	6	7
gong ageng, boneng scale ^e	1	2	3	4	5	6	7
gong ageng, boneng scale ^e	1	2	3	4	5	6	7
suling	1	2	3	4	5	6	7
rebab, pathet nem, boneng ^f	1	2	3	4	5	6	7
rebab, pathet mi ^g	1	2	3	4	5	6	7
slendran	1	2	3	4	5	6	7
widradid	1	2	3	4	5	6	7

a. The pitch shown may be an octave above the fundamental; see note on p. 203.
b. Normally only found in a Veyga-style gamelan.
c. The *enggak* and *kemping* are respectively the higher and the lower of the pair.
d. Normally only one (if any) per gamelan; the compass ♯ no. 3 is usual.
e. As a Veyga-style instrument, normally in *cecal* form.
f. Normally one instrument per gamelan, used for *pathet mi* or *pathet nem*/during as required.
g. Normally one instrument per gamelan, used for *pathet mi* or *pathet nem*/during as required.

Fig. 1.6: Table of instruments that make up the Javanese gamelan, from Pickvance (2005) pp. 104-105.

In the following discussion of Javanese gamelan instruments, the ranges given are specific to the instruments of Gamelan Padhang Moncar. Not all of the instruments listed in the table above appear in this set and variations regarding the exact registers may exist. Curious readers may see Appendix IV for recordings of traditional repertoire.

¹³ Robson, Stuart and Singgih Wibisono (2002), p. 810.

Balungan instruments



Fig. 1.7: *Demung* and *saron*

Demung (foreground: front – *pelog*; right – *slendro*),

Saron (background: front – *pelog*; right – *slendro*)

*Demung*¹⁴
 either range is possible, even within a set

Saron

The *demung* and *saron* play a traditional piece's *balungan* line, and are struck with a wooden beater. As the performer strikes a note, he/she dampens the previous note with his/her other hand. The bronze keys are suspended over a wooden body with a hollowed cavity. For some pieces, the *saron* and *demung* play *imbal-imbalan* interlocking patterns (short iterated scalar motifs that are divided up between two players – like a hocket). There are usually multiple *demung* and *saron* in a set of gamelan instruments.



Fig. 1.8: *Stenthem* (front – *pelog*; right – *slendro*)

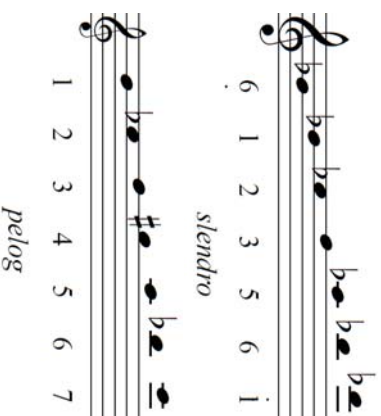
¹⁴ The pitches given in this thesis are a representation of a Western approximation (see further below for an explanation). Dots above/below a number denote pitches of higher/lower octaves.

Like the *demung* and *saron*, the *slenthem* plays the *balungan*. It is struck with a wooden beater that has been padded with material to soften the sound, and is damped in the same way as the other *balungan* instruments. The bronze keys are suspended over resonating tubes fitted into a wooden frame. In some gamelan pieces the *slenthem* plays a syncopated technique, *pinjalan*, playing one note higher than the *balungan*, on the off-beat, resulting in an interlocking resultant melody.

Elaborating instruments



Fig. 1.9: *Peking* (also known as *saron panerus*) (front – *pelog*; right – *slendro*)



The *peking*, which looks like a small *saron* or an even smaller *demung*, is one octave higher than the *saron*, and is struck with a beater made from buffalo horn. Depending on a piece's tempo (*irama*), the *peking* plays either

- (a) the *balungan*,
- (b) the *balungan* doubled (i.e. reiterates the note on its off-beat),
- (c) repeated pairs of notes, based on the *balungan*, or
- (d) extended repetitions of pairs of notes, based on the *balungan*:

Peking (a) (b) (anticipating) (c) (anticipating)

Balungan (d)

Fig. 1.10: Relationship of *peking* to *balungan*

Thus the slower the *balungan* plays, the faster the *peking* plays – and the same goes for the other elaborating instruments.



Bonang barung
(*bonang panerus* is one octave higher)

1 2 3 5 6 1̇ 2̇ 3̇ 5̇ 6̇ 1̇ 2̇
slendro

1 2 3 4 5 6 7 1̇ 2̇ 3̇ 4̇ 5̇ 6̇ 7̇
pelog

Fig. 1.11: *Bonang barung* (often just called *bonang*) (front – *pelog*; left – *slendro*) & *bonang panerus* (right – *pelog*; rear – *slendro*)

A *bonang* instrument consists of two rows of bronze pots. The arrangement of the pots depends on the *pathet* of the piece. The performer plays with two wooden beaters, wound with cord to slightly soften the tone. Depending on the form/colotomic structure and the tempo, the *bonang* and *bonang panerus* might play one of three different elaboration techniques, either

- (a) *gembyangan* (syncopation against the *balungan* using the last note of the *garra* ('bar' or grouping of pitches),
- (b) *mipil* (doubling, alternately, the next two notes of the *balungan*), or
- (c) *imbal-imbalan* interlocking patterns (short iterated scalar motifs that are divided up between *bonang barung* and *bonang panerus* – also like a hocket):

Bonang panerus (anticipating) (a) (anticipating)

Bonang barung (anticipating) (b)

Balungan (anticipating) (c)

Fig 1.12: Relationship of *bonang* to *balungan*

The *bonang* instruments exemplify the end-weighted schema of Javanese music; the last note of a *gatra* is considered the strong note, not the first, and these patterns anticipate that stress.



Fig. 1.13: *Gender barring* (often just called *gender*) (front three) and *gender panerusus* (rear three)

Gender
(gender panerusus is one octave higher)

sets have one range or the other

slendro

(6) 1 2 3 5 6 1 2 3 5 6 1 2 3 (5)

pelog (or, substitute in 7s for 1s)

Like *slenthem*, the bronze keys of the *gender* are suspended over resonating tubes fitted into a wooden frame. The range of the *gender* matches that of the *slenthem* and *demung*, and the range of the *gender panerusus* is one octave higher, matching that of the *demung* and *saron*. They are played with two small wooden beaters padded with material to soften the sound's attack, and as both hands are required to play the instrument, the performer must have mastered a difficult dampening technique – dampening the previously played notes with the side of one's wrist or the heel of one's palm. The long resonance of the instrument makes mastering the dampening technique even more important. Each gamelan set has one *slendro* and two *pelog* versions of *gender* and *gender panerusus* – one *pelog* version has 1s (and no 7s), and the other has 7s (and no 1s). Neither have 4s. Which *pelog* version is used in a piece depends on its *pathet*. The melodies of the *gender* instruments are complex – a performer must learn many traditional melodic patterns (*garap*), and know which patterns to pull out of this 'pool' for any given traditional piece. Experienced musicians also create their own *garap*. Some will teach them to their students, contributing them to the pool, and partly for this reason there are regional differences in the *garap* perceived to be appropriate for any given traditional gamelan piece.



Fig 1.14: Gambang (*slendro*; *pelog* version not pictured)

The *gambang* consists of wooden keys, spanning four octaves, placed over a hollow wooden body, struck with two wooden beaters. Like *gender*, each gamelan set has one *slendro* and two *pelog* versions of *gambang* – one *pelog* version has 1s (and no 7s), and the other has 7s (and no 1s). Neither have 4s. Some gamelan sets, however, have just one *pelog* version, and extra keys, so that the keys of the 1s and 7s can be interchanged according to the *pathet* of the piece. The *gambang* plays elaborate melodies which, like the *gender*, come from a pool of *garap*. Most *gambang* patterns end with a decoration of, and emphasis on, the final note (the strong note) of each *gatra* (bar) or *gonggan* (gong note at the end of a line or cycle).



Fig. 1.15: *Rebab*

The *rebab* (a bowed two-string, vertical fiddle), is often considered the melodic leader of the ensemble; it plays a decorated *balungan* with figures loosely comparable to standard Western ornamentations (such as anticipation notes, accented and unaccented passing notes). The style and intricacies of the decoration is unique to the performer.



Fig. 1.16: Siter



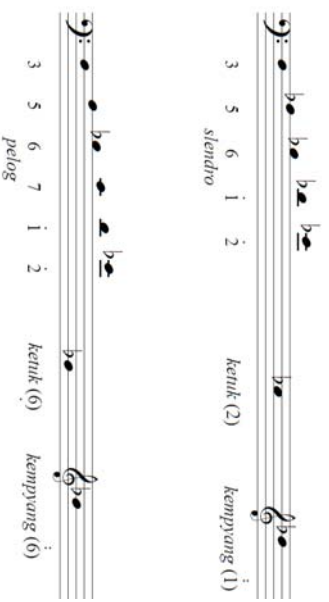
Fig. 1.17: Suling

Like the *rebab*, *gender* and *gambang*, the *siter* and *suling* instruments are played by musicians extensively trained in traditional practice. The *siter* is plucked by the performer’s thumbnails, and a single instrument has both scales on it – the performer flips its legs around and turns it upside down for the other scale. The *suling* plays intermittently, at the discretion of the performer, usually in its higher octave, in free time, which is unique amongst gamelan instruments. The *slendro suling* has four finger holes and the *pelog suling* five finger holes (to include 7 but not 4). As with the other *garap*-playing instruments, melodies can be pulled out of a conventional pool, while master musicians may create their own as well.

Structural instruments and drums



Fig. 1.18: *Kenong* (large pots; top half of photo – *pelog*; bottom half – *slendro*); *ketuk* (small pot, has a flat top) and *kempyang* (small pot, has a rounded top). [The *pelog* pair of *ketuk/kempyang* is in the middle-left of the photo, the *slendro* pair is diagonally across, somewhat obscured]

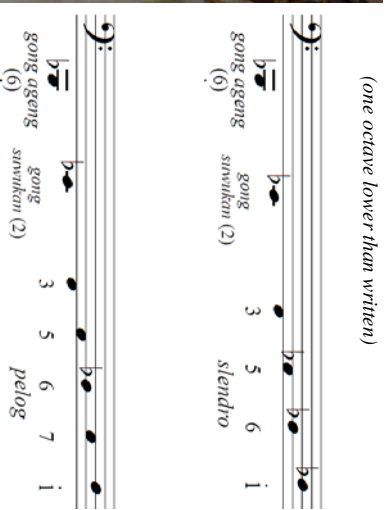


Kenong are a set of pots, similar in shape to *bonang* pots, but larger. They are suspended by cord over a hollow wooden body, and are struck by a wooden beater wound with cord to slightly soften the tone – like a *bonang* beater, but larger. Also, like *bonang*, the performer strikes the small boss on the top of the pot. There is a *kenong* for each note of the two scales, and the performer strikes the one that matches the appropriate *balungan* pitch at specific structural points according to the piece's form. The register of the *kenong* is a single octave, which crosses the higher half of the *demung* register and the lower half of the *saron* register.

The *ketuk* and *kempyang* are often, but not always, played by the *kenong* player. They too mark specific structural points according to the piece's form. A *pelog* pair of *ketuk* and *kempyang* comprise the notes 6, two octaves apart – the *ketuk* at the register of the *slenthem* and the *kempyang* at the register of the *saron*. A *slendro* pair comprise a 2 (*ketuk*) at the register of the *demung*, and a 1 (*kempyang*) at the register of the *peking*. These are struck by the same beaters as *kenong*.



Fig. 1.19: *Gong ageng* (often just called *gong*), *kempul*, *kendhang*



The *gong* is the large, black gong on the far side of the gong frame, and the *kempul* are the other smaller gongs. The *gong* is struck with a heavy, round, well-padded beater which produces a very low, deeply resonant 6, at the register one octave lower than the *slenthem*'s low 6. Conventionally, the *gong* marks the ends of significant lines or cycles.

The next lowest, the low-hanging *kempul* on the other side of the frame to the *gong*, is also often called *gong swuwikan*, and is used structurally in some traditional forms, especially in *wayang kulit* (shadow-puppet) performances. The other *kempul*, like *kenong*, mark specific structural points according to the piece's form. *Kempul* are struck with round beaters that are well-padded, though lighter and smaller in size to the beater specifically for the *gong*.

The *kendhang* are the different shaped hand-drums, placed on stands around the performer. They are played at both ends with the performer's palms and fingers, and are asymmetrical (the ends produce different relative tones). The *kendhang ageng* is the largest one, the *kendhang wayangan* is the next largest (facing forward in the photo), the *kendhang ciblon* is the smaller one (on the right hand side of the photo), and the *kendhang keripung* is even smaller, and sits on the floor in front of one of the other drums (it is obscured in the photo). The different drums are employed by the performer to evoke different moods, to cue tempi and structural changes, and so on. The *kendhang* player is considered the 'conductor' of the ensemble, to whom all the other players must listen in order to be in time with each other and to hear important sonic cues.

Every gamelan-maker tunes the notes of their instruments differently, i.e. different sets of instruments produce different pitches when like notes (for instance, *pelog* 1s) are compared. Generally, these pitches are roughly around the same pitch area. Within a gamelan set, usually the *pelog* 4 and the *slendro* 5 are the same as each other, as are the *pelog* and *slendro* 6s.

However, regional differences occur and in some cases the scales will share similar 2s as well; or similar 5s instead of similar 6s, with similar *pelog* 7s to *slendro* 6s.¹⁵ Generally speaking, between adjacent pitches, *slendro* contains wide ‘seconds’ and narrow ‘thirds’ while *pelog* comprises narrow ‘seconds’ and wide ‘thirds’ (McDermott, 1986), compared to Western equal temperament. To give an idea, the pitches of the instruments of Gamelan Padhang Moncar are (measured with electronic tuner):

	1	2	3	4	5	6	7
<i>Pelog</i>	D-15c	Eb+20c	F-50c	G+35c	A-35c	Bb-20c	B+35c
<i>Slendro</i>	C+25c	D+50c	F-10c		G+35c	Bb-20c	

Fig. 1.20: Pitches of the instruments of Gamelan Padhang Moncar

The sizes between adjacent intervals is thus:

	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 1 (next octave)
<i>Pelog</i>	135c	130c	285c	130c	115c	155c	250c
<i>Slendro</i>	225c	240c		245c	245c		245c

Fig. 1.21: Intervals between the pitches of the instruments of Gamelan Padhang Moncar

This can be observed by the placement of pitches in relation to an equal tempered chromatic scale:

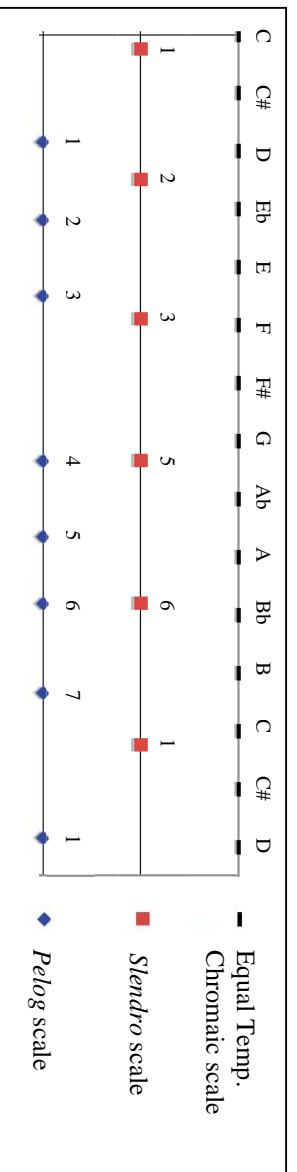


Fig. 1.22: Graphic representation of the pitches of the instruments of Gamelan Padhang Moncar

Thus, I usually represent them on the staff as follows (the same as I have represented them in my instrument profiles above), avoiding unnecessarily complex microtones. Because different

¹⁵ Sumarsam (2002), p. 5. Consequently, a single traditional gamelan piece can therefore sound similar, subtly different, or quite different on different gamelan sets, and this has become a significant aspect of the aesthetics of gamelan music.

pitches are produced on different sets of instruments, I feel it is more appropriate to approximate the pitches for straight-forward note reading and analysis, and place the cipher numbers underneath the scored pitches for the performers to follow:

	1	2	3	4	5	6	7
<i>Pelog</i>	D	E _b	F	G [#]	A	B _b	C
<i>Slendro</i>	D _b	E _b	F		A _b	B _b	

Fig. 1.23: Western approximation of Gamelan Padhang Moncar pitches

An exception is when I employ both scales in a single piece – I notate *pelog* 2 as an E (natural) to differentiate between *pelog* and *slendro* 2s, and *slendro* 3 as a G_b to differentiate between *pelog* and *slendro* 3s. Another exception is specific to my piece *Wigena*, and I give my reasons for this in the piece’s extended programme note (see Chapter 3 Section II).

It is important to consider the social and cultural context of a Javanese gamelan performance:

Besides its independent function (i.e. *klenengan*, a performance to be held for its own sake), gamelan is an essential accompaniment for dramatic forms, such as dance, drama, and *wayang* performance. Whether accompanying a theatrical form or not, gamelan is performed in Java in many different contexts. The most common involve gamelan in ritual celebrations (e.g. wedding receptions, circumcisions, village ceremonies, etc.). As history has evolved and technology advanced, other contexts have been created, such as performances for [Indonesian Independence Day], broadcasts from radio or television stations, etc... At any rate, the concept of a “music concert” in which the music is listened to attentively... is still alien in gamelan performance.¹⁶

However, new contexts are being developed and concerts of contemporary music for gamelan are rapidly becoming more frequent. The late Sapto Raharjo was instrumental in this development – he devoted his life to promoting contemporary composition for gamelan. He was the initiator and director of the Yogyakarta International Gamelan Festival, at which gamelan ensembles from all over the world are invited to perform. Furthermore, through Indonesia’s arts academies such as STSI (*Sekolah Tinggi Seni Indonesia*), contexts for *kreas barnu* (new creations) are being generated. Indonesian composers are encouraged to create new approaches to gamelan composition, often disregarding traditional idioms.

When asked in an interview on Radio New Zealand whether or not gamelan *had* to be played traditionally, Gamelan Padhang Moncar’s director and teacher, Budi S. Putra, responded, “But now you can do *anything* to the gamelan, you can put Western instruments, you can put other

¹⁶ Sumarsam (2002), p. 23.

instruments in gamelan. But twenty years ago, that's still different – they had to play in tradition.”¹⁷

For further information on Javanese gamelan, curious readers can find extensive guides and textbooks, such as Pickvance (2005) and Spiller (2008), and also older publications such as Sumarsam (2002), Lindsay (1992), Sorrell (1990).

¹⁷ Yee (2010), Radio New Zealand Asian Report on 6 April 2010

IV. Instruments of the Balinese gamelan (*Gong Kebyar*)¹⁸

The use of Balinese gamelan in my composition portfolio occurs only in two electroacoustic pieces, *Mernecolion* and *Podróže*, and in none of the scored instrumental/vocal compositions. For this reason, I only give a very brief introduction to the instruments and traditional music, bypassing such complex topics as form and technique (see Tenzer, 2000 for a comprehensive study; and also Spiller, 2008) and I do not provide analyses of tunings and scales.



Fig. 1.24: *Reong* (left side), *ugul* (taller instrument in background), and pairs of *gangsas* – *pemade* (foreground) and *kanthian* (middle row)



Fig 1.25: Pair of *Jublag*

¹⁸ All photos taken by myself. These instruments are part of Gamelan Taniwha Jaya and are owned by composer Gareth Farr.



Fig. 1.26: Pair of *Jeggagan*



Fig. 1.27: *Gongs (Gong gede* – big gong on the right, *kempur* – medium sized gong on the left, *klentong* (also known as *kemping*) – small gong on the right)



Fig. 1.28: *Kempit*



Fig. 1.29: *Ceng-ceng*

Gong kebyar instruments comprise a 5-note scale, *pelog selisir* – 1, 2, 3, 5, and 6. Typically, the two-octave ranged *ugal* plays the main melodic line of the piece, which is the basis for the ensemble's multi-tempo stratification. The *ugal* is struck with a hard wooden mallet, and, like *balungan* instruments in Javanese gamelan, the previous note is dampened as the next note is struck. All of the other metallophones are paired, and 'gendered', for the purposes of tuning.

The 'male' *jublaj*, *jegogan*, and *gangsra* (*pemade* and *kantilan*) instruments of each pair are tuned together, and their 'female' counterparts are tuned together, with a small difference in pitch between the two 'genders' (the female instruments are tuned a little lower), thus when the ensemble strikes a like note, the two very close pitches cause a beating. This explains the ensemble's shimmering sonic effect. (The *ugal* is usually tuned to the female pitch.) Like Javanese gamelan, there is no universally accepted model of tuning; gamelan-makers tune their instruments to their own sets of pitches. Furthermore, the rate of beating is not arbitrary, but counted by the gamelan-maker to produce a beating either specific to that maker, or for that specific set of instruments.

The one-octave ranged *jublaj* play a reduction of the *ugal* melody, often in a kind of contrary motion as the instrument has to compensate for having the range of only one octave. It is struck with a hard, though padded mallet, and its notes are dampened as its next note is struck. The one-octave ranged *jegogan* plays an even further reduced, skeleton version of the *ugal* melody, and is struck with soft, heavily padded beaters. The *jublaj* is the same range as the upper octave of the *ugal*, and the *jegogan* is the same range as the lower octave.

The two-octave ranged *gangsra* instruments (*pemade* – one octave above *ugal*, and *kantilan* – two octaves above *ugal*), decorate the *ugal* part with their own resultant melody of interlocking rhythms (*kotekan*), created by splitting parts between two positions, *sangsih* and *polos* (thus requiring four instruments - a male and female pair playing *sangsih* and a male and female pair playing *polos*). They are struck with hard beaters and dampened quicker than the other instruments, to allow for crisper articulation of the faster, higher parts. Also decorating the *ugal* melody is the *reong*, a line of 12 pots played by four players, whose parts also interlock. These are struck by lightly padded wooden beaters, and although the performance technique is quite different, they are similar to Java's *bonang*.

The *kempuli* is struck with a wooden beater that has been lightly padded, and held, muted, by the performer's other hand. It marks the downbeat, like a metronome, keeping every player in sync. The *ceng-ceng* are small cymbals which are clashed together in some pieces for energetic percussive effect. As with Javanese gamelan, the *kendhang* directs the tempo and gives

structural cues, and the gongs mark the colotomic structure of the piece's form. Here is an example of a traditional, standard repertoire piece, in cipher notation:

<i>Gangsa</i>	5-32	-2-2	-2-2	-2-2	-6-3	-2-5	-1-3	-6-2
	5-32	1-1-	1-1-	1-1-	1-5-	5-3-	3-2-	2-1-
<i>Ugal</i>	5	2	1	2	1	5	3	2
<i>Jublag</i>	5		1		1		3	
<i>Jegogan</i>	5				1			
<i>Kempli</i>	+	+	+	+	+	+	+	+
<i>Gongs</i>	G (<i>gong gede</i>)							
==								
<i>Gangsa</i>	-56-	56-5	-65-	656-	5-3-	23-2	-32-	323-
	1-23	-23-	32-3	2-23	5-61	-61-	16-1	6-61
<i>Ugal</i>	1	5	3	6	5	2	1	3
<i>Jublag</i>	1		3		5		1	
<i>Jegogan</i>	1				5			
<i>Kempli</i>	+	+	+	+	+	+	+	+
<i>Gongs</i>	P (<i>kempur</i>)							

Fig. 1.30: Excerpt from *Pengipuk*, from *Puspanggih* (Trad.), as performed by Gamelan Taniwha Jaya¹⁹

The above cipher notation can be reinterpreted into Western notation, showing the pitches of the gamelan instruments (according to a Western approximation of Gamelan Taniwha Jaya's instruments, measured with an electronic tuner) and the placement of the instruments outlining the colotomic structure:

¹⁹ See Appendix IV for a recording of *Pengipuk*.

Gangsaas:

Kantilan

Pemada

Ugal

Jublag

Jegogan

Colotomy

Detailed description of the Gangsaas score: The score consists of six staves. From top to bottom: *Kantilan* (treble clef), *Pemada* (treble clef), *Ugal* (bass clef), *Jublag* (bass clef), *Jegogan* (bass clef), and *Colotomy* (bass clef). Each staff contains rhythmic notation with fingerings (1-5) written below the notes. The *Colotomy* staff has a '5' at the beginning and a '1' at the end, indicating specific rhythmic patterns or rests.

Detailed description of the Pengsipek score: The score consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. Both staves contain rhythmic notation with fingerings (1-5) written below the notes. A bracket on the left side of the score groups the two staves together.

Fig. 1.31: Excerpt from *Pengsipek* in staff notation

V. Chinese *yangqin*²⁰

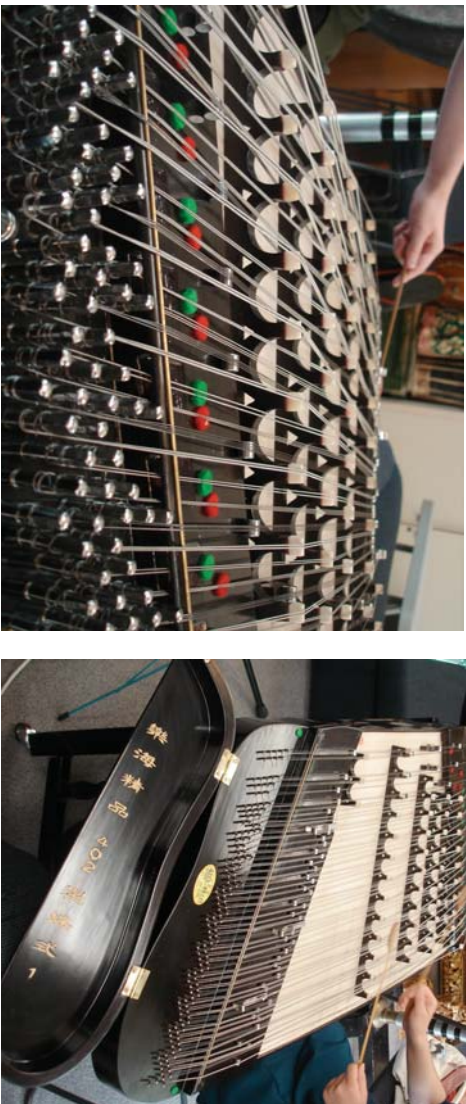


Fig. 1.32: Close-up and profile photographs of a Chinese *yangqin*

The Chinese *yangqin* (扬琴), which appears in two pieces in my composition portfolio, is a trapezoid-shaped dulcimer instrument that suspends strings over bridges on a resonating wooden body, and is struck by two thin hammers padded by rubber on one side – one hammer for each hand. Traditionally, the padded side strikes the strings (for a softer sound), though in less conventional standard repertoire, the other side is used for a harsher sound (Yang, 1993). The wooden boards on the two outer sides of the instrument may also be struck for percussive effect. This can be found in standard repertoire such as *Climbing Mountain to Kill the Tiger* (Wang Hui, pers. comm., 2010; see Appendix IV). In the above pictures, these wooden boards are open, revealing the pins for the strings (left hand side of player), and the tuning pegs (right hand side of player) – these boards are conventionally closed for performances.

There is a little controversy over the origins of the *yangqin*, though it is widely held that a dulcimer instrument was originally introduced into China from the Middle East during the Ming dynasty, as early as the 15th century or as late as the 17th century, and the *yangqin* thus evolved from this common ancestor of Iran's *santur* (Jiang, 1970; Moule, 1989). Although smaller *yangqin* do exist with a narrower range (Yang, 1993), a modern-day *yangqin* spans chromatically²¹ over four octaves, typically thus:

²⁰ *Yangqin* photos by Thomas Lambert and reproduced here with his permission.

²¹ This is unusual amongst Chinese instruments. Most others are more comfortable in a pentatonic scale (Body, pers. comm., 2010).



Fig 1.33: Range of the *yangqin*

The instrument is performed mostly with *lun*, a tremolo technique, rapidly alternating between pitches by striking with the hammers with both hands. *Dunyingin* (staccato effect) can be employed by dampening a struck string with the performer's hand, although some resonance will remain (Yang, 1993). Indeed, its resonance and long decay (like a harp) contributes to its characteristic sound. Although it is a solo instrument, with a large traditional solo repertoire, the *yangqin* also plays an accompanying role in pieces that showcase other traditional instruments, fulfilling a similar role to that of the piano in the West. *Yangqin* has also been accompanying Western solo instruments, like violin or guitar, for over a century (Moule, 1989).

Conventionally, *yangqin* music is notated in cipher notation similar to that for gamelan but more complex (see below), though now, it can also be notated in Western staff notation, as many *yangqin* players are conservatory trained. The *yangqin* also has a repertoire of adapted works from other instruments – traditional and Western. The following excerpt is from Guo Min Qing's arrangement for *yangqin* of composer Cao Ling's 天山诗画 (*Festival of the Tianshan Mountains*). The key of the piece is explained by the '1=D' (i.e. D major).

1=D

雄伟壮观、自由地

曹玲曲
郭敏清改编

3 > 4 > 5 - - 5. 1 5 1 5 0 4 3 2 3 4 5 1 5 1 3 5 1 3 5 1 3 5 0 3 4 > >

f 3 4 5 2 5 7 2 5 7 2 7. 1 5 1 5 0 4 3 2 3 4 5 1 5 1 3 5 1 3 5 1 3 5 0 3 4 > >

5 - - 5. 6 4 5 3 4 3. - - - 6 7 1 - - - 1. > >

5 2 5 7 2 5 7 2 7 - - 7 3 7 3 5 7 3 5 7 3 6 7 6 3 6 1 3 6 1 3 6. 7 1

mp f

Fig 1.34: Excerpt from Cao Ling, arr. Guo Min Qing: *Festival of the Tianshan Mountains*, Republic of China. Zhao

Yan Fang, Xiamen University (c.2000)

See Appendix IV for recordings of *yangqin* standard repertoire, including a performance of the piece notated above, in Wang Hui's own style.

VI. Asian influences in Western art music

The purpose of this section is to outline the context in which my cross-cultural compositions are received, and to put forward a taxonomy of approaches to cross-cultural composition. Much of my music is influenced and informed by Asian music and Asian musical instruments, and it is this influence on Western art music that I focus on here – see Appendix II for a review of the influence of folk and non-Western music in Western art music since the Classical era.

Specifically, I will consider seminal twentieth century composers Claude Debussy, Maurice Ravel, Olivier Messiaen, Benjamin Britten and Steve Reich – *all are Western art music composers trained in Western composition practice*. These composers were influenced by the sounds of Asian music, and to varying degrees allowed this influence to manifest in their own Western art music. Furthermore, see Appendix I for a specific case study on Lou Harrison, a significant figure in cross-cultural composition in the twentieth century. Harrison was a major catalyst in this domain because many of his compositions used traditional Asian instruments with or without Western instruments.

French composers Debussy and Ravel “were profoundly impressed in their youth by the performance of oriental and north African music at the Paris World Exhibition of 1889,”²² including hearing the sounds of Javanese gamelan. Debussy²³ especially was excited by the gamelan’s exotic, non-Western sounds, claiming that it “contained all gradations, even some that we no longer know how to name, so that tonic and dominant were nothing more than empty phantoms of use to clever little children.”²⁴ His *Pagodes* from *Estrampes pour piano* (1903), for instance, employs pentatonic systems and stratified tempi²⁵ that evoke the sounds of the gamelan:

²² Stuckenschmidt (1969), p. 165.

²³ Debussy also shows influence of European folk music – most profoundly in his pieces *La Soiree dans Grenade* (from *Estrampes*, 1913) and *Iberia* for orchestra (1905-1908) – both pieces have a Spanish character; and also in *La petite bergere* from *La boîte à joujoux* (1913) and *Rondes de Printemps* (1905-9) – both pieces have a French character. Indeed, *Rondes de Printemps* comprises two French folk tunes, *Nous n’irons plus au bois* and *Do, do l’enfant do* (Brown, 1993).

²⁴ Debussy quoted in Ross (2009), p. 44.

²⁵ The higher the pitch, the faster the voice. The lower the pitch, the slower the voice.

Modérément animé
 m.f.
 PIANO
 pp m.d.
 2^{da}
 Rit.
 a Tempo
 Rit.
 détachement et presque sans nuances

Fig. 1.35: Claude Debussy (first half of first page): *Pagodes* movement from *Estampes* (1903), published by Durand & Co., Paris, France (1903) p. 1

pp
 Rit.
 a Tempo
 Rit.

Fig. 1.36: Claude Debussy (first half of seventh page): *Pagodes* movement from *Estampes* (1903), published by Durand & Co., Paris, France (1903) p. 7

This effect is also evoked in moments in Ravel's orchestral work *Ma Mère L'oye* (1911), which also employs pentatonic scales and stratified tempi:

The image displays a page of a musical score for Maurice Ravel's "Impératrice des Pagodes" movement. The score is arranged in a traditional orchestral format with multiple staves. From top to bottom, the staves are labeled as follows:

- pté P1.** (Percussion)
- 4th P1.** (Percussion)
- Hr** (Harp)
- Cor A.** (Cor Anglais)
- Cl.** (Clarinets)
- Bass.** (Bassoons)
- Cora.** (Cornets)
- Xylo.** (Xylophone)
- Clarineta.** (Clarinets)
- Harp.** (Harp)
- 1st VOLS Div.** (Violins I, Divisi)
- 2nd VOLS Div.** (Violins II, Divisi)
- 3rd VOLS Div.** (Violas, Divisi)
- Alt. Div.** (Alto Saxophones, Divisi)
- voles** (Violoncelles)
- G. B.** (Double Basses)

The score features complex rhythmic patterns, particularly in the percussion and string sections, with many notes beamed together. The woodwinds and brass sections also have intricate parts. The harp part is notably active, with many chords and arpeggios. The overall texture is dense and rhythmic, characteristic of Ravel's style.

Fig. 1.37: Maurice Ravel (tenth page): *Laidieromette, Impératrice des Pagodes* movement from *Ma Mère L'oye* (1911), published by Durand & Co., Paris, France (1912) p. 19

Moreover, throughout this movement, Ravel's "combination of xylophone, glockenspiel and celeste, variously supported by cymbal, harp and string pizzicato figurations, so uncannily

suggests a gamelan orchestra,²⁶ though no traditional Indonesian techniques or musical materials are explored in the piece.

The piano pieces in Debussy's *Childrens Corner* (1906-8) amongst others comprise melodies built from pentatonic scales, influenced by the sounds of oriental music. Stuckenschmidt (1969) proposes that they are “rationalised or stylised versions of oriental scales such as the Javanese *slendro* and *pelog*.”²⁷ Furthermore, moments in Debussy's *Preludes* (1909-1913) evoke the sounds of the gamelan. I feel that the low octave notes evoke the sounds of the gongs, the semiquaver melody-in-octaves are reminiscent of *gambang* performance technique, and the parallel octaves are reminiscent of *balungan* melodies performed in three octaves by *slenthem*, *demung* and *saron* on each downbeat:

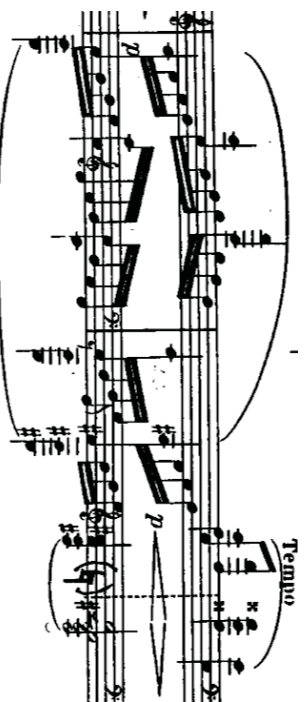


Fig. 1.38: Claude Debussy (ob. 43-44): *Le sons et les parfums tournent dans l'air du soir* from *Preludes* (Book 1) (1909-1910), published by United Music Publishers Ltd., UK (1910) p. 15

Messiaen first heard a gamelan perform in 1931 (Hill & Simeone, 2005) and, like other composers such as Benjamin Britten and Lou Harrison, he was inspired by the sounds of gamelan to incorporate robust, dominant ensembles of keyed and mallet percussion inside larger ensembles – like a ‘gamelan section’ of an orchestra. Consider Messiaen's *Turangalila-Symphonie* (1946-8), *Réveil des Oiseaux* (1953), *Oiseaux Exotiques* (1956) and *Couleurs de la Cité Céleste* (1963) – Messiaen even went as far as to name this section the ‘gamelang’ section in *Turangalila-Symphonie* (Sorrell, 1992). Each make extensive use of their comprehensive percussion sections:

²⁶ Cooke (1998), p. 9.

²⁷ Stuckenschmidt (1969), p. 165.

The image displays a page of a musical score for the ballet *Coulours de la Cité Céleste* by Olivier Messiaen. The score is for the first half of the third page and includes parts for the following instruments: 1^{re} Clar., 2^e Clar., 3^e Clar., Piano, Xylo., Xylo., Xylo. (Xylo. is listed three times), Mar., Cenc., Cloches, and Gongs. The score is written in 2/4 time and features complex rhythmic patterns, including triplets and sixteenth-note runs. A section titled "Molona à tête jaune" is marked with a box containing the number 51. The score includes various dynamic markings such as *pp* and *p*, and articulation marks like accents and slurs. The percussion parts are particularly prominent, with the Maracas (Mar.) and Gongs parts showing complex rhythmic patterns.

Fig. 1.39: Olivier Messiaen (first half of third page): *Coulours de la Cité Céleste* (1963), published by Alphonse Leduc & Co., France (1966) p. 3

Britten's imitation of the sounds of gamelan in his ballet *The Prince of Pagodas* (1957) – with a percussion section of vibraphone, celeste, piano, harp, xylophone, bells, tomtoms and gongs – is well-known, and is based on traditional Balinese material (Britten & Cranko, 1957; Sorrell, 1992):

The image shows a page of a musical score for the percussion section of Benjamin Britten's 'The Prince of the Pagodas'. The score is arranged in a multi-stem format. The instruments listed on the left are: Tam-tam, Gong, Vibra., Glock., Perc., Cel., and Piano Duet. The notation is dense, with many notes and rests. Dynamic markings include 'cresc.', 'f', and 'p'. There are also performance instructions like 'always marked' and 'always sustained'. The score is written in a key signature of one flat and a 3/4 time signature.

Fig. 1.40: Benjamin Britten (percussion section): *The Prince of the Pagodas* (1957), published by Boosey & Hawkes, UK (1989) p. 253

Britten's *Curlwew River* (1964) is informed and influenced by his exposure to traditional Japanese art forms such as *nō* theatre and *gagaku* (Japanese court music) while visiting Japan in 1956 (Cooke, 1988). Fascinated by the music of the *shō*, a traditional Japanese mouth organ capable of performing chords of five or six notes, Britten studied the performance techniques of the instrument²⁸ and incorporated this technique into the chamber organ part of *Curlwew River*:

The image shows a page of a musical score for the organ part of Benjamin Britten's 'Curlwew River'. The score is written for a chamber organ. It features complex, sustained chords. A performance instruction 'always sustained' is visible. The score is written in a key signature of one flat and a 3/4 time signature.

Fig. 1.41: Benjamin Britten (organ part): *Curlwew River* (1964), published in Cooke (1988), p. 233

²⁸ A succession of chords constantly evolving, in which the beginnings and endings of the chords are blurred by slipping one's fingers away from the fingerholes employed and slipping them onto the next.



Fig. 1.42: “*Britten in Japan (1956) having a lesson in shō technique*” from Cooke, 1988 p. 232

Britten was faithful to the instrument’s conventional harmonic language and attempted a degree of authenticity in his synthesis of cross-cultural musical influence. In his article, Cooke (1998) maps the various traditional *shō* chords onto Britten’s chamber organ part and the transpositions of those chords in Britten’s music:

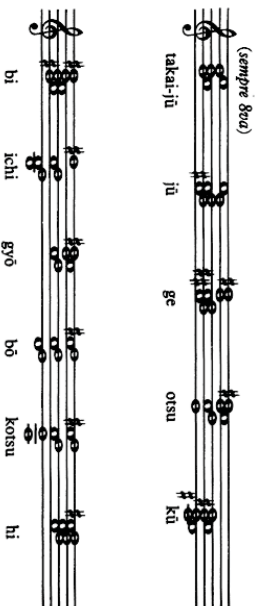


Fig. 1.43: Traditional *shō* chords from Cooke, 1988 p. 233

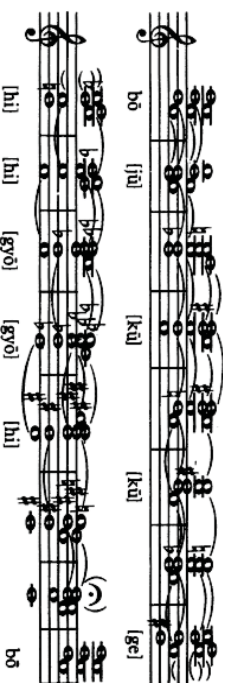


Fig. 1.44: Mapping the traditional chords onto Britten’s organ part in *Curlew River* from Cooke, 1988 p. 233

Messiaen's *Sept Haikai* (1962) was also inspired by the Japanese music the composer heard when in Japan in the early 1960s. The eight-part violin writing, especially in its fourth movement, *Gagaku*, evokes the sound of the *shō* through sustained chords,²⁹ and the musical material in the trumpet evokes the sound of the *hichiriki*, a Japanese double-reed wind instrument. Again, the composer's selection of percussion – bells, gongs, xylophone and marimba – evokes the timbres of gamelan:

The image displays a page of a musical score for Olivier Messiaen's *Sept Haikai*. The score is arranged in ten horizontal staves, each representing a different instrument or percussion element. From top to bottom, the staves are labeled: Perc. (Percussion), 2 Hrn. (Two Horns), Clari. (Clarinet), Pic. Clar. (Piccolo Clarinet), Trp. (Trumpet), Viol. (Violin), Cymb. (Cymbals), Gong, and C. G. C. T. (Cymbals, Gong, Cymbals, Gong, Triangle). The notation includes various rhythmic values, dynamic markings (such as *mf*, *f*, *pp*), and articulation marks. The Percussion staff features complex rhythmic patterns with many notes beamed together. The Violin staff shows sustained chords, characteristic of the *shō* mentioned in the text. The other instruments have more melodic and harmonic lines. The score is written in a standard musical notation style with a key signature of one flat and a time signature of 3/4.

Fig. 1.45: Olivier Messiaen (second page); *Gagaku* from *Sept Haikai* (1962), published by Alphonse Leduc & Co., France (1966) p. 47

Prior to the 1970s, American minimalist composer Steve Reich had read *Music In Bali* – Colin McPhee's seminal description of Balinese gamelan – and had listened enthusiastically to recordings of Balinese gamelan. After returning to America from West Africa (see Appendix D), Reich studied gamelan in the summer of 1973 at the University of Washington at Seattle,

²⁹ This technique is also used by Edgard Varèse in *Nocturnal* (1961) (see Griffiths, 1971).

and in the summer of 1974 at the Center for World Music in Berkeley (Schwarz, 2008). Schwarz identifies the influence of gamelan textures in Reich's *Music for Mallet Instruments, Voice and Organ* (1973), despite the fact it was composed before Reich began his gamelan studies, and that this influence continued to present itself in pieces such as Reich's *Music for 18 Musicians* (1974-6). In his own words, "I studied Balinese and African music because I love them, and also because I believe that non-Western music is presently the single most important source of new ideas for Western composers and musicians."³⁰ Reich's time studying gamelan continued to influence and inform his compositions. Take, for instance, his piece *Tehillim* (1981), in which four Psalms are set in Hebrew, Reich himself identifies "two forces at work: the long cycles of [Balinese gamelan] and my study of cantillation."³¹

Michael Tippett's *Triple Concerto for Violin, Viola, Cello and Orchestra* (1979) combines elements of both Balinese and Javanese gamelan (see Clarke, 2000). While the first and final sections of the work are reminiscent of Balinese *gong kebyar*, the "Very slow, calmer still" section evokes the sounds of Javanese gamelan with its approximation of *pelog* scale, and its movement of the three solo instruments in parallel octaves, like a *balungan*. Furthermore, moments of pizzicato strings are reminiscent of Balinese *korekan* or Javanese *imbal-imbalan* techniques:

Fig. 1.46: Michael Tippett (string section only): *Triple Concerto for Violin, Viola, Cello and Orchestra* (1979), published by Schott & Co., UK (1981) p. 87

³⁰ Reich (2002), p. 69.

³¹ Reich quoted in Schwarz (2008), p. 88.

These composers have been influenced by Asian music to varying degrees. For some, Asian musical influences inspired a specific choice of instruments (for instance, a large keyed and mallet percussion section inside a larger ensemble). For other composers, Asian musical materials made their way into larger musical structures. For other composers still, studying the traditional music itself and its theory generated musical material for new composition. These composers did not compose for traditional musicians and their instruments – though this is now a developing trend, since such works by prominent Western art music composer as Neil Sorrell's *Gendhing Kencaha*³² (1983) for gamelan and Michael Nyman's *Times Up* (1983) for gamelan, and since the music of Lou Harrison (see Appendix I).

A taxonomy can be extrapolated from the various approaches of composers:

1. Incorporating folk tunes (or melodies based on folk tunes) in a Western art music piece (e.g. Stravinsky's *Rite of Spring*, Schubert's *Sonata in C major "Reliquie"* – see Appendix II)
2. Imitating the timbres of non-Western music through choice of instruments in a Western art music piece (e.g. Messiaen's 'gamelan sections' of the orchestra)
3. Imitating the sounds of non-Western music through adopting their modes, scales, rhythmic ideas, and so on, in a Western art piece (e.g. Debussy's *Pagodes*)
4. Appropriating non-Western material for a Western art music piece through transcription techniques (e.g. Body's *Melodies for Orchestra* – see Section I (this Chapter), or studying the music and composing using traditional techniques (e.g. *shō* technique in Messiaen and Britten; composing 'out from' a *balungan* in my own piece *Wigena*).

³² Sekar Pethak (1986), *A Rag Bag of English Pieces* (USA: American Gamelan Institute). This is an interesting work in which *pelog* and *slendro* are combined into a composite scale, like in Body's *Polish Dances* (see Chapter 2 Section I) and my work *Elegy*. This allows for a greater harmonic vocabulary because there are more pitches to compose with – this is especially pertinent in the middle section of Sorrell's piece, which comprises contrasting chords. The *suling* in his piece, through its slow, breathy, 'mediative', glissandi tones, is much more reminiscent of Japanese *shakuhachi* than Javanese *suling*, and the cyclic material that the piece comprises owes as much to ground bass and other Western art music methods as it does to traditional Javanese gamelan conventions.

5. Including recordings of non-Western music in an instrumental Western art music piece (e.g. Body's *Arum Manis* – see Chapter 2 Section III) or in an electroacoustic composition (my own pieces *Mernecolion* and *Podróže*)
6. Composing *for* the non-Western instrument(s), often in combination with Western instruments, though in a Western art music context, that is, as a work of chamber music (e.g. Jack Body's *Campur Sari* – see Section I (this Chapter); my own pieces *Melody for Violin and Yangqin*, *Tabula Rasa* and *Cycles*, *Shadows*)
7. Composing *for* the non-Western instrument(s), perhaps in combination with Western instruments, in the context of the traditional music, or heavily inspired by authentic traditional performances and conceived as *in that style*, even though it may develop that style (e.g. Lou Harrison's *Bubarran Robert*, see Appendix I; my own pieces *Ketawang Anggun*, *Slendro Manyura*, *Ladrang Santai*, *Slendro Sanga* and *Gendhing Tarikan Pelag Nem*) – or, in unfortunate cases, expose the composer's naïveté.

Each position in the list above essentially outlines a different level of awareness of the 'other' music, or engagement with the 'other' music. Each position may result in a successful composition, and through each one, composers explore different possibilities and have different musical goals.³³

Below I offer a chart that generalise my approaches to the composition of the works in my portfolio and the extent to which they are cross-cultural or influenced by the music outside of the Western art music tradition (for example folk music or non-Western music).

	Cross-cultural Approach	Taxonomy of Cross-Cultural music composition
Piece	Instrumentation (see Preface to <i>Composition Portfolio</i> and Chapter 3)	
<i>Cycles</i> , <i>Shadows</i>	Clarinet, bassoon, viola, Javanese <i>gender</i>	6
	Assimilate the non-Western instrument into a Western chamber music context	Composing for non-Western instruments using Western compositional techniques

³³ See Appendix IV for a table of how my compositions and their approaches fit into this taxonomy.

<i>Wigena</i>	String quartet, Javaneese <i>gong</i> , <i>kempul</i> , <i>kenong</i> and <i>rebab</i> solo	Assimilate the non-Western instrument into a Western chamber music context	4
<i>Melody for Violin and Yangqin</i>	Violin and Chinese <i>yangqin</i>	Assimilate the non-Western instrument into a Western chamber music context	6
<i>To –</i>	Javaneese gamelan player (male voice and <i>gender</i>)	Inspired by Javaneese music and composed in a style that is similar, though my own	6 - 7
<i>Ketawang Anggun Slendro Manyura</i>	Javaneese gamelan with viola solo	Assimilate the Western instruments into a Javaneese gamelan context	7
<i>Ladrang Santai Slendro Sanga</i>	Javaneese gamelan with <i>gerong</i> and guitar solo	Assimilate the Western instruments into a Javaneese gamelan context	7
<i>Gending Tarikan Pelog Nem</i>	Javaneese gamelan with accordion solo and clarinet solo	Assimilate the Western instruments into a Javaneese gamelan context	7
<i>Mernecolion</i>	Electroacoustic	Involve recordings of non-Western instruments, essentially as sound sources, in electronic music	5
<i>Podróže</i>	Electroacoustic	Involve recordings of non-Western instruments, essentially as sound sources, in electronic music	5
<i>Elegy</i>	Piano and Javaneese gamelan	Create a metainstrument by combining together non-Western and Western instruments	6
<i>Tabula Rasa</i>	Chinese <i>yangqin</i> and live electronics	Create a metainstrument by combining together non-Western instruments and Western electronic media	6

<i>Primes</i>	Clarinet solo	Partly inspired by (European) folk music	1	Incorporating ideas from folk music
<i>After Clive Bell</i>	Piano solo	Inspired by cyclic, non-climactic music such as Javanese gamelan	3	Imitating the sounds of non-Western music through rhythmic ideas, cycles, lack of climax, stasis
<i>Outside my front door</i>	Electroacoustic	N/A	N/A	Not drawing upon cross-cultural practice

Fig. 1.47: Approaches and taxonomy of my compositions

Furthermore, the acculturation of non-Western countries to Western art music and its repertoire has been swift and prolific, and many well received ‘Western art’ pieces have been composed by composers of non-Western origins – consider such composers such as Tan Dun, Tōru Takemitsu, Chou Wen-Chung and the China-born, New Zealand-based Gao Ping. A recent concert of new music from the New Zealand String Quartet³⁴ featured composers Chinary Ung (of Cambodian descent) and his work *Spiral III* (1990), and Zhou Long (of Chinese descent) and his work *Song of the Ch’in* (1982), both for conventional Western string quartet. Western composers are far from holding a monopoly on cross-cultural composition.

Zhou’s *Song of the Ch’in* recasts the sounds of the *ch’in* (also spelled *gugin*, *guchin*), China’s ancient seven-string zither, across the four instruments of the string quartet. Characteristic sounds like fingernail plucking, extensive use of glissandi, tapping the instrument, and several styles of pizzicato evoke the sound of the instrument that inspired the work.³⁵

³⁴ New Zealand String Quartet, Friday 28 May 2010, Adam Concert Room, New Zealand School of Music (Kelburn Campus), Wellington.

³⁵ This is a development of a style exemplified in Chou Wen-Chung’s *Yü Ko* (1965) – a composition for chamber ensemble which is an adaptation of a solo *ch’in* piece of the same name by Mao Min-chung (c. 1280).

Violin I and II score, measures 52-57. The score features complex rhythmic patterns with various dynamics and articulations. Key markings include *rit.*, *ad lib.*, *ppp*, *pizz.*, *senza sord.*, *f*, *mp*, *mf*, *p*, and *Vivo (♩ = 126) arco*.

Violin I and II score, measures 57-63. The score continues with complex rhythmic patterns and dynamics. Key markings include *div. 1*, *mf*, *mp*, *p*, and *pizz.*.

Fig. 148: Zhou Long (bb. 52-63): *Song of the Chi in* (1982), published by Oxford University Press, USA (2002)

Ung's *Spiral III* is one of a series of pieces for a variety of Western chamber ensembles, in which textures and timbres play central roles; the melodic and rhythmic material 'spiral' in and out of several distinct timbres. Ung studied the traditional music of his own culture as well as Western art music, and this knowledge of both manifests in his original compositions. In *Spiral III* the music phases in and out of ordinary (*via sul pont* and *sul tasto*) timbral positions within robust, internal musical structures, and the textures he employs evokes the sounds of traditional Southeast Asian music:

Violin I, Violin II, Viola, and Violoncello score, measures 1-10. The score shows complex rhythmic patterns with various dynamics and articulations. Key markings include $\text{♩} = 56 (\text{♩} = 112)$, *mf*, *pizz.*, *senza sord.*, *f*, *mp*, *p*, and *ord.*.

CHAPTER TWO

ISSUES FACED BY CROSS-CULTURAL COMPOSERS

I. Participant observation¹

The important German philosopher Friedrich Nietzsche first invited his readers to reflect on *whether or not music can truly be fathomed in an academic fashion*² in his 1872 treatise, *The Birth of Tragedy*.³ In studying the music of another culture, Nietzsche's open question is even more significant. The ethnomusicologist and anthropologist John Miller Chernoff asks, "How can we bring something of a different order into our own world of understanding and at the same time recognize and appreciate it on its own terms?"⁴ Chernoff proposes that *participation* in the music of another culture is how this can be overcome. In his book *African Rhythm and African Sensibility* (1979), he writes, "My method of studying the music was to learn to play it myself,"⁵ becoming one of the first academics (Mantle Hood was another) actively involved in the learning of a traditional music, "beyond the limited participation practiced in most ethnographic research orientations ... a participant-observer often obtains a better sense of how the elements of a given context blend together into a larger configuration."⁶ The importance of participant observation is also stressed by Solís (2004), Johnson (2008), and Spiller (2008). Mantle Hood, who "advocated 'bimusicality' (the musical equivalent of 'bilingualism') as an approach to cross-cultural understanding through music,"⁷ acquired a gamelan set for the

¹ A 'participant observer' in ethnomusicological terms refers to one who studies the music *by learning to play it* – usually by learning to play it from a master musician trained in traditional practice of the music

² According to Nietzsche, "music is beyond rational understanding: it is too close to the basic mysteries and contradictions of existence; it touches and conveys realities for which words or logic are inadequate; it is, in Nietzsche's own words, 'a realm of wisdom... from which logicians are excluded'" (Chernoff, quoting Nietzsche, 1979, p. 2).

³ At that time Nietzsche was influenced by Arthur Schopenhauer's metaphysical view (along with, interestingly, the composer Richard Wagner) that the cosmos does not allow for human individuals to retain happiness for any extended period of time. Instead frustrations prevail so one must settle for the reprieve exclusively generated by *aesthetic experience*, and absolute music – an *essentially non-representational* art form – can give one both the closest access to reality achievable and a cessation of daily frustrations through the experience of sublime awe, while dissociating oneself from that which holds *the illusion of reality* together (i.e. what we otherwise perceive is merely a *representation*) – the cosmic metaphysical force that Schopenhauer calls 'the Will'. See Nietzsche (1999) Preface by Raymond Geuss, p. vii; also Berríos & Ridley (2005) and Hamilton (2007). Obviously this is not a non-controversial view, though answering to it is beyond the scope of this thesis.

⁴ Chernoff (1979), p. 3.

⁵ Chernoff (1979), p. 20.

⁶ Chernoff (1979), p. 8.

⁷ Spiller (2008), p.103.

University of California, Los Angeles in 1958. He believed that his students should learn to play the music that they are researching – an unconventional notion at that time.⁸ Hood defends his view in his seminal article *The Challenge of 'Bi-Musicality'* (1960).

I have experienced being a participant observer. I have learnt the music of Indonesian gamelan by rehearsing and performing with Javanese and Balinese gamelan ensembles, participating in workshops, and undertaking ethnomusicology performance study at university. I believe that Chernoff is right. Much of what I know about gamelan has come from playing the instruments in ensembles and one-on-one with a teacher from the tradition – and that I would not have the understanding of the music that I now have if I were not a participant observer. And to Nietzsche – it is through my own participation, practical experience and understanding that I can fathom the music in an academic fashion.

Composer and world music enthusiast Steve Reich says,

Although earlier generations of Western musicians *listened* to many non-Western musics, live or in recordings, it is now becoming increasingly possible to learn how to *play* African, Balinese, Javanese, Indian, Korean, and Japanese music, among others, directly from first-rate native teachers, here in America or abroad. A Western musician can thus begin to approach non-Western music as he would his own; he learns to play it through study with a qualified teacher, and in that process can also analyze the music he is playing in detail to understand how it is put together. During the process of performance and analysis, he will find basically different systems of rhythmic structure, scale construction, tuning, and instrumental technique. Knowledge of these different systems also sheds light on our own Western system, showing it to be one among many.⁹

It was as a participant observer that I was able to pursue composition via *prescriptive transcription*, a technique requiring the learning of the music. Rather than creating a descriptive transcription by notating what my ears hear, I create a transcription by notating what an appropriate part would be for a traditional musician playing that instrument, given the conventions of that instrument. In my piece *Wigena* (for string quartet, *rebab* solo and Javanese gamelan instruments), I use the *balungan* line of a traditional Central Javanese gamelan piece, *Ketawang Wigena Pelog Nem*, to extrapolate the parts for the string quartet, who play versions of the *demung* (viola), *peking* (second violin), *bonang barung* (cello) and *bonang panerus* (first violin). Similarly, in my three pieces for gamelan and Western instruments in traditional Central Javanese style – *Ketawang Anggun Slendro Manyura*, *Ladrang Santai Slendro Sanga* and *Gending Tarikan Pelog Nem* – I notate the parts of the gamelan 'short score' in the same manner, though I allow for trained gamelan musicians to play according to a style congruent

⁸ Hood spent several years studying Indonesian music under Jaap Kunst in Amsterdam, who never learnt to play any of the music – see Spiller (2008), p. 103.

⁹ Reich (2002), p. 69.

with traditional practice by reading instead from the *balungan* line and creating their part as appropriate for their instrument. This approach allows freedom for the players of some gamelan instruments, but not for the players of Western instruments (i.e. the string quartet must play *what is written* on the score).

My own involvement and participant observation in non-Western music

In February 2005, when I began as an undergraduate music student at Victoria University of Wellington (the 'New Zealand School of Music' merge with Massey University had not yet occurred), I joined Gamelan Padhang Moncar, the Javanese gamelan affiliated with the university, and began rehearsing and performing concerts with the group. I played predominantly *balungan* instruments as I learnt the music, its structures and repertoire.

Six months later, *Slendro Canon*, my first composition for Javanese gamelan (employing only a small ensemble featuring *demung*, *slenthem*, and *peking*) was performed by Gamelan Padhang Moncar at a concert of new compositions for gamelan and traditional Javanese pieces at St Andrews on The Terrace. Shortly after this concert I joined Gamelan Taniwha Jaya, the Balinese gamelan owned by Gareth Farr and affiliated, at that time, with Massey University.

In 2006 I began one-on-one lessons with Budi S. Putra for Ethnomusicology Performance at university. These lessons continued for the next three years, up to and including Honours level. I learnt to play several of the elaborating instruments that require specialisation – *bonang barung*, *bonang panerus* and *gambang*. I also learnt basic techniques on *suling* and *gender*. Knowledge I acquired included the formal structures of traditional pieces and the six standard *pathet* (modes), as well as repertoire and performance techniques. An enriching event that year was the performance of both gamelan ensembles at the Nelson Arts Festival, for which I played *gong* and *kempul*. In the programme, traditional pieces were combined with new compositions, and a particularly striking new work was I Wayan Gde Yudane's *The Churning of the Sea* (2006) for baritone saxophone and Javanese gamelan. In this piece, Yudane transfers the Balinese gamelan technique *kotekan* (interlocking rhythms, like a hoquet, that comprise a resultant melody) to the instruments of the Javanese gamelan, and directs an improvised fiery baritone saxophone solo that roars over the top.

1110

..654...465465
..654...65421

Bonang barung
56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6
123.32 123.32 123.32 123.32 123.32 123.32 123.32 123.32

Bonang penerus enter here
56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6
123.32 123.32 123.32 123.32 123.32 123.32 123.32 123.32

Gong enter here
56.5.6 56.5.6 56.5.6 56.5.6
123.32 123.32 123.32 123.32

Slentem enter here
56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6
123.32 123.32 123.32 123.32 123.32 123.32 123.32 123.32

6.7..6 ..7..6 ..7..6 ..7..6
2.4.5. 63.26. 5.5.63 .4.5.5
3.4... 3.4... 34... 34...

(x4)
peking
kanong
Stentem
after Slentem
is play twice

56.565 56.565 56.565 56.565
123... 123... 123... 123...

5.67. 5.67. 5.67. 5.67.
135..5 135..5 135..5 135..5

56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6 56.5.6
123.32 123.32 123.32 123.32 123.32 123.32 123.32 123.32

5.3.53 .5... 5.3.53 .5...
1...2. 1...2. .1... 6.2...

(x2)
demung

5.56. 5.56. 5.56. 5.56.
133.2 133.2 133.2 133.2

5.3.53 .5... 5.3.53 .5...
1...2. 1...2. .1... 6.2...

(x2)
sawea
demung

Fig. 2.1: I Wayan Gde Yudane: *The Churning of the Sea* (2006), first half of first page, unpublished score from my private collection

This piece does not conform to Javanese gamelan conventions. For instance, the strong beats occur with the gongs (third line of each system in the cipher notation) on the first beat of each *gatra*, rather than on the last beat which is the strong beat in Javanese gamelan. Moreover, the ornamentation of this *gong*-played ‘*balungan*’ (the *gong*, *kempul* and *slentem*) is more similar to the way *gangsaw* ornament an *ugal* melody in Balinese gamelan.¹⁰ Conventional Javanese colotomic structures are disregarded. This cross-cultural works combines the instruments from one culture (Java) with performance techniques from another (Bali), and coordinating an improvising saxophone solo – a musically and intellectually exciting example of combining music from different cultural backgrounds.

I composed two pieces for gamelan ensemble in 2007, *Ullalim* and *Melody for Gamelan Bali*. *Ullalim*, for Javanese gamelan and recorded voice, was inspired by my transcribing of Benicio Sokkong’s singing of a fragment of the “Ullalim” epic of the Kalinga people, from northern Philippines. Much of the transcription found its way into the music either literally, or changed through various compositional processes; this piece was released on Gamelan Padhang Moncar and Gamelan Taniwha Jaya’s 2008 album, *Now I Know*.¹¹

¹⁰ This piece exemplifies an approach also in some of the compositions of Gareth Farr for Javanese gamelan, for example *Keongan* (1992) – adopting idioms from Balinese gamelan as a compositional device when writing for Javanese gamelan; an adjunct to the composition.

¹¹ See SOUNZ The Centre for New Zealand Music, <<http://sounz.org.nz/manifestations/show/9290/>> Accessed 06/01/2010.

Melody for Gamelan Bali was composed for performance by Gamelan Taniwha Jaya at the 2007 International Gamelan Festival in Yogyakarta, Java. It is a simple, traditional-style melody, though punctuated by a 3-time colotomic gong structure rather than a conventional 4-time colotomic structure. Touring Indonesia was an indelible experience, see Ström (2009) for an account of the tour.

Another piece from the tour's repertoire is Jack Body's *Polish Dances* for two clarinets, saxophone, and Javanese gamelan. The first clarinet carries the melodies of Jack's transcriptions of Polish folk music, while the gamelan suggests a 'skewed' version of Western harmony, switching between the *pelog* and *slendro* scales. The second clarinet and saxophone support the first clarinet, appearing only in the second movement. Jack's method of notation here (using the Western staff with cipher notation clearly marked underneath) appeared to me to be a successful solution to combining elements of cipher and staff notational systems. The performer follows the rhythms and pitches as indicated by the cipher notation, which is underneath a staff which assists by representing contours and (approximate) pitches more effectively than cipher notation on its own. This method has also been used by I Wayan Gde Yudane and Jack Body (*House in Bali*, 2009), Helen Bowater (*Sun Wu Kong "Monkey"*, 2009), amongst others – including myself in compositions for gamelan from 2008 onwards.

2. Medley

♩ = 66

[A] (balungan 1) PLAY 4 TIMES

(gender) *f*

(balungan 2)

(Kempul)

4 TIMES

[B] Faster! = 96

(clarinets) 2

(clarinets) 3

(clarinets) 2

(clarinets) 3

(Kempul)

'hey!'

'hey!'

'hey!'

'hey!'

Fig. 2.2: Jack Body: *Polish Dances II. Medley* (2007), first half of first page of the Javanese gamelan part, unpublished score from my private collection

In 2008 I composed two new gamelan pieces, *Sonnet Suite* for Javanese gamelan and ...*tor/tue*, a duo for guitar and gamelan performer (*Kenong* and *saron* instruments). *Sonnet Suite* comprises four miniatures, in which I explore different possibilities for gamelan composition in separate, short, self-contained movements. ...*tor/tue* was developed out of one of those miniatures, and in it, for the first time, I explored and manipulated the way tension can be built and released by exploiting microtonal intervals generated through combining *pelog*, *slendro*, and equal temperament Western tunings together.¹² That the piece would sound quite different (due to pitch discrepancies and beatings) when performed on different sets of instruments is something I embrace.

However, I was unfamiliar with Chinese *yangqin* (dulcimer) before being invited to compose for it, for young musician Wang Hui.¹³ Hui offered the composers involved in her concert a preliminary workshop. She played some traditional pieces and a contemporary piece written by a friend and colleague of hers at Xiamen University, and then invited us to try playing the instrument ourselves, with her guidance.¹⁴ Hui encouraged us to work closely with her and have regular rehearsals. Our pieces were developed over time and workshoped along the way. Hui also gave us scores and recordings of traditional Chinese pieces for our compositional research.

Moreover, in Hui's concert, I accompanied her on drum in two of her *yangqin* pieces, 将军令 (*The General's Order*) and 天山诗画 (*Festival of the Tianshan Mountains*). Although I was improvising, I was given patterns and verbal instructions, and played under Hui's direction, listening for sonic cues such as tempo changes. Performing drum alongside Hui further contributed to my understanding of Chinese repertoire, and extensively rehearsing these pieces with her was an enriching, informative experience. For a recording of my performances with Hui, see Appendix IV.

¹² A very similar approach was employed in my composition *Elegy* for Javanese gamelan and piano, which is part of my composition portfolio.

¹³ Hui was in Wellington for two months from Xiamen, China, Wellington's sister-city, on an artist residency (via the Wellington Asia Residency Exchange programme) supported by the Wellington City Council. Her residency culminated in a concert at the New Zealand School of Music of both *yangqin* standard repertoire, and works composed especially for her by myself, Carol Shortis, and Thomas Lambert.

¹⁴ Had more time been available, I would have taken the opportunity to learn further basic performance techniques and beginner pieces – this is one thing I humbly regret.

II. Towards a cross-cultural music aesthetic

In my discussion of approaches regarding aesthetic appreciation in Appendix III, I settle on a pluralist option. The purpose of this section is to consider how a pluralist approach to aesthetics might affect an aesthetic appreciation of art from another culture or in a cross-cultural context.

There is debate in the philosophical literature regarding whether or not there are aesthetic universals across art (Dutton, 2005). For instance, one might think that *pitch* is a universal property of music, but counterexamples are abundant. Consider the music produced by unpitched percussion instruments (found not only in contemporary Western music, but in Australian Aboriginal and African music, amongst other world musics), in some electroacoustic music, and works like Cage's '4'33'' (1952). I argue that the project of the aesthetic universalist is not a lost cause, however. This is relevant because it is through the debate on universals in music that common properties across music in different cultures are identified, facilitating any genuine *prima facie* aesthetic experiences in contexts unfamiliar with those experiencing the music. I argue that musical *tension*¹⁵ – in its many guises – is inherent in all music.

Walton (1999) also advocates an appeal to musical tension, quoting Roger Sessions, “the principle of tension and relaxation is perhaps the most important single principle ... its bearing on all questions of musical expression cannot be overestimated.”¹⁶ Walton also considers its embodiment, “Often, my muscles actually do tighten in response to tension in music and then relax when the music calms down.”¹⁷ He discusses the tension produced by the unpredictable rhythmic jolts in Stravinsky's *Rite of Spring* (1913), the driving rhythms of Beethoven's music, the rising motion of Bartok's *Music for Strings, Percussion, and Celeste* (1936), and the steady states of tension and relaxation in traditional Javanese gamelan, quoting master Javanese musician, Sumarsam, describing the “initial statement, tension, and resolution” that comprises and characterises a *gonggan* (phrases in traditional gamelan pieces between (ending with) the soundings of the large gong).¹⁸

Anthony J. Palmer (1992), taking a psychological approach, also advocates the significance of considering musical tension. Firstly, he argues in favour of the universalist's project, “while the

¹⁵ By ‘tension’ I refer not only to Western concepts such as resolutions of dissonances, and trajectories towards climactic sections, but I also refer to other qualities – or lack thereof – in music that evoke tension in other ways, such as balance, constriction, force, strain, intensity, repetition, and anticipation. Similarly, seemingly ‘tensionlessness’ is a form of tension in itself; as a piece progresses through time, it builds up an awareness and anticipation in the listener, which arouses tension, such as in ‘4'33'', much minimalist music, and much non-Western music.

¹⁶ Sessions (1951) quoted in Walton (1999), p. 408.

¹⁷ Walton (1999), p. 413.

¹⁸ Sumarsam (1998) quoted in Walton (1999), p. 409

physical environment has produced slight variations in human physiognomy, we are essentially alike in our mental and emotional dispositions. It seems reasonable to assume, therefore, that we will respond similarly, if not identically, to various fundamental principles embedded in the stimuli in musical and other artistic phenomena.”¹⁹ This controversial claim was vindicated seven years later by psychologists Balkwill & Thompson (1999), whose extensive experimentation proved that, very frequently, ‘naïve’ listeners, *even in a cross-cultural context*, responded similarly to ‘expert’ listeners of that music system (in terms of sensory perception, emotion, and so on).

Secondly, Palmer shows how, appealing to musical tension, one can make sense of music cross-culturally. Consider the epitome of musical tension in the Western tonal tradition, “a tonic is established, a move away from it raises expectations, it arouses tensions until a return to the tonic is effected as a final completion or closure ... The announcement of this return event has come to be the dominant-seventh chord.”²⁰ The dominant-seventh chord is so strongly implicated in the West, that it *by itself* begs resolution. Consider the beginning of the fourth movement of Beethoven’s *Eroica* (1804) – “With the tension build up from the reiteration of the *B^b7* chord, the release can only be effected by offering an *E^b* rooted chord, which does occur when the theme is presented.”²¹ Contrast this construction, or version of tension, with that of Japanese *gagaku*, or Indonesian gamelan, or John Cage’s ‘4’33’’, or atonal works. Although tension is created and controlled very differently, “is not the very same *aesthetic* at work whatever the specific style? The human psyche derives satisfaction from a controlled build-up of tension and its subsequent release.”²²

I cannot improve on philosopher Dennis Dutton’s words,

A balanced view of art will take into account the vast and diverse array of cultural elements that make up the life of artistic creation and appreciation. At the same time such a view will acknowledge the universal features the arts everywhere share, and will recognize that the arts travel across cultural boundaries as well as they do because they are rooted in our common humanity.²³

Despite the very different ways music has manifested in different cultures, and the different ways music can be understood in different cultures, I believe it is probable that there is a common historic link – music has an origin in our biological, ancestral past.²⁴ Moreover, it can

¹⁹ Palmer (1992), p. 68.

²⁰ Palmer (1992), p. 69.

²¹ Palmer (1992), p. 69.

²² Palmer (1992), p. 69.

²³ Dutton (2005), p. 289.

²⁴ Darwin (in Hamilton, 2007) explains the evolution of music in the hominin lineage by appealing to the mating-calls our ancestors once made; Dutton (2009) explains it in a similar vein, as a costly signal for sexual selection (like a peacock’s tail); Pinker (2006) regards it as a *by-product* of evolution rather than

be easy to imagine how something else (e.g. a folk religion) could evolve/develop in small scale hominin groups to enable cooperation, amongst other things (see Wilson, 2002), and music – demanding social cooperation and coordination – could emerge as an aspect of that social framework. One could continue postulating more ideas about how music could have evolved (as, indeed, many scholars do), but that endeavour would go beyond the scope of this thesis. For me, it is interesting to reflect upon the notion that, even though now music *is* and *is received* so diversely throughout the world, there was probably a common situation where music's origin, meaning and function were robust and uniform for all.

Ultimately, cross-cultural composition offers the possibility of an aesthetic interesting to me – it is my experience that combining elements of different musics in a piece results in an outcome that far outweighs the sum of its individual parts. In time, as composers continue down the cross-cultural path, it is highly likely that this aesthetic will give rise to new modes of listening, and new attitudes towards art in general.

an adaptation – that we have evolved a capacity for sensory pleasure and that music 'hits the right buttons' in the same way that strawberry cheesecake and pornography does for some people.

III. Cross-cultural appropriation

[It] is no longer apropos to know just the music that you were raised in, but you must know one other. Otherwise you are not a citizen of the twentieth century world.²⁵

[Total musical culture] of the planet Earth is “coming together”, so to speak. A western composer living in the United States or Europe, for example, would now have access to music of the various Asian cultures, to the music of Africa, and to the music of South America. Numerous beautiful recordings of non-western music are readily available, and one frequently has the opportunity to hear excellent live performances by the touring performers of other cultures. The influence would be felt on different levels, of course: only a few western composers would have a sophisticated technical knowledge of the Indian *raga*-technique, for example; but in general, the sounds, textures, and gestures of this music would be well-known. This awareness of music in its largest sense – as a world-wide [phenomenon] – will, I feel, have enormous consequences for the music of the future.²⁶

There is a vast literature on cultural appropriation. For recent discussions see Ziff & Rao (1997) and Young (2010). My discussion is focused on the adoption of musical materials and concepts from other cultures. I acknowledge that there is difficult terrain in the taking of another culture’s musical ideas, though I believe that my discussion below shows that my adoption of non-Western musical materials and concepts, and my use of gamelan instruments and *yangqin*, is with sensitivity and respect.

I have already shown that many composers are inspired by the sounds of the music of other cultures (Chapter I Section V and Appendix II). For those Western composers who work with musical materials or instruments of other cultures, or who record or transcribe music of other cultures for use in composition, or who combine musical conventions of different cultures together, there is the important political and philosophical matter of cultural appropriation – “the taking – from a culture that is not one’s own – of intellectual property, cultural expressions or artifacts [sic], history and ways of knowledge.”²⁷ It can be immoral²⁸ for a composer to

²⁵ Henry Cowell quoted in von Gunten (1995), p. 11.

²⁶ George Crumb quoted in Ryker (1991), p. 23.

²⁷ Ziff & Rao (1997), p. 1.

²⁸ A pertinent distinction between ethicists in the contemporary philosophical literature is between moral *expressivists* and moral *naturalists* (see Sterelny, 2007). Expressivists believe that there are no objective moral properties – instead, what expressivists are doing when they make a moral claim is *not* making a factual claim (a claim that can be objectively true or false), but merely *expressing their attitudes and tastes* reflecting their system of ethical standards. Conversely, naturalists believe that when they make a moral claim, they *are making a factual claim*. I am an expressivist, so when I make claims about ethical issues, my intentions of those utterances (whether verbal or written) are to express my own feelings and

misappropriate and the extent of the debate gets excruciatingly complex, as is shown by Ziff & Rao (1997). There are three main areas of concern relevant to composers: *stewardship* (the treatment of the indigenous resources – i.e. the musical instruments), *deprivation* (the profiting – whether financial or reputational – of composers whose technique exploits the intellectual property of musicians of another culture), and matters of *authenticity* and *degradation* (the misrepresentation of cultural conventions or misallocation of authenticity that is harmful to the perception of the tradition, and the debate between preservation and innovation within the conventions of a non-Western music).²⁹

The extent to which one should or should not conform to the traditional methods of treating cultural artefacts such as musical instruments is, I consider, an open issue. However, misuse of instruments and misappropriation of musical material can lead a composer into a cultural minefield. My solution is simple. I try to be aware of culturally appropriate uses of instruments and musical materials in my compositions, and I try not to break any traditional taboos. For instance, the gamelan instruments and the *yanngin* are played either by traditional beaters/mallets, or by the hands of the performer. Performances of the pieces involving gamelan do not explicitly require the performers to step over the instruments instead of walking around them, or indeed, do anything other than play them sitting cross-legged on the floor, without shoes (as is customary). Some Indonesian composers have dramatically challenged norms – such as the experimental Balinese composer I Wayan Sadra, who has composed pieces that involve dragging and scraping the gong across the stage floor of the performance venue (the gong is traditionally considered the place where the ‘spirit’ of that gamelan set resides) – however I have decided that it is not my place to do so. This does not mean that I am confining myself to a level of limited creativity, or that I am being unnecessarily conservative or ‘politically correct’ in my compositions – it is a sign of respect for the music of the culture and the people of the culture. It is my feeling that composers who have a genuine respect for the music and culture of the artefacts they are appropriating will be using them in an ethical manner, even if they are rejecting conventions. Indeed, I reject certain conventions. For example, *Elegy*, for piano and gamelan, combines both *pelog* and *slendro* instruments together, and has composed parts for instruments that usually play *garap* – however this approach to gamelan composition is neither new nor profane.

intuitions, without appealing to an objective standard of morality, which may or may not exist (a different inquiry, which we cannot enter into here).

²⁹ John Cage famously remarked, “value judgements... are destructive to [composers’] proper business, which is curiosity and awareness” (Cage quoted in Zurbrugg, 1993, p. 31). It is possible to be curious and aware, and moreover, creative, even when observing simple moral ideals. For me, the important issue is not to break any taboos in my cross-cultural music – simply breaking ‘conventions’, I feel, is fair game

My practice avoids that which would permanently *damage* the instruments – but this is not a consideration unique to cross-cultural composition: Western musicians are unlikely to happily endorse new works that damage their valuable instruments through harmful extended techniques, and so on, unless special circumstances prevail. Consider Anna Lockwood’s *Piano Burning* (1968), *Piano Garden* (1970) and *Piano Drowning* (1972) – however, using defunct pianos is acceptable for performances of these pieces.³⁰ Whether or not one has artistic license to use cross-cultural instruments in this way, I have not done so.

Deprivation is a much thornier issue, especially for composers (and ethnomusicologists who collect field recordings too). This is because ownership of traditional music in many cases is not clear, and, in a legal sense, can greatly vary to how the Western notion of copyright operates. Jack Body’s *Arium Manis* (1991) for string quartet and tape presents a recording of an unknown Indonesian street performer which the live performers essentially support – a touching “elevation to centre stage of the unnoticed, and the unacknowledged.”³¹ I have often wondered what the original musician might think if he/she discovered Body’s piece, which does not bestow authorship to anyone other than Body himself. The musician may well feel exploited, justifiably so. I have avoided this situation – in two of my electroacoustic works, *Podróże* and *Mernecolion*, recordings of performing musicians are sampled, with the permission of the person recorded or the copyright owner of the sampled piece (in the case of *Podróże*), or they are my personal recordings of my own music (*Mernecolion*).

Anthony Seeger (1997) reflects on this issue, with a special case study on the traditional music of the Suyá (indigenous people of Amazonian Brazil). Seeger himself was amongst the Suyá people in the early 1970s, collecting and recording traditional songs and learning their culture and traditions. He published his research in his book *Why Suyá Sing* (1987). According to the customs of the people, a song is taught to the person whose song it becomes,

by a “person-without-spirit” who in turn has walked in the forest and learned a song from some natural being (plants, fish, animals). The *originator* of the song is a specific plant, fish, or animal species. The *communicator* of the song (the person who most nearly fits the Western concept of “composer”) is the person-without-spirit. The *owner/controller* (*kandé*) of the song is the person who learns it and sings it aloud for the first time.³²

³⁰ I am also reminded here of Karlo Margetić’s *Deux Fanfares Grandes* (2010) for solo horn, which involves pouring half a cup of water into the horn and removing one of the valves. The piece startled the audience at its premiere as performer Alex Morton poured the water into the instrument, though the composer later revealed to me that the horn that was used was not the performer’s own expensive instrument, but one borrowed from a friend who bought it very cheap on the popular auction website, TradeMe <www.trademe.co.nz> (Margetić, pers. comm., 2010).

³¹ Psathas (2010), p. 44.

³² Seeger (1997), p. 55.

Seeger himself was taught a song which he ending up singing in a Suyá ceremony, and by virtue of their tradition, that song became *his* song, ‘if someone [else] sang it badly, [Seeger] could complain.’³³ Now imagine that Seeger’s song was recorded, then transcribed by a composer, and then realised into a composition. If this was not with Seeger’s blessing, he could complain; furthermore, he probably could claim copyright infringement or plagiarism; it is theft of his intellectual property as *owner/controller* of that song. Our imaginary composer’s profit – if without Seeger’s blessing – *deprives* Seeger of his royalty dues.

The above is just one example of how a traditional culture can allocate cultural intellectual property and ownership – and there are many other examples in the literature (see Ziff & Rao, 1997). My own ethical concern is that I, as a composer, am not engaging in this kind of cultural theft. I do not believe that I am.

In an interview with Jack Body (2010), composer and colleague Michael Norris challenges Body to defend his process of transcription, to which Body replies:

Historically, of course, borrowing from other composers was generally regarded as an act of *homage*... In general, I try to ensure my source material is acknowledged appropriately...

In fact one of my hopes is that my transcriptions will stimulate a curiosity in the listener to search out and experience the original music upon which my transcription is based. This was one of the reasons behind my double CD *Pulse*, which enabled people to hear the source material alongside my transcription of it...

I have found that some contemporary Asian composers have expressed enthusiasm for my transcriptions as suggesting different perspectives on how they might relate to their own traditions. The arranging and orchestrating of folksongs is a feature of musical nationalism in many countries, particularly China, and composers are often frustrated by the clichéd conventions... and are looking for alternative approaches.³⁴

These appear to me to be very sensible responses, ultimately advocating and promoting the diversity and complexity of the music of non-Western cultures to a predominantly Western audience. It is also in line with my notion of a pluralist approach to musical aesthetics.

I believe my own approaches to transcription-based compositions avoid this minefield. In two compositions, *To –* and *Wigena*, I employ transcription techniques. Before composing *To –*, I performed a series of transcriptions of Javanese vocal music, which *informed* my composition, but do not *appear* in any kind of robust sense in the piece itself. In *Wigena*, I recast music for the string quartet from the *balungan* of an old, traditional, public domain Javanese gamelan piece, *Ketawang Wigena Pelog Nem*, extrapolating the individual parts of the piece through a process of *prescriptive* transcription – composing out from the *balungan* with my own

³³ Seeger (1997), p. 55.

³⁴ Body (2010), pp. 41-42

knowledge of how the gamelan instruments would generate their parts (rather than *descriptive* transcription – writing down what I hear traditional performers play in a specific performance). I feel that these two approaches are ultimately more satisfying than other transcription-based approaches as they involve an element of *coming to terms* with the music itself; compositions in the past that I have based on descriptive transcription (Body’s approach) have not, for various reasons, I feel, have been as successful as these two pieces, which are *compositions* and not merely *arrangements*.

Furthermore, matters of both authenticity and degradation are important for composers to consider, as it can be harmful to a culture’s reputation to mistakenly misidentify conventions, or misallocate authenticity. This can be avoided, I believe, by working with a master musician from the relevant culture, and this is why I have collaborated with Budi Putra and Wang Hui over the course of my composing for gamelan and *yanggini* respectively. Furthermore, I do not allocate cultural authenticity to any of my cross-cultural compositions – *none* of them are, I believe, authentically Indonesian or authentically Chinese. Moreover, there is an important consideration regarding the continuum between the *preservation* of a tradition’s music culture, and *innovation* – traditionalists-about-music like to see that the music of their tradition is being preserved and when performed, it is as true as possible to the historic tradition (traditionalists-about-music are not exclusively non-Western – consider the debate amongst musicologists on performance practice: whether or not Baroque instruments should be employed in the performance of a Baroque piece, or whether or not an orchestra performing Beethoven symphonies should be tuned to 440Hz, and so on). I suppose that the aforementioned Suyá people are reasonably traditional-about-music, according to Seeger’s account. The catch is whether or not there is room in the tradition for creative, experimental composers to present something that is different. Indonesia and China are both countries that pride themselves on their traditional music and they continue to preserve it by keeping archives and through institutional music study, however, they are also both countries that boast prominent composers that continue to expand and evolve their country’s traditions and music practice. For instance, contemporary “gamelan compositions from conservatory-trained [Indonesian] composers often de-emphasize cyclic underlying structures... relegating the old-fashioned Javanese notions... to the background.”³⁵ China too, has had successful revolutionary compositions such as the model operas of the Cultural Revolution (*Taking Tiger Mountain By Strategy* is an example – see Mittler, 2003); and contemporary Chinese composers such as Tan Dun are well established worldwide. Indeed, development and innovation is crucial in many music traditions, and it has

³⁵ Spiller (2008), p. 88.

been pointed out that the notion that an artform must be preserved, never allowed to change, is foreign to many traditional musicians (see Fang, Pratt, Provine & Thrasher, 1981).

My own compositions can, I imagine, be placed in different points along a continuum between preservation of musical materials and innovation – *Ketawang Anggun Slendro Manyura*, *Ladrang Santai Slendro Sanga* and *Gending Tarikan Pelog Nem* contain conventional forms and are composed in a traditional style, albeit with Western solo instruments; *Elegy* completely abandons these forms and the gamelan instruments are used to microtonally and timbrally enhance the piano. The important matter is, as Stockhausen argues, ‘not striving for a ‘synthesis’ where everything is swallowed up into a gigantic mishmash... The idea isn’t to obliterate [traditional music] but rather to diversify its effectiveness.’³⁶ I feel my approaches contribute to this creation and development of a new tradition – *cross-cultural composition* – and *not compromising* any existing traditional musical traditions.

³⁶ Stockhausen (1989), pp. 26-27.

IV. Practical concerns

The purpose of this section is to share a personal account of several practical concerns relevant to cross-cultural composition – tuning discrepancies between instruments, notational issues, collaborative input from performers, and recording. I will first, however, discuss three activities that I engaged in during the early stages of my Master’s enrolment, for the purpose of becoming more familiar with the process of combining gamelan with Western instruments (see Appendix IV for recordings of these).

First, in collaboration with Jack Body, I wrote a violin solo for the Javanese gamelan piece *Lelagon Prau Peloge Nem*, for concert performances at the New Zealand School of Music and St Andrews On The Terrace in early 2009. Violinist Tristan Carter improvised upon this melody, using what Body and I gave him as a starting point. It was very easy to put the piece together in rehearsal, due to the performer’s excellent musicianship, and because the violin’s tuning is easily adjustable as it is not a fretted or keyed instrument. Matching the violin’s pitches with the pitches of the gamelan did not cause much fuss, and the melody beautifully spoke out over the top of the gamelan’s texture.

Lelagon Prau Layar Peloge Nem

The musical score is divided into three systems. The first system features a Violin part in G major, 2/4 time, with a dynamic of *mf*. It includes an 'Introduction' section with the instruction 'Improvise Flourishes etc'. The second system features a Gamelan Balungan part in G major, 2/4 time, with a dynamic of *ff*. It includes a section labeled 'Umpak' with a dynamic of *ff*. The third system features a Ngelik part in G major, 2/4 time, with a dynamic of *p*. It includes a section labeled 'Ngelik' with a dynamic of *p*. The score includes various musical notations such as clefs, time signatures, dynamics, and fingerings.

Violin
Introduction
Improvise Flourishes etc
mf

Gamelan
Balungan
ff

Umpak
ff

Ngelik
p

18 Ngelik

(5) 5 : 5 2 5 5 5 1 (5) 2 2 3 2 5 3 2 (1) 5

27

5 6 5 6 5 1 (5) 2 2 2 3 2 5 3 2

34

(1) 7 1 2 5 6 (1) 2 1 2

40

1 5 6 1 (2) 3 2 3 2 1

45

1 2 (1) 2 1 2 1 2 1 2

50

(1) 2 1 6 5 4 5 6 (5) 2

55

2 3 2 5 3 2 (1) 2 2 3 2 3



Fig. 2.3: *Lelagun Pratu Pelog Nem* with a violin melody

This was a rewarding practice exercise in composing a Western solo for gamelan, in preparation for composing my own three original gamelan pieces in traditional Javanese style with Western solo instruments.

Second, inspired by the recording of Terry Riley’s famous minimalist work *In C* (1964) by the Shanghai Film Orchestra,³⁷ using traditional Chinese instruments, I led an SMP Ensemble performance of it with two clarinets, trumpet, saxophone, double bass and five gamelan players.³⁸ The Western instruments were tuned to match the gamelan’s B-flat (*pelog/slendro* 6), but the performers did not make any other special allowances for their other pitches – so as the piece progressed, a new layer of musical interest (the intervalllic/microtonal discrepancies between the equal tempered Western instruments and the gamelan) developed and evolved throughout the performance. As the musicians moved through the melodic cells of the piece at their own pace, the piece’s intonation and beating evolved and changed. This too was a rewarding exercise in working with these microtonal pitch discrepancies, and was an influence on *Elegy* and *Cycles*, *Shadows*.

Third, I arranged – as a *homage* – Helen Bowater’s solo violin piece *Zingaro* (1988), for clarinet, bassoon doubling viola, Javanese *gender* and *bonang*. This was also performed by SMP Ensemble, and was a fruitful exercise in ‘assimilating’ gamelan instruments into a Western chamber ensemble. I liked the instrumentation, and used it in my composition *Cycles*, *Shadows* (though without the *bonang*), which I wrote for the same performers. Having performed the *Zingaro* arrangement, they were already familiar with working with the pitch discrepancies so rehearsing and performing *Cycles*, *Shadows* was easier (the parts for that piece are virtuosic enough without getting used to the microtonal pitch discrepancies that the *gender* introduces).

³⁷ Shanghai Film Orchestra (1992), *In C* (Celestial Harmonies Records).

³⁸ Because of the limited pitches of the gamelan, the piece was performed in B-flat so that the gamelan pitches were closer to the Western pitches of the melodies that comprise Riley’s score.

Undertaking these three exercises raised my awareness of the practical issues in cross-cultural composition. One concern that I have already mentioned is the pitch discrepancies and different tuning systems between Western instruments and Javanese gamelan. This was not an issue for the *yanggini*, because it is now tuned according to the Western chromatic scale. For my pieces that involved gamelan, I decided how to resolve the issue on a case-by-case basis. I employ three approaches:

1. Ignoring the differences and allowing the instruments to be 'out of tune' with each other (piano in *Elegy*; accordion in *Gendhing Tarikan*).
2. Tuning the Western instruments/voice to closely match the gamelans pitches (viola in *Ketawang Anggun*; string quartet in *Wigena*; voice in *Ladrang Santai* and *To -*).
3. Tuning one specific Western pitch to match one specific gamelan pitch, and allowing the rest to be slightly 'skewed' (clarinet in *Gendhing Tarikan*; guitar in *Ladrang Santai*; clarinet, viola and bassoon in *Cycles*, *Shadows*).

My decisions depend upon the malleability of the tuning of the Western instrument. Importantly, the results of the three approaches are very different, as they shape different structures of tension-release for the listener's aesthetic experience.

The first approach allows me to sonically exploit the unique, arbitrary microtonal soundworld that the pitches of a gamelan ensemble, combined with equal temperament, produce. In the case of *Elegy*, I carefully listened to the beatings of the sounds and composed the rhythms of the work intuitively. Accordions are not easily tuneable, so in *Gendhing Tarikan* it plays 'out of tune' melodies in the first time through the *ketawang* section (see the piece's programme note) and in the second and third time through, it plays *gambang* repertoire *garap*, with the final note (the strong beat) removed, so the gamelan *balungan* can resolve the tension caused by the discrepancies.

The second approach *removes* any pitch discrepancies, firmly rooting the piece in the gamelan's world of pitch.

Finally, the third approach is a cross between the two. For example, in *Ladrang Santai*, the guitar tunes each string down one semitone, and aligns its A-flat pitches with the *slendro 5* of the gamelan. In *Cycles*, *Shadows*, the clarinet, bassoon, and viola align their B-flat pitches with *slendro 6* of the *gender*. These 'home' pitches always match up during the performance, but other pitches deviate, creating tension and musical interest in the discrepancies of the pitches.

Each approach is interesting in and of itself, and I do not wish to privilege one over the others: the choice of approach for a composer should be appropriate to the intentions of the composition and the instruments that he/she is working with.

Another practical concern for cross-cultural composers is notation, especially because many musicians engaged in non-Western music making do not read Western notation. Thankfully, my *yanggini* player Wang Hui could read Western notation, so I was able to compose my *Melody for Violin and Yanggini* in standard Western notation. However, *Tabula Rasa*, my other piece for Hui, demands extended techniques and complex gestures, so I decided to compose it as a graphic score, which was well received by the performer.

Conversely, Budi S. Putra, director of Gamelan Padhang Moncar, does not read Western music confidently, so I transcribed *To –* into cipher notation for him to read.

My scores for *Elegy*, *To –*, *Wigena*, and *Cycles*, *Shadows* had staves specific to gamelan instruments, and the cipher notation is given underneath the staff. The performer follows the pitches as indicated by the cipher notation, and the staff assists by defining the rhythms, and representing contours and (approximate) pitches more effectively than cipher notation on its own. My scores for *Ketawang Anggun*, *Ladrang Santai* and *Gendhing Tarikan* are a little different: the Western instruments each have their own staff and there is also a staff that represents the *balungan*, with cipher notation indicated underneath. The gamelan players may read from this, or from the conventional version of the cipher notation given in the work's extended programme note. A gamelan 'short score' is also given in the three scores, which represents the *slenthem*, *saron*, *demung*, *peking*, *bonang barung* and *bonang barung*. Also, I give the *gambang* part in *Ketawang Anggun*, and the *gong* and *kempul* in *Gendhing Tarikan*. My indications for the *peking* and *bonang* instruments represent one possible traditional-style extrapolation of the *balungan* for those instruments. However, the *gambang* part in *Ketawang Anggun* could be performed 'authentically' in other ways, but the way it is notated is preferred as the viola solo is designed to interweave in and out of the *gambang* part. The other gamelan instruments, such as *suling*, *gender*, and so on, are not notated because they will perform *garap* based on the cipher notation, and that *garap* will be realised differently by different performers.

Essentially, the 'short scores' are for the purposes of score reading and directing an ensemble. By organising the score of the gamelan in this way, I avoid unnecessarily writing out parts on separate staves for each individual gamelan instrument (many of these would be arbitrary due to the concept of *garap*) which in any case would not represent the performance any better, and would confuse many performers who cannot read from a staff anyway. Essentially, I feel that

this approach is a cross-cultural analogy to the Baroque practices of realising a basso continuo part (at performer's discretion), and the addition of characteristic decoration/ornamentation that a performer trained in the idiom employs when performing a period piece, in keeping with the practice of the time.

Another issue for cross-cultural composers regards the collaborative input from the performers. *Wigena* and *To* – both benefited from welcome input from Greg Street and Budi S. Putra, respectively. Joint authorship is not necessary, as although they assisted, the ultimate decisions, as composer, were mine. Greg's input in *Wigena* helped shape the *rebab* solo and inform it with both authenticity and personal style, and Budi's input in *To* – culminated in the inclusion of the *gender* accompaniment. Moreover, neither piece requires explicit *improvisation* from the performer, so I am happy to claim authorship. However, it must be understood that in other (hypothetical) cross-cultural collaborations (I am especially thinking of works involving the improvised talent of *taonga pūoro* performers, who also have a great deal of input into choosing which instruments are appropriate for the piece), joint authorship would be appropriate in many cases.

Finally, another issue is the undertaking of recordings of the pieces. Regarding the works in my portfolio, the electroacoustic pieces aside, *Primes* was recorded in a recording studio, *Tabula Rasa* and *Cycles*, *Shadows* were recorded live in concert, and *To* – was recorded live while workshoping the piece with the performer. *Elegy* was put together after I recorded each part separately (I thought that would be easier and much more time efficient than rehearsing and recording the piece with performers – the whole recording process in the end only took me several hours). Similarly, *Wigena* was put together layer by layer – the string quartet part was recorded first, workshoped live by the New Zealand String Quartet. I then added the colotomic gamelan instruments as a separate track, and then finally recorded the *rebab* solo over the top, in a recording studio. *Ketawang Anggun*, *Ladrang Santai* and *Gendhing Tarikan* were recorded similarly – the gamelan ensemble was recorded first, any additional gamelan instruments were recorded over the top, such as *suling*, *rebab*, *gender* and *gambang*, so that each of these elaborating instruments could be easily mixed into gamelan ensemble with close-microphone high fidelity recordings. The Western solo instruments too, were added over the top, recorded in a recording studio.

Recording, however it is done, can be problematic. Pieces recorded layer by layer may lose the unique unity and spontaneous musicality that defines a well performed work. However, it can be possible through multi-layering to put together the best of the recordings of multiple individual parts and this approach is certainly more time efficient given the nature of the pieces

I employed it in, given time constraints, performer availability, and technologies available.

Some of the recordings are more successful than others; all more or less capture the composition they represent.

CHAPTER THREE

COLLECTED EXTENDED PROGRAMME NOTES

- I. *Cycles, Shadows*
for clarinet in B-flat, viola doubling bassoon (or viola and bassoon), Javanese *gender*
- II. *Wigena*
for string quartet, *rebab* solo, and Javanese instruments
- III. *Melody for Violin and Yangqin*
for violin and Chinese *yangqin* (dulcimer)
- IV. *To –*
for Javanese musician (voice and *gender*)
- V. *Three Pieces for Gamelan in Traditional Central Javanese Style with Western Instruments*¹:
Ketawang Anggun Slendro Manyura
for Javanese gamelan and viola solo
Ladrang Santai Slendro Sanga
for Javanese gamelan, *gerong* (male unison choir) and guitar solo
Gendhing Tarikan Pelog Nem
for Javanese gamelan, accordion solo and clarinet in B-flat solo
- VI. *Mernecolion*
electroacoustic
- VII. *Podróže*
electroacoustic

¹ Despite their combined extended programme note, these three works should be considered separate pieces, not three movements of the same piece.

- VIII. *Elegy*
for Javanese gamelan and piano
- IX. *Tabula Rasa*
for Chinese *yangqin* (dulcimer) and live electronics
- X. *Primes*
for clarinet in B-flat solo
- XI. *After Clive Bell*
piano solo
- XII. *Outside my front door*
electroacoustic

I. *Cycles, Shadows*

Clarinets in B-flat, viola doubling bassoon (or viola and bassoon), Javanese *gender*

This work was written for performance by myself and two friends: clarinet virtuoso and winner of the 2009 New Zealand School of Music Concerto Competition, Andrzej Nowicki, and Kylie Nesbit, who is equally accomplished on both viola and bassoon. The ‘cycles-within-cycles’ structures and intense performance requirements of the piece pay tribute to Jack Body’s *Epicycle* (1989, r.2004); while the rhythms are derived from traditional Chinese *erhu*² music. *Cycles, Shadows* was premiered at the ‘Gong Crazy!’³ concert series in October 2009.

Cycles, Shadows is constructed from a 19-note pitch cycle – Ab, D, Bb, B, A, Db, B, Ab, D, Bb, Ab, A, B, Bb, Ab, B, Eb, Ab, F – and looped shorter cycles from within that 19-note cycle. This 19-note cycle uses eight of the notes of the chromatic scale, and a ninth note, C, is used intermittently as a non-cycle, *decorative* note (for instance, see bb. 21-22). Thus three notes do not appear, E, Gb and G: an approach favoured by composer Henry Cowell, whose ‘serial’ pieces did not comprise all twelve chromatic notes, since “there are always those extra notes that you wished didn’t exist in the row.”⁴

The construction and structure of *Cycles, Shadows* is inspired by two works in particular, Mark Langford’s *Mostly in B-flat* (1989), comprising cycles based on a 22-note cycle (see fig. 3.1 and 3.2), and Jack Body’s *Epicycle* (1989, r.2004) comprising cycles based on a 36-note cycle (see fig. 3.3). Unlike *Cycles, Shadows*, the cycles from which these two other pieces are generated are both chromatically saturated. Langford employs serial techniques in his piece, and Body employs minimalist techniques such as looping cycles within the larger cycle, “variation within repetition” and “‘phasing’ as the instruments follow each other in close canon”⁵ in his. In *Cycles, Shadows*, I continuously loop the pitch-cycle (1-19) though it often gets ‘stuck’, only looping up to or from a certain pitch, generating subsets. ‘Glitches’ are also added – out-of-sequence notes – and a non-cycle note, C, often appears as a decorative note. The octave/unison relationship between the instruments is directly inspired by the sounds of Javanese gamelan, and *Epicycle* (see fig. 3.3).

² A two-stringed vertical fiddle, one of the most prominent instruments in traditional Chinese repertoire.

³ These concerts comprised new works involving gamelan, and celebrated the end of 30 years of Jack Body’s teaching in the music department at Victoria University of Wellington/New Zealand School of Music.

⁴ Lou Harrison (on Cowell) quoted in von Gunten (1995), p. 11.

⁵ Body (2006), *Epicycle* [score] programme note.

EPICYCLE

(1989, revised 2004)

JACK BODY

1 | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

4 | 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

7 | 34 35 36 (1) 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 (1) 2 3

11 | 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 (1) 2 3

Fig. 3.3: Jack Body: *Epicycle* (1989, r.2004), bb. 1-13, with the 36-note cycle the piece is based on, annotated. The only pitch variation so far is that the first 1 is a G₃, and subsequent annotated (1)'s are G₄. Published by Waiteata Music Press, New Zealand (2006)

Cycles, Shadows is structured thus (please note b1- is a truncation of b1):

Section	Themes	Transitional sections			
A	a	b	c		
B	a1	b	c1	T1	
C	a1	a2	b	c2	T2
D	a3	b1	c3	T3	
E	a4	b1-	c4	T4	
F	a5	b1-	c5		

Fig. 3.4: Structure of *Cycles, Shadows*

Within these sections (not to be confused with the *rehearsal marks* noted on the score), the pitch cycle and cycles-within-the-cycle are indicated below (with out-of-sequence notes included, but not the non-cycle decorative grace-note C's, nor the non-cycle material played by the *gender*): (1 = Ab, the first pitch of the 19 note cycle, 2 = D, the second pitch, and so on)

A	a	1-19, 1-19, 1-19
	b	19; 1-19
	c	1-19, 1-19 (though skips 14-16), 1-7
B	a1	8-19, 1-8
	b	19; 1-19
	c1	1-8, 1-8, 1-8, 1-8; 'extra note' 2; 1-8, 1-5
	T1	7-19, 7-19; 'extra note' 4; 3-8, 1-8, 1-8, 1-15 (skips 6)
C	a1	8-19, 1-8
	a2	1-19, 1-14
	b	19; 1-19
	c2	1-8, 1-7, 1-13, 6-8, 1-8, 1-5
	T2	7-15; 18; 17; 15-19, 15-19, 15-19, 15-19, 15-19, 15-19, 15-19, 15-19, 15-19, 15-19, 15-19; 8; 7; 7-19 (skips 16), 1-19 (skips 14, and 5 is flattened), 1-10 (5 is flattened)
D	a3	1-19 (skips 9-11), 1-7 (skips 3), 1-15 (5 is flattened)
	b1	19; 1-19, 1-19, 1-19, 1-19
	c3	1-14, 1-7 (3 and 4 are swapped around), 3-8, 1-5
	T3	6-19 (6 is raised), 6-19, 6-19, 1
E	a4	1-19, 1-19
	b1-	19; 1-19 (9 is raised)
	c4	1-19 (6 is raised, skips 9-11), 1-19, 1-6
	T4	6-19, 1-19, 1-19, 6-19
F	a5	1-6, 1-6, 1-6, 1-17
	b1-	19; 1-19
	c5	8-13, 8-13, 4-16 (non-cycle C between 10 & 11, not as a grace-note), 1-19, 17-19, 17-19, 17-19

Fig. 3.5: Annotated score of *Cycles, Shadows*

No practical issues arose in rehearsal regarding the inclusion of the gamelan instrument in the ensemble – the Western instruments were tuned so that B-flat matched the *gender*'s 6, and then we simply rehearsed the piece. The *gender* has two functions in the music. The first is to provide a tremolo drone underneath the melodic material of the other instruments, and often these drones are preceded by solo *gender* two-note motifs (e.g. b. 1). The second is to play, intermittently, the cyclic melodic material along with the other instruments (e.g. bb. 41-47). However, because of the tuning of the *gender*, its pitches, other than 6, did not quite match up with the Western instruments, generating interesting beatings. This was used structurally in some 'c' and 'T' sections. I feel that my approach to combining the *gender* with Western instruments in a 'Western' chamber music context in this piece was fruitful and successful.

PERFORMANCE HISTORY (as of 12 July 2010)

3 Oct 2009 Andrzej Nowicki (clarinet), Kylie Nesbit (viola/bassoon), Anton Killin
 (Javanese *gender*), at "Gong Crazy!" at Adam Concert Room, New Zealand
 School of Music (Kelburn campus), Wellington

- 4 Oct 2009 Andrzej Nowicki (clarinet), Kylie Nesbit (viola/bassoon), Anton Killin
(*Javanese gender*), at “Gong Crazy!” at Adam Concert Room, New Zealand
School of Music (Kelburn campus), Wellington
- 5 Oct 2009 Andrzej Nowicki (clarinet), Kylie Nesbit (viola/bassoon), Anton Killin
(*Javanese gender*), at a Composer Workshop at Adam Concert Room, New
Zealand School of Music (Kelburn campus), Wellington
- 25 Nov 2009 Andrzej Nowicki (clarinet), Kylie Nesbit (viola/bassoon), Anton Killin
(*Javanese gender*), at the inaugural Music and Artists’ Social Club Cinema
SoundEX screening at Happy, Wellington

II. *Wigena*⁶

String quartet, Javanese instruments, Javanese *rebab* solo

Several years ago, I wrote a suite for string quartet and one of the movements was entirely pizzicato – an idea that I have always intended to revisit for an entire piece. In *Wigena*, I arrange for pizzicato string quartet an ‘imaginary transcription’ (a *prescriptive* transcription) of the *demung*, *peking*, *bonang barung* and *bonang panerus* parts of *Wigena*, and combine this with several instruments of the gamelan – *rebab* (2-stringed solo upright fiddle), and to outline the colotomic structure, *gong*, *kempul* and *kenong*.

A *ketawung* is a traditional structure, typically 5 lines long, with four four-note *garra* to each line. The *gong* marks the last note of each line, the *kenong* marks the last note of the second and fourth *garra* of each line, and the *kempul* marks the last note of the third *garra* of each line. Here is the *balungan* and colotomic structure for *Wigena*, according to how Gamelan Padhang Moncar plays it (typically, minor personal and regional differences occur in traditional pieces, so this may be just one of a few authentic versions of the piece):

<i>Buka</i> (opening):	(played by solo <i>bonang</i> or <i>rebab</i>)					
-	-	2	2	1	6	5

Thus, *Wigena* was constructed around realising these patterns/parts via the string quartet, adding in the colotomic structure markings from the *gong*, *kempul*, and *kenong*, and working together with Greg Street – Gamelan Padhang Moncar's *rebab* player for many years – on the *rebab* melody, which is a combination of *Wigena*'s tradition melody in Solo (Surakarta) regional style (as compiled by Djumadi, 1986) and Greg's own personal decorative style. The ornamental relationship between the *rebab* and the *balungan* can be followed by inspecting the following annotated copy of the score with the cipher numbers noted. (Note that for *rebab* notation, \ represents a down-bow, and / represents an up-bow.)

Wigena ANTON KILIN

Rebab Folk-like expression -rebab arco

Solo Solo

Kenong Kempul Gong

2 1 2 1 6 2 1 6

1 2 1 6 2 1 6

5 1 2 1 6 2 1 2 1 2 2 1 6

1 2 1 6 2 1 6

First time through!

with up-bow!

with down-bow!

Handwritten musical notation with fingerings: 1 5 12 | 2 1 6 3 7 | 6 2 | 2

Handwritten musical notation with fingerings: 2 3 5 . 5 5 5 . 5 5 5 . 5 5 5 5 6 1

Handwritten musical notation with fingerings: 1 2 2 1 6 5 12 | 2 2 6 2 1

Handwritten musical notation with fingerings: 1 2 6 5 6 6 6 5 4 5 6 2

Handwritten musical notation with fingerings: 1 2 5 6 7 . 1 12 . 3 . 3 2

Handwritten musical notation with fingerings: 5 . 3 6 7 . 1 1 . 1 . 12 3

Handwritten musical notation with fingerings: 3 5 . 6 . 5 5 5 . 3 6 5 3 6

Handwritten musical notation with fingerings: 2 12 6 5 2 3 5 6 5 6 3 5

3 2 1, 1 1 6 6 1 2 5 6 - 6,
 1st line through: accel. poco a poco (until Section B)
 2nd line through: rit. poco a poco all line
 4 5 6 2 1 2 1 6
 5 12 1 2
 1 = 1st line through
 1 = 1st line through

5 12 1 2 1 6 2 1
 5
 1 2 1
 5

Fig. 3.9: Annotated score for *Wigena*

The practice of transcription employed here, *prescriptive transcription*, is quite a different compositional device to other transcription techniques, for example the ‘double-transcription’ of Jack Body (see Body, 1991). Body’s technique is an *external* technique, transcribing and then

instrumentating the essential musical parts (for instance, in his 1983 work *Melodies for Orchestra*), turning *heard sound* into a symbol (representation) and then back into sound again. Mine is an *internal technique* – performing gamelan enabled me to create the symbol (representation) from my own knowledge of how the music works (not from listening to a piece of music) and then turning that back into sound via instrumentation. It is thus a composition, extrapolated from the *balungan* of an old traditional Javanese work.

Furthermore, there are new, popular music styles of Indonesia, such as *kroncong*, gamelan textures and parts performed by ensembles comprising violin, electronic keyboards, guitars, and so on; and *tarting*, “gamelan-like parts played on the guitars, supported by gongs and drums, with a *suling* (bamboo flute) melody floating above it.”⁷ This kind of gamelan-inspired music with Western instruments has been established in Indonesia since the 1980s (Spiller, 2008) – proof that Western art music is certainly far from having a monopoly on cultural appropriation. My version, gamelan-textures played by plucked strings, with gongs and a *rebab* melody, is thus not without precedence of a similar concept.⁸

This work has not been performed in concert. It was recorded in stages – string quartet first, then gamelan instruments, and then *rebab* – see Chapter 2 Section IV.

⁷ Spiller (2008), p. 105.

⁸ Nevertheless, I feel that the combination of textures and timbres in my piece is fresh and exciting, and contributes a successful piece to the genre of cross-cultural music.

III. *Melody for Violin and Yangqin*

Violin and Chinese *yangqin* (dulcimer)

This piece was composed for Wang Hui, a Chinese *yangqin* player from Xiamen, China, visiting Wellington via the WARE (Wellington Asia Residency Exchange) programme, and Vector Orchestra violinist and member of the Wellington Xiamen Association, Elena.

Initially, I had ambitious ideas for this piece and I spent a long time working on a highly abstract, angular, systematic score, which contained extremely fine-grained detail. Ultimately though, the piece-in-progress was musically unsatisfactory and not performer-friendly, and I reflected upon on whether or not I was taking the wrong approach. I had recently participated in the ‘Momentary Pleasures’ project for the ISCM (International Society for Contemporary Music), in which composers were invited to submit a piano piece that they had composed in one single day. I decided to give this approach a try for violin and *yangqin* – and the *Melody for Violin and Yangqin* is what came out of it, rejecting all of the previous material I had composed.

In *Melody for Violin and Yangqin*, the music moves through different tonal/modal areas, often using chromatic voice-leading. Each of the piece’s four sections comprises a five bar phrase, a three bar phrase, and then a four bar phrase (except the very last section whose last phrase is five bars). The musical material is all closely related – I have aimed for an economy of material.

In the first section, the melody is presented by the violin and accompanied by the *yangqin* (and this section is repeated). In the second section both instruments play a variation of the melody together. In the third section, the texture thins, and the two instruments, interlocking, perform a stripped-down variation. So that the pieces comes ‘full circle, the final section is a version of the first. The work explores some interesting modulations and harmonic relationships, and the harmonic implications of the two instruments can be traced by seen in the following annotated score (from next page).

The work was well received in performance by the audience and the performers. Indeed, the two performers took the opportunity to perform the work in China.

Melody for Violin and Yangqin

ANTON KILLIN

Grave con grazia (♩ = 50-60)

Section 1

Violin

Yangqin

C: [V⁶₃] V⁶ VII⁷ i I [V⁶₃]

Violin

Yangqin

bII bII I⁵.....6 [V⁶₃]

Violin

Yangqin

A-Flat: iii⁶₄ i I F: i

Violin

Yangqin

iii I i

Section 2

Violin

Yangqin

d: IV III V⁶ i V⁶

Violin

Yangqin

i E: I II V⁶ a: V I i

37 arco

Section 4

pp p mp p

C: [V^o₄] V VII⁷ I I [V^o₁]

40

f mf f f

bII bVII vi [V^o₅]

43

p pp mf f

A-flat: i⁶₄ ii⁶₄ i I f

46

mp f ff ff mp

⁹iii I⁵ 6 I i i a: vi i

Fig. 3.10: Annotated score for *Melody for Violin and Yangqin*

PERFORMANCE HISTORY (as of 12 July 2010)

26 March 2010 Performed by Elena (violin) and Wang Hui (*yangqin*) at Massey University Concert Hall, New Zealand School of Music, Wellington

12 June 2010 Performed by Elena (violin) and Wang Hui (*yangqin*) at Little Egret Music Hall, Xiamen, China

IV. *To* –

Javanese musician (male voice and Javanese *gender*)

To – is a short piece for a solo (male) Javanese musician, for voice and *gender*, in *pelog* scale. It is inspired by, though not an imitation of, *pathetan* postludes found in gamelan performances and *wayang kulit* (shadow-puppet shows). It was also inspired by my study of Javanese vocal music. My study involved transcriptions of recordings, but none of that material is directly referred to in my piece. However, it does contain *characteristics* of those transcriptions, such as very long melismas.

Originally I conceived this piece as a solo vocal miniature, possibly to be accompanied by fixed media. I had a rehearsal with performer Budi S. Putra, director of Gamelan Padhang Moncar, to workshop a vocal part that I had composed, and I recorded this entire rehearsal. Although Budi began singing solo, after a short while he started doubling parts of his vocal line on *gender*, to help him get his pitches. What he produced quite unintentionally resonated with me, and I decided to abandon the idea of fixed media, and instead use live *gender*. I then listened to the recording of this session. Each run-through of the piece had a different *gender* accompaniment, and using these I composed this composition. Although the ultimate compositional decisions were mine, the work was developed out of a session of collaboration and negotiation with the performer.

All three *gender barung* are required to play this piece, because they each contain different sets of pitches. The *slendro* instrument is required for the *pelog* 4s (i.e. *slendro* 5s), and both *pelog* instruments are required so that *pelog* 1s and 7s are available.

The lyric that is repeated throughout the piece, ‘*Saya orang lewat*’, is inspired by a short verse of Edgar Allan Poe, *To* – (1829):

I heed not that my earthly lot / Hath little of earth in it –
That years of love have been forgot / In the hatred of a minute: –
I mourn not that the desolate / Are happier, sweet, than I,
But that *you* sorrow for *my* fate / Who am a passer by.⁹

Saya orang lewat, ‘I’m a passer by’, is my original lyric representing the mournful, yearning mood of this verse. It was translated into Indonesian with assistance from Yono Sukarno.

⁹ Poe (2002), pp. 799-800.

V. *Three Pieces for Gamelan in Traditional Central Javanese
Style with Western Instruments*

Ketawang Anggun [laras] *Slendro* [pathet] *Manyura*

Ladrang Santai [laras] *Slendro* [pathet] *Sanga*

Gending Tarikan [laras] *Pelog* [pathet] *Nem*

In keeping with Javanese conventions, the full titles of these three pieces for gamelan describe the pieces' form (*bentuk*), scale (*laras*) and mode (*pathet*).¹⁰ The individual titles, *Anggun*, *Santai*, and *Tarikan*, reflect the piece's mood and expression – respectively 'Graceful'; 'Relaxed'; and 'Pulling' or 'Attracting'. *Anggun* is of *ketawang* form, in the *slendro* scale, and of *pathet manyura*. *Santai* is of *ladrang* form, in the *slendro* scale, and of *pathet sanga*. *Tarikan* is in *pelog* scale, of *pathet nem*, and the form *gending* can be a little ambiguous; here, *Tarikan* has an original form at the beginning – *komposisi baru* – then a transition into a traditional *ketawang* form. All three include Western instrument solos: *Anggun* includes viola solo, *Santai* includes guitar solo, and *Tarikan* includes accordion and clarinet. Moreover, *Santai* also includes a *gerong* (male choir) part, singing in English.

The scores are notated in Western staff notation in my composition portfolio, with the cipher number underneath the pitch which is only an approximation. No two gamelan makers tune their gamelan ensembles alike, so I do not feel that it is useful to complicate the score with ultimately unnecessary microtones:

Pelog: 1 (D), 2 (Eb), 3 (F), 4 (G#), 5 (A), 6 (Bb), 7 C

Slendro: 1 (Db), 2 (Eb), 3 (F), 5 (Ab), 6 (Bb)

See Chapter 1 Section III for further discussion of the pitches and tunings of the Javanese gamelan.

I use gamelan terms that need some explanation, thus a short glossary follows before returning to a discussion of the pieces.

Buka: the introduction of a piece, played by one instrument, usually the *bonang* or the *rebab*, but sometimes also the *gender*. *Anggun* and *Santai* both have *buka*, played by the *bonang barung*.

¹⁰ The two scales are further subdivided into three *pathet* each, establishing a pool of *pelog nem*, *lima* and *barang*; and *slendro nem*, *sanga* and *manyura* – each which have different 'cadential' patterns, ranges, and also each tend to both emphasise and avoid certain pitches, relevant to that *pathet*.

Suwuk: the ending of a gamelan piece. After a small speed up and drastic slow down initiated by the *kendhang* player, the gamelan players withhold their last note until after the final stroke from the *gong ageng*. The term *suwuk* can also refer to a line or *gatra* (bar) of music to substitute in, signalling the end of the piece with a different set of notes. In *Tarikan*, there is a *suwuk* line to substitute in for the final line of the final cycle through the piece.

Ketawang: a form, which indicates to the performers of the punctuating instruments (as notated by the symbols above this *balungan* example) to play *this* specific punctuating cycle:

° + °	° + ° ∩	° + ° V	° + ° ∩
1 2 1 6	2 1 6 5	1 2 1 6	2 1 6 (5)

° = *kempyang*, + = *ketuk*, ∩ = *kenong*, V = *kempul* and () = *gong ageng*

For *ketawang*, four *gatra* comprise one *gongan* (line before a strike of the *gong ageng*), and a *ketawang* structure conventionally comprises five *gongan*. The first two lines comprise a *merong* section, and the next three a *ngelik* section.

Ladrang: a form, which indicates to the performers of the punctuating instruments (as notated by the symbols above this *balungan* example) to play *this* specific punctuating cycle:

° + °	° + ° ∩	° + ° V	° + ° ∩
1 2 1 6	2 1 6 5	1 2 1 6	2 1 6 5
° + ° V	° + ° ∩	° + ° V	° + ° ∩
1 2 1 6	2 1 6 5	1 2 1 6	2 1 6 (5)

° = *kempyang*, + = *ketuk*, ∩ = *kenong*, V = *kempul* and () = *gong ageng*

For *ladrang*, eight *gatra* comprise one *gongan* (line before a strike of the *gong ageng*), and a *ladrang* structure usually comprises two *gongan*. The first *gongan* is a *merong* section, which may be cycled several times before moving onto the second section, a *ngelik* section, which is played only once before returning to the *merong* and repeating the process.

Merong: the first part of a *ketawang* or *ladrang*, etc., which is followed by a *ngelik* section.

Ngelik: the second part of a *ketawang* or *ladrang*, etc., which follows a *merong* section. Etymologically, *ngelik* means “go up” or “get higher”; the *balungan* gets higher, and the elaborating instruments rise in accordance, playing higher-pitched patterns, or melodic lines that

lend themselves toward higher pitches. The end of the *ngelik* section requires a return to a lower pitch base, for the return to the *merong* section.

Umpak Also spelled *ompak*. A transitional section between structures or sections, for instance, in *Tarikan* it denotes the transition between the introductory section, and the *ketawang* section. Also, sometimes a *merong* section can be called an *umpak* section, but because this is ambiguous (*umpak* also meaning transition) I have avoided that use here.

Irama The relationship between the speed of the *balungan* (core melody, performed by *slenthem*, *saron*, *demung*) and the rhythmic density of the ornamentation/decoration of the *peking*, *bonang* and the instruments performing *garpap* (*gambang*, *gender*, *rebab*, *suling*). The slower the *irama* (i.e. the longer the space is between adjacent notes of the *balungan*), the busier the other instruments. The three *irama* that I work with here in my compositions are *lançar*, *tanggung*, and *dadi*. It is perhaps easiest to see *irama* by considering *how often* the *peking* plays, relative to the *balungan*.

For example (here I underline the beats that match up together):

<i>Lançar:</i>	<i>Peking:</i>	<u>1</u>	<u>2</u>	<u>1</u>	<u>6</u>
	<i>Balungan:</i>	<u>1</u>	<u>2</u>	<u>1</u>	<u>6</u>
<i>Tanggung:</i>	<i>Peking:</i>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>
	<i>Balungan:</i>	<u>1</u>	<u>2</u>	<u>1</u>	<u>6</u>
<i>Dadi:</i>	<i>Peking:</i>	1	<u>1</u>	<u>2</u>	<u>1</u>
	<i>Balungan:</i>	<u>1</u>	<u>2</u>	<u>1</u>	<u>6</u>

Lançar The fastest of the three *irama* I work with in these compositions. The *buka* for both *Anggun* and *Santai* starts in *irama lançar*, and slows down, guided by the *kendhang*, to *tanggung* for the first *gong ageng* note, which is also entry point of all the other gamelan instruments. The entire first section of *Tarikan* is *lançar* before the *umpak* transition to *ketawang* and *irama tanggung*.

Tanggung The *irama* that both *Anggun* and *Santai* are in once the whole gamelan joins the piece on the gong note after the *buka*. This does not last long however, as both pieces slow down and transition to *dadi* at the end of the third *gatra*. This is very typical for traditional gamelan music. *Santai* remains in *irama dadi* for the rest of the piece, though *Anggun* transitions back to *tanggung* for the final time through the cycle. The *ketawang* section in

Tarikan begins in *tanggung* and the first cycle through stays in this *irama*, until the end of the last line when a transition to *dadi* occurs, and the rest of the piece remains in *irama dadi*.

Dadi The slowest *irama* that I use for these compositions for the *balungan*, and the busiest for the elaborating instruments. *Dadi* is considered the home *irama* for *ketawang* and *ladrang* structures; *Santai* and *Anggun* are predominantly in this *irama*. Often, elaborating instruments like *rebab* and *suling* only play in *irama dadi* sections of a piece, dropping out if the *irama* shifts into *tanggung*. In the recording of *Anggun*, the *rebab* and *suling* do exactly that.

Salisir *Salisir* is one of the several poetic forms to which the lyrics of a gamelan piece traditionally conform (see Sumarsam, 2002). *Salisir* has a specific meter – four lines of text, eight syllables per line, and a specific rhyme scheme –

The first line ends with either an /**ʔ**/ vowel sound (e.g. “**do**” or “**through**”), or an /**ʊ**/ vowel sound (e.g. “**book**”)

The remaining three lines end with an /**d**/ vowel sound (e.g. “gui-**tar**”).

Also, a *salisir* is a kind of poetic riddle (Spiller, 2008). My original lyrics for *Santai* demonstrate this concept:

Out in the shade, no work to do

Nylon and glass, there we all are

Under a pohutukawa

Singing, drinking, playing guitar

In keeping with Javanese convention, the first two lines point to metaphors and the third and fourth lines elucidate these metaphors, often describing the environment or expressing a moral, emotion, or irony. Here, “out in the shade” connects with “under a pohutukawa”; “nylon and glass” connects with “drinking, playing guitar.” The verse paints a picture of friends relaxing together on a warm day – making music and having a few drinks together – *relaxing* (*Santai* – the individual title of the piece).

I shall now consider each of the three works individually. In performance, it is the preference of Gamelan Padhang Moncar to read from cipher notation, and this I give below.¹¹ The performers follow the *kendhang* player who directs the changes in tempo and dynamics (so, for the soloists’ sake, the *kendhang* player needs to know when I have specified these changes in the score, because traditionally this is up to the *kendhang* player). As is convention, the *balungan* is

¹¹ Not all gamelan ensembles in the West have this preference – Ensemble Gendhing in Holland only plays new compositions in Western notation, using cipher notation for traditional gamelan pieces (Body, pers. comm., 2010).

sufficient for all gamelan players to understand their parts.¹² However, the *gerong* in *Santai* will need to see their part (my vocal melody cannot be extrapolated from the *balungan* line). Similarly, for *Anggun*, the *gambang* player should take note of how I notate the instrument's *garap* in the score because it is specifically designed to interweave with the viola solo.

'High' notes and 'low' notes outside of the one-octave range of the *balungan* are notated with dots above and below the cipher number, respectively. *Balungan* instruments will not have a low 5, so they play their 'normal' 5 instead (the low 5 is specific to the embellishing instruments only). Similarly, the low dot on a 6 is ignored by *balungan* instruments if it is adjacent to a low 5. This occurs in *Santai*.

Moreover, dynamic markings are absent from gamelan cipher notation. Dynamics are tied up in performance practice, controlled by the *kendhang* player. For this reason, I have not indicated dynamic marks for the gamelan players on the score for *Aggun* or *Santai* – the *kendhang* player will signal to the other gamelan performers to play louder or softer as he/she deems appropriate and the Western instrument players must attenuate their dynamic level relative to the volume of the gamelan ensemble. However, for *Tarikan*, due to its unusual form, I have indicated on the score that the introduction section should be fortissimo, and that when the *ketawang* section starts, it should be *mezzoforte*. This is essentially an instruction to play very loud at the beginning, and when the *ketawang* starts, to drop to a lower volume (listening to the *kendhang* player for cues).

¹² That is, the *balungan* performers play the *balungan* as given in the cipher notation, the embellishing instrument performers extrapolate their own parts based upon it from traditional performance techniques and specific *garap*; allowing the music to be extrapolated by musicians trained in, or under the supervision of musicians trained in, traditional practice. The performers of the colotomic instruments play according to the piece's form.

Ketawang Anggun Slendro Manyura

<u><i>Buka:</i></u>	--62	33-6	321 (6)
<u><i>Merong:</i></u>	3351	66-2	3351 336 (3)
	3351	66-2	3351 -66 (3)
<u><i>Ngelik:</i></u>	6625	-663	66-2 -66 (3)
	6625	3363	66-2 335 (1)
	33-6	--62	33-6 321 (6)

Fig. 3.11: Cipher notation for *Ketawang Anggun Slendro Manyura*

Bonang plays the *buka* and the other gamelan instruments join in on the first *gong ageng* note (last note of the *buka*). Like a traditional *ketawang*, *Anggun* plays through the five *gongan* that make up the form in turn, and then repeat through that structure. The *kendhang* player needs to know when to change *irama*: the *buka* is *irama lancar*, slowing down to *tanggung*; the piece is *irama tanggung* by the time the gamelan joins, slowing down to *dadi* by the end of the third *gatra*. On the third time through the cycle, the *kendhang* player must gradually speed the ensemble up, and then transition to *irama tanggung* by the last *gatra* (*rebab* and *suling* will drop out when the piece transitions to *tanggung* here – this is typical). The fourth time through the cycle the piece is *tanggung*, slowing down for a traditional style *suwuk* at the end.

Anggun fits neatly into *pathet manyura* – there are no low 5's at the end of any *gatra*; high 5's at the end of *gatra* occur only in the first half of the *ngelik*; there are no 5's on a gong note; characteristic 'cadential' figure for *manyura* – 3216 – is the final *gatra* of both the *buka* and the piece; the mode often feels 'at home' on the notes 6 and 2, especially when they appear as the last note of a *gatra*. These are all typical, traditional characteristics of *manyura*.

The score comprises the viola part and the *balungan* line, which is accompanied by its cipher notation. The *kempul* and *gong ageng* colotomy is given with the cipher notation; I have not given the other colotomic indications (the players of these instruments already know when and what to play due to its form). The *gambang* part is also given, and I have laid out on short score the parts for the *bonang panerus*, *bonang barung*, *peking*, *saron*, *demung* and *slenthem*. The

given *bonang* and *peking* parts are essentially just one representation of a possible extrapolation of the *balungan* melody on those instruments. I have not notated *gender*, *rebab*, *suling* and so on, because these performers can work out acceptable *garrap* from the *balungan*, and different performers with different musical backgrounds and styles from different regions will choose different, though appropriate, material.

Ladrang Santai Slendro Sanga

<u><i>Buka:</i></u>	-356	3521	3352	-16(5)
<u><i>Merong:</i></u>	2156	5535	2532	-165
<u><i>Ngelik:</i></u>	-55	6165	6153	2532
	6165	2156	3352	-16(5)

Fig. 3.12: Cipher notation for *Ladrang Santai Slendro Sanga*

As in *Anggun*, for *Santai* the *bonang* plays the *buka* and the other gamelan instruments join in on the first *gong ageng* note (last note of the *buka*). Like a traditional *ladrang*, the *merong* is played through several times before playing *ngelik* once and returning to the *merong*, repeating the process. The *bonang* cues the switch to *ngelik* by playing a *gembyang* (octave) pattern on the last bar of the *merong* instead of ornamenting the *balungan* in its usual way (*mipil*). On the score, I have notated that the *merong* will happen twice, then *ngelik*, three times in total before slowing down for a traditional style *suwuk*. However, in practice, it is really up to the *bonang* player how many times the *merong* section will be cycled through, and this is fine for *Santai* because there is no *gerong* or guitar solo in the *merong* section, only gamelan. Like *Anggun*, the *buka* is *irama lancar*, slowing down to *tanggung*; the piece is *irama tanggung* by the time the gamelan joins, slowing down to *dadi* by the end of the third *gatra*. The piece remains in *dadi* until the end.

Santai fits neatly into *pathet sanga* – the gong notes are 5; a characteristic ‘cadential’ figure for *sanga* – 2165 (though used in this piece as 2–165, as it occurs in traditional pieces such as *Gembling Gambir Sawit Slendro Sanga*) – is the fourth *gatra* of the *merong* and also the final

gatra of both the *buka* and the piece; the mode often feels ‘at home’ on the notes 5 and 1, especially when they appear as the last note of a *gatra*. These are all typical, traditional characteristics of *sanga*. However, the third and fourth *gatra* of the *ngelik* section will probably require most *garap* performers to ‘borrow’ from *pathet manyura* for those two *gatra*, as ending a *gatra* with a 3 (i.e. the third *gatra* of *ngelik*) is uncommon in *pathet sanga*.

The score comprises the *gerong* and guitar parts, and the *balungan* line, which is accompanied by its cipher notation. Like for *Anggun*, the *kempul* and *gong ageng* colotomy is given with the cipher notation, but not the other colotomic indications. I have laid out on short score the parts for the *bonang panerus*, *bonang barung*, *peking*, *saron*, *demung* and *slenthem*. Again, the given *bonang* and *peking* parts are essentially just one representation of a possible realisation of the *balungan* melody on those instruments, and other traditional realisations are acceptable. For the same reasons as *Anggun*, I have not notated *gender*, *rebab*, *suling* and so on.

Gending Tarikan Pelog Nem

Overscored numbers are “quavers” or twice as fast as standard *balungan* notes. Numbers that are underscored with a “x” should be held, muted with the players other hand whilst they are being struck, for a dampened, muted percussive effect.

Intro (*irama lancar*) – play through three times. No colotomy other than *kempul* (V), *gong sawuk* (S) and *gong ageng*. On third time through, after the *gatra* marked with an *, move on to the *umpak*. Because the form is not traditional until the *ketawang* section, I have indicated which notes the *kempul* player should play (i.e. V⁶ = *kempul* 6; V⁵ = *kempul* 5).

V ⁶	V ⁶	V ⁶	V ⁶	V ⁶	V ⁶
(1) 2 35 65 32	12 35 65 32	12 35 65 32	12 35 65 32	12 35 65 32	12 35 65 32
V ⁵	V ⁵	S	V ⁶	V ⁵	V ⁵
7 5 7 5	65 32 12 35*	7 5 7 5	7 5 7 5	35 67 65 32	35 67 65 32

Umpak – slowing down for *tanggung*. Play only once.

V ⁵	V ⁵	V ⁵	V ⁵	V ⁵	V ⁵
6 66 7 5	3 33 2 4	6 -	(5)	x x	x x

Ketawang – first time through *irama tanggung*. Each line of the entire structure is played through one-by-one. During the last line, slow down for *dadi*, and transition to *dadi* by the beginning of the repeat of the structure. Play through the *ketawang* twice more in *irama dadi*, and on final time through the cycle, after the *garra* marked with an *, move on to the *sawuk* section. (I no longer mark colotomy here because it is now a traditional *ketawang*.)

(Merong)

6̄ 5 3 2 1 - 2 4̄ 2 1 - 6 5 3 5 7 6 (5)
 6̄ 5 3 2 1 - 2 4̄ 2 1 - 6 5 3 5 7 6 (5)

(Ngelik)

3̄ 5 3 2 4 1 - 2 4̄ 2 1 - 2 3 6 5 2 5 (1)
 3̄ 5 3 2 4 1 - 5 6 3 5 6 7 6 5 3 2 (1)
 - 1 - 1 1 2 4̄ 2* 5 - 6 3 5 - 2 (6)

Sawuk – slowing down for traditional style ending

4 - 2 6 5 3 2 (6)

Fig. 3.13: Cipher notation for *Gendhing Tarikan Pelog Nem*

This piece is unusual in its *pathet* as well as in its structure. *Tarikan* does not neatly fit into any of the *pathet* categories of *laras pelog*. I have given it *nem* essentially for the embellishing instruments that perform *garap* (so they can use patterns from that *pathet*), not because it expresses the modal sound qualities of *nem*. However, this was not an arbitrary choice: it could *not* have been *pathet barang* because of the regularity of 1s appearing at the end of *garra* and the overall regularity of 1s over 7s. I settled on *nem* rather than *lima* because the numbers that appear most often as gong notes – 1 and 5 – are also the most often gong notes for traditional pieces like *Lelagon Prau Layar Pelog Nem*, and the *only* gong notes for traditional pieces like *Ketawang Pocung Layung Pelog Nem*. Also, when 4s occur, they intuitively seem to be an

alternative to 5 rather than 3 – a feature that traditionally distinguishes between *nem* and *lima*. Moreover, the accordion plays a *gambang* style melody in the *dadi* part of the *ketawang* section, using *garvap* from *pathet nem*. Because this *gambang*-esque melody is from the equal tempered accordion, tension builds through the tuning discrepancies as the melody unfolds. For this reason, the accordion never plays on the downbeat of the fourth note of any *gatra* (the beat felt as the strong beat in Javanese gamelan music), allowing the gamelan instruments to resolve that tension in their own tuning system.

The score comprises the clarinet and accordion parts, and the *balungan* line, which is accompanied by its cipher notation. Like for *Anggun*, the *kempul* and *gong ageng* colotomy is given with the cipher notation for the score-reader to follow and I have not given the other colotomic indications because they do not play in the opening section ('intro' and *umpak*), and in the *ketawang* part, players of those instruments already know when and what to play. I have laid out on short score the parts for the *bonang panerus*, *bonang barung*, *peking*, *saron*, *demung* and *slenthem* – and also *gong ageng*, *gong suwuk* and *kempul* for just the opening section because their part does not conform to that of a traditional form. Again, the given *bonang* and *peking* parts are essentially just one representation of a possible realisation of the *balungan* melody on those instruments, and other traditional realisations are acceptable, at least in terms of the *ketawang* section. For the opening section, both *bonang* instruments just play the *balungan* melody. However, the *slenthem* and *peking* players need to take note of what to play in the opening section: *slenthem* only plays the downbeats and not any offbeat 'quavers', *peking* plays 'quavers', but iterations of the downbeat note, rather than note-for-note *balungan*). For the same reasons as *Anggun* and *Santai*, I have not notated *gambang*, *gender*, *rebab*, *suling* and so on.

The *rebab*, *suling*, *gambang*, *gender* (and so on) players will likely first appear in the *ketawang* section near the end of the transition from *tanggung* to *dadi*, for performance in the *dadi* section.

VI. *Memnecolion* Electroacoustic



Fig. 3.14: Memnecolion¹³

A memnecolion is a somewhat obscure mythical creature. It is a hybrid, combining the body of a giant ant with the head and foreparts of a lion. The combination of such physically contrasting species is the motivation and inspiration behind this piece, in which several soundworlds are combined to create a hybrid soundworld: piano, viola and flutes, Balinese gamelan, and electronics. As the legend goes, the creature inevitably can never survive – the lion's head wishes to eat only meat but the body of the ant can digest only grain – so it starves. This short piece briefly paints an abstract sonic picture of this constant weak state, inner conflict, and demise.

Interestingly, the origin of the creature is traced to an error in translating the Bible from Hebrew to Greek (Allan, 2008), specifically Job 4:11, “the lion perishes for want of prey.”¹⁴ A translator attempted to reproduce the effect of the original Hebrew *lajisch*, an uncommon word for lion, by coining ‘myrmecoleon’ (memnecolion), prefixing lion with *myrmex*: the term that the geographer Strabo used to describe Arabian lions. However, *myrmex* happens to mean ‘ant’ in Greek – and thus the ant-lion was created. As pious believers whittled away the cold nights by puzzling over the creature, a moral finally emerged: just like the inevitable demise of a

¹³ Source: <http://www.borges.pitt.edu/vakalo/zf/assets/images/0077_Mirmigoleon.JPG/> Accessed 22/06/2010.

¹⁴ Allan (2008), p. 179.

mermeccolon, a “man chronically in two minds must come to naught, being inherently unstable in all his ways,”¹⁵ gender-exclusive language aside.

This piece was composed specifically for submission to the Vox Novus “60x60” electroacoustic music composition series, for which it was accepted for the “2009 International Mix” – an hour-long concert experience comprising sixty-second acousmatic pieces from sixty composers from all over the globe.

This piece’s electronic sounds were composed using Metasynth, and interwoven with short samples from recordings of pre-existing compositions of mine, *Melody for Gamelan Bali* (2007), *Much Suspicion* (2007) for two flutes, and *Moversi Lento* (2008) for viola and piano, using composer Karlheinz Essl’s electronic composition programme, Fontana Mixer. The programme created a long collage of material using random operations, and I selected from that output the minute that resonated with me the most. The final gong near the end was then added, as I felt the work needed a strong final gesture.

PERFORMANCE HISTORY (as of 12 July 2010)

- 3 Oct 2009 Presented by the Vox Novus “60x60” project (henceforth, ‘Vox Novus’) at the Wallstreet Club, Columbus, Ohio, USA
- 14 Oct 2009 Presented by Vox Novus at the University of Limerick, Ireland
- 6 Nov 2009 Presented by Vox Novus at Electronic Music Midwest Festival, Kansas City, in Kansas, USA
- 8 Nov 2009 Presented by Vox Novus at New Music Circle at MadArt, St Louis, in Missouri, USA
- 13 Nov 2009 Presented by Vox Novus at Winter Garden Atrium, New York City, in New York, USA
- 13 Nov 2009 Presented by Vox Novus at New Music Juke Joint, in Mississippi, USA

¹⁵ Allan (2008), p. 179.

- 13 Nov 2009 Presented by Vox Novus at Central Michigan University, in Michigan, USA
- 15 Nov 2009 Presented by Vox Novus at Stimulania Art Gallery in Strasbourg, France
- 20 Nov 2009 Presented by Vox Novus at the University of Cincinnati in Ohio, USA
- 3 Dec 2009 Presented by Vox Novus at Luggage Store Gallery, San Francisco in California, USA
- 5 Dec 2009 Presented by Vox Novus at Los Angeles Harbor College, Wilmington, in California, USA
- 10 Dec 2009 Presented by Vox Novus at California State University, Long Beach, in California, USA
- 12 Jan 2010 Presented by Vox Novus at Westbrook Auditorium, Illinois Wesleyan University, Bloomington, in Illinois, USA
- 26 Feb 2010 Presented by Vox Novus at Oxford Brookes University, England
- 16 March 2010 Presented by Vox Novus at Atgeld Hall, Southern Illinois University Carbondale, USA
- 19 March 2010 Presented by Vox Novus at Mansfield University, Pennsylvania, USA
- 25 March 2010 Presented by Vox Novus at Centennial Theatre, Oklahoma Panhandle State University, in Oklahoma, USA
- 29 March 2010 Presented by Vox Novus at Cat Winter Garden Atrium, University of Wisconsin-Green Bay, in Wisconsin, USA

SCHEDULED FUTURE PERFORMANCES

- 21 July 2010 Presented by Vox Novus at Outsound New Music Summit, San Francisco, in California, USA

VII. *Podróże*
Electroacoustic

Podróże is the incredible story of an anonymous man's journey as a child in World War II: from Poland to the labour camps in Siberia, to Iran, and eventually to New Zealand as a 'Pahiataua child'. His story is punctuated and ornamented with electroacoustic sounds.

Firstly, I am indebted to my storyteller for his kind patience and willingness to participate in this project; and I must also acknowledge the following people who generously consented to my sampling of their material – Dr Allan Thomas, Dr Megan Collins, Farhad Bahrami, and *hazure*, *laurent*, *ljudman* and *Ironi Alef* from the freesound.org project; the following brilliant musicians for allowing me to record them – Jonathan Berkahn (accordion), I Wayan Gde Yudane (percussion), Joel Gordon (percussion), Kylie Nesbit (bassoon), Andrzej Nowicki (clarinet), and Gamelan Taniwha Jaya; and Clare Tattersall for the beautiful French.

Even before embarking on my Master's studies I knew that I wished to write a radiophonic-style electroacoustic piece that contained a single person's narration. This is kind of electroacoustic piece is well established in the New Zealand repertoire – consider John Cousins' *Sleep Exposure* (1979) and *Tense Test* (1986), amongst others, and Jack Body's *Intimate History no.1: Yono* (2005) and *no.2: ssstve* (2008), and, for piano and recorded voice, *The Street Where I Live* (2007). David Sanders' *Choice Cuts* (2001) and Chris Cree Brown's *Pilgrimage to Gallipoli* (2008), which both interweave a single narrative told through many different people, were also initial influences on my writing this piece, as was the seminal New Zealand radiophonic work, *The Return* (1965), by Douglas Lilburn.

Initially, I was approached by my friend, Andrzej Nowicki who asked me if I'd be interested in writing a piece for inclusion in a concert series commemorating two important anniversaries for New Zealand's Polish community – the 65th anniversary of the arrival in Wellington of the Pahiataua children (Polish children refugees – the first refugees ever accepted by New Zealand – who were given refuge at an old camp in Pahiataua, in Tararua) and the 20th anniversary of the end of the Cold War and Polish Independence.

Andrzej told me the epic story of the Polish children's journey to New Zealand – from being taken out of Poland and growing up in the harsh environment of the Russian labour camps, to being freed once Russia became an Ally, and making their way with the Polish Army towards Iran, where they were given temporary refuge. In 1944, New Zealand Prime Minister Peter

Fraser responded to the plea of the Polish government-in-exile and accepted over 800 refugees, 733 of whom were children. Touched by the story and the strength and persistence of the young refugees, I asked Andrzej if he knew any of the survivors (who are now senior citizens) on a personal level, and he put me in touch with the man whose story I recorded. This man cooperatively recollected, very openly, about his childhood experiences and his journey to New Zealand, for a little over two hours. Thus I had a lot of spoken material to work with, and from this I chose sections for the retelling of his story through my piece. Some time before the piece's premiere, I played the piece to him and he willingly gave me his approval of my selections of his spoken material, and how the electronic sounds caught the mood of the tale. My friend and composition colleague Carol Shortis, very interested in my project, made a transcript of his entire tale, which in turn inspired her piece *Tešknota (Yearning)* (2009), and her arrangement of *Polskie Kwiaty* (2009).

Podróże begins with my narrator introducing and singing a few lines from an old Polish folk song, *Polskie Kwiaty* (Polish Flowers) that for many Polish people has come to represent their post-war diaspora, as well as describing the yearning of someone “far removed from their roots” (0’12’), reminiscing about their homeland, lamenting their displacement from it. The recording of his singing is reiterated later in the piece from 9’06’’, over an electronic soundscape. This occurs in-between his recollection of school life in Russia and his recollection of his family’s struggle for survival – catching sparrows for something to eat – thus placed at a moment where the folk meaning of the song, longing for one’s home, would have been significant to my narrator and his family. A lot of the generated electronic material for this piece was inspired by the melody of the folk song (in an abstract way), but also in a non-abstract way, as my own two arrangements of it appear near the piece’s end (see below).

The intermittent drones persisting throughout the piece signal an allusion to the narrator’s state of limbo and homelessness throughout this period of his life, while other recorded environmental and technological sounds (birds, train sounds, water sounds, children laughing, tree felling, sweet wrappers) refer to specific points and anecdotes in the narration, accompanying, in various levels of abstraction, like an embellished reality or intermittent embellished Foley track.

For instance, bird sounds are heard from 9’27’’ as my narrator recalls his parents catching a sparrow for something to eat, though the accompanying bird sounds are of New Zealand birds, not Russian birds, foreshadowing my narrator’s arrival in New Zealand and his fascination with New Zealand greenery and wildlife, in an abstract sense.

Sound morphology plays a role in foreshadowing aspects of the narration. For instance, at 6'20'', the narrator mentions the lack of water and not being able to shower, and instead having to bathe “in snow.” A dripping water sound accompanies his mention of showers and water, a manipulated, softer water sound accompanies his mention of snow, and then harsher, ice-like sounds follow.

Moderate levels of abstraction between sound sources and the narrative were achieved by the employment of percussion instruments. The snare drum rolls (punctuated by gongs) from 8'10'' - 9'25'' and 10'05'' - 11'10'' evoke a strong military allusion. These snare drum rolls are anticipatory sonic signals for the forthcoming *kendhang* drumming ‘battle’ (11'14'' - 12'25''), a metaphorical standoff, representing the release of the Polish prisoners from the camps, to fight on the side of the Russian army against the German army, once the German army invaded Russia. Similarly, while my narrator talks about his temporary refuge in Iran at 16'30'', we hear the sounds of an Iranian *tar* (تار) lute, played by Farhad Bahrami, evoking the musical language of the area.

The *taonga pūoro* at 17'20'' and 17'53'', signals the welcome to and arrival at Pahiātua of the refugees, evoking the musical language of Aotearoa New Zealand. The French language spoken over my narrator’s recollection of French class at high school in New Zealand (at 18'10''), by adding an extra layer of spoken voice, disorients and confuses, as the listener’s ear is torn between attending to several voices simultaneously, and purposefully having to focus on the narrator’s voice to keep up with the tale. This effect is intended to capture the disorientation, confusion and frustration my narrator must have experienced in trying to sit through classes, in which a new language is being taught through another language that he could not yet competently speak!

The ‘multicultural interlude’ at 18'56'' - 19'10'', which follows from the narrator’s joke about confusing ‘bookkeeping’ class with what it is that librarians do, combines Chinese gong sounds, Balinese Gamelan (*Gong Kelyar*), bassoon and accordion together – all instruments with different cultural associations – representing the diverse multicultural makeup of New Zealand’s population, in an arrangement of the melody of the Polish folksong *Polskie Kwiaty* that my narrator sang at the beginning (and iterated roughly in the middle) of the piece – we thus hear this tune at the beginning, middle, and end of *Podróż*. A second arrangement of that melody, for a “folk band” quartet of accordion, bassoon, clarinet and tambourine follows (from 19'10''), over which my narrator wraps up his tale, discussing his plurality of identity after living in New Zealand for 65 years – he considers himself both Polish *and* a New Zealander.

PERFORMANCE HISTORY (as of 12 July 2010)

- 06 Nov 2009 Realised (by the composer) at “*Podróże – Journeys*” at Adam Concert Room,
New Zealand School of Music (Kelburn campus), Wellington
- 07 Nov 2009 Realised (by the composer) at “*Podróże – Journeys*” at St. Andrew’s On The
Terrace, Wellington

CD RELEASE

The SMP Ensemble (2010), *Podróże – Journeys* (New Zealand: Amstore)

VIII. *Elegy*

Piano and Javanese gamelan

In August 2009 I was compelled to create a piece for the memory of a close friend. To avoid sentimentality, I structured the piece's pitch material serially, from a 14-note row based on her name that I created by transferring letters of the alphabet to a pitch at a certain octave: D₂, E₃, Eb₂, E₁, E₂, E₁, A₂, Eb₃, D₃, E₁, Eb₂, D₂, Ab₁, A₁. My row presents only five different pitches: Ab, A, D, Eb, and E – pitches that create lots of 'open' intervals (fourths and fifths) with which I could construct an open, bare soundworld which would 'shimmer' in varying ways according to the microtonal tuning of the gamelan. as each piano note is doubled by a gamelan note – breaking free of the ubiquitous convention of the equal-tempered piano – "twelve black and white bars in front of musical freedom,"¹⁶ in a way representing, for me, how I was feeling when writing the piece.

Because of the tuning discrepancies between the Western tuning of a piano, and the tunings of Javanese gamelan, different unison/octave harmonies beat at different rates, at different registers. Exploring this concept, I thus composed the piece to work through different tensions and releases, leaving a lot of space, silence, and emptiness around the sound-events so that the beating notes and resonances could be properly perceived by the audience in the space of the performance. On different gamelan sets, the beating will be different again – an exciting premise I endeavour to explore if I ever end up in a position to try the piece out on different sets of gamelan instruments.

The piano part was composed first, and then every piano note doubled by at least one gamelan note. The first two realisations of the row are doubled one octave higher by gamelan instruments (bb. 1-12; 12-16).

During the third time through the fourteen-note row, some of the piano notes begin to be displaced into a different register from the opening row, and the octave at which they are doubled by the gamelan instruments begin to vary:

¹⁶ Partch (1991), p. 12.

- 1** (D₂) +2 octaves, doubled at unison
- 2** (E₃) +2 octaves, doubled at unison
- 3** (Eb₂) +2 octaves, doubled at unison
- 4** (E₁) omitted
- 5** (E₂) +2 octaves, doubled at unison
- 6** (E₁) same register, doubled 1 octave higher
- 7** (A₂) +4 octaves, doubled 1 octave lower

- 8** (Eb₃) +2 octaves, doubled at unison
- 9** (D₃) +2 octaves, doubled at unison
- 10** (E₁) same register, doubled 1 octave higher
- 11** (Eb₂) +2 octaves, doubled at unison
- 12** (D₂) +3 octaves, doubled at unison
- 13** (Ab₁) +4 octaves, doubled at unison
- 14** (A₁) +2 octaves, doubled at unison

The fourth and fifth/sixth times through the row happen simultaneously: the ‘fourth’ time is realised by the left hand of the piano writing (and is essentially a literal repeat of the first instance of the row, except that 2 and 7 are an octave lower this time), and the ‘fifth/sixth/seventh’ times through the row are realised by the right hand of the piano writing (which are very ‘sketchy’ realisations of the row – see below). The fourth time through is doubled an octave higher by gamelan instruments, except for 12 and 14, which are doubled at unison. A unison drone from the gamelan’s *slenghem* maintains itself, though dying away, from straight after 13, until the piece ends – with a 1 at the original register, doubled at unison. The fifth/sixth/seventh realisations of the row are ‘incomplete’, and are as follows ((following 1 & 2 from the left hand’s fourth realisation – see bp. 21-22) 3, 4, 7, 8, 9, 11, 14; 8, 9, 10, 10, 13; 8, 9, 11, 12, 13, 14):

- 3** (Eb₂) same register, doubled at unison
- 4** (E₁) +2 octaves, doubled at unison
- 7** (A₂) same register, doubled 1 octave higher
- 8** (Eb₃) same register, doubled 1 octave higher
- 9** (D₃) same register, doubled 1 octave higher
- 11** (Eb₂) same register, doubled 2 octaves higher
- 14** (A₁) same register, doubled 1 octave higher

- 10** (E₁) +3 octaves, doubled at unison
- 13** (Ab₁) +1 octave, doubled at unison
- 8** (Eb₃) +2 octaves, doubled 1 octave higher
- 9** (D₃) +2 octaves, doubled at unison
- 11** (Eb₂) +2 octaves, doubled at unison
- 12** (D₂) +2 octaves, doubled at unison
- 13** (Ab₁) +2 octaves, doubled at unison
- 14** (A₁) +2 octaves, doubled at unison

- 8** (Eb₃) +1 octave, doubled at unison
- 9** (D₃) +3 octaves, doubled 1 octave lower
- 10** (E₁) +3 octaves, doubled at unison

All of the above can be followed by inspecting this annotated copy of the score, with the realisations of the row (1 = first note of row, 2 = second note of row, and so on) annotated in the piano part, along with omissions, octave transpositions, and so on:

Grave, Melancholic $\text{♩} = 54$
Octave higher

Camel an
 Slendro gender Pelog gender
 1 *mp* 2 *pp*
 1 2
 3 4
 2 2
p *pp*
mp *pp*
senza ped.



6 *l.v.*
 2 *p* 2 *pp*
 5 *mp*
 2 *f* 5
 1 *p*
 2 *pp* *l.v.*
 2 *p*
 Piano
 5 6
 7 *mp*
 8 *f* 5
 9 *p*
 10
 11 *pp*
 Slendro gender Pelog gender
 Slendro gender

10

System 1 (Measures 12-13):

- Pelog gender:** *mp*, measure 12.
- Slendro gender:** *pp*, measure 13.
- Pelog demung:** *pp*, measure 12.
- Slendro demung:** *pp*, measure 13.
- Pelog saroni:** *pp*, measure 12.
- Slendro demung:** *pp*, measure 13.

System 2 (Measures 14-15):

- Pelog demung:** *p*, measure 14.
- Pelog saroni:** *p*, measure 14.
- Slendro demung:** *pp*, measure 15.
- Pelog saroni:** *pp*, measure 15.
- Slendro demung:** *p*, measure 15.
- Pelog saroni:** *p*, measure 15.

Handwritten annotations:

- Measure 12: *mp*, *pp*, *b*.
- Measure 13: *pp*.
- Measure 14: *p*, *pp*, *b*.
- Measure 15: *pp*, *p*, *pp*, *p*, *pp*, *p*.

gamelan: UNISON

14

Slendro saroni

Pelog saroni

Slendro demung

Pelog gender

Pelog pekking

Piano

Handwritten annotations:

- gamelan: UNISON
- Pelog + Slendro bonang panerus
- p1 p2 ppp
- s2
- 3
- 5 p
- octave lower
- octave higher
- no 4
- 2 + 4
- 7 + 4 octaves
- 2 + 4

19 [Pelog + Slendro botang parerus]

Slendro saron
 p1 + s2
 pp
 3
 2
 p

Pelog pekkik
 1 + 4
 mp
 5
 mp

Pelog saron
 1, 2
 p

Pelog gong suwak
 1, 2
 p

Slendro slenthem
 2
 pp

Handwritten Annotations:
 - Slendro saron: 9, 8, 11 + 2 octaves
 - Pelog pekkik: 13 + 4 octaves, 12 + 3, 14 + 2
 - Slendro slenthem: 2 unison, 4 → + 2 octaves
 - Other: 2 (octave lower), 10, 1, 2

Piano

Handwritten musical score for four instruments: Pelog + Slendro bonang panerus, Pelog saron, Slendro saron, and Piano. The score includes various annotations such as 'octave higher', 'octave lower', '2 octaves higher', and '3 octaves higher'. It also features dynamic markings like 'pp', 'p', and 'f', and performance instructions like 'Piano' and 'Piano + Slendro bonang panerus'.

4/4
 original octave
 til end.

IX. *Tabula Rasa*

Chinese *yangqin* (dulcimer) and electronics

Tabula Rasa is another piece composed for Chinese *yangqin* player Wang Hui, the other being *Melody for Violin and Yangqin*. She was very excited when I suggested a *yangqin*-with-live-electronics piece – she could think of no other such existing composition, and was very enthusiastic about working on it with me.

In *Tabula Rasa* I approach the *yangqin*, a new instrument for me, as an artefact rather than an established functional instrument. Think of the piano, for instance. One can either compose for it in the latter, conventional sense (and write music to be played by a performer's fingers on the keyboard), or one can compose for it in the former sense, taking the piano to be what it, as an artefact, physically comprises – a resonating box with strings and other features. Stockhausen exemplifies this approach in *Mikrophonie I* (1964) for tan-tan, in which he composed a complex graphic score that instructs performers to play the instrument with all kinds of different materials and in a non-conventional manner. *Tabula Rasa*'s instructions encourage a sonic exploration of the *yangqin*: striking the strings with the instrument's traditional bamboo mallets, finger-picking the strings, striking the woodboards with the mallets, knocking the wooden underbelly, striking the tuning pegs and the strings past the bridge. An electronic manipulation of the sounds also takes place in real-time. However, the *yangqin* is not *amplified* – the audience hears the direct acoustic sounds of the *yangqin* plus the manipulated electronic material coming out of loudspeakers (see score for directions for the live electronics).

I am interested in aleatoric music and controlled improvisation. Working with a graphic score for this piece easily resolved notation issues, and furthermore, the fact that the piece will be different in different performances is something I embrace.

PERFORMANCE HISTORY (as of 12 July 2010)

26 March 2010 Wang Hui (*yangqin*) and Anton Killin (electronics) at Massey Concert Hall,
New Zealand School of Music (Mount Cook campus), Wellington

X. *Primes*

Clarinet in B-flat solo

Mathematically influenced and organised around structures with prime number relationships, *Primes* comprises three (a prime number) formal sections – *Grave* (from b. 1), *Fast* (from b. 32), and *Mini cadenza* (from b. 48). The work was composed especially for Andrzej Nowicki, who was very excited about my idea of a mathematically influenced piece.

The *Grave* section comprises 59 (a prime number) notes in total. The pitches were chosen from the clarinet's lowest register, other than a single "higher" E-flat in bar 15 (as a marker half-way through the section – as the thirtieth note it both follows and precedes 29 notes, a prime number, inserting a degree of symmetry into the work), by a random number generator – each number assigned to a pitch on the clarinet.

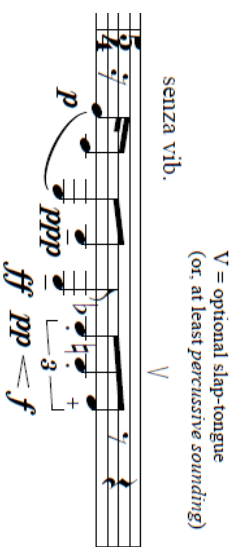
Pitches that occur twice in a row are embellished with a multiphonic pitch (b. 4 and bb. 24-25).

The image contains two musical staves. The first staff, labeled 'multiphonic #1', shows a single note on a five-line staff with a sharp sign (#) above it and a 'ppp' dynamic marking below it. The second staff, labeled 'multiphonic #2', shows a sequence of notes on a five-line staff. It starts with a 'ff' dynamic marking, followed by a 'ppp' dynamic marking, and ends with a 'p' dynamic marking. There is a flat sign (b) above the final note. The notes are connected by slurs and ties, indicating a complex melodic line.

Fig. 3.16: Excerpts from *Primes*

The length of each note and its dynamic were generated by chance operations (though much of what the chance operations generated was rejected – the section was ultimately through-composed using *what came up that I liked* and felt had interesting shapes, voice-leadings and juxtaposition). With the exception of grace notes, pitches are not slurred and very little articulation is specified other than occasional tenuto directions and ‘vibrato; widening vibrato on longer notes’, until the last bar of the section (b. 31, a prime number), which contains a short phrase with articulations I chose (a slurred figure followed by two tenuto pitches, followed by three staccato pitches, the middle of which may be played with slap-tongue effect (if the performer is capable of performing the effect). This final phrase, although in the range of the first section, anticipates the general vibe of, and shifts to, the material of the second section,

Fast:



b. 31

Fig. 3.17: Excerpt from *Primes*

Fast comprises 97 (a prime number) notes, predominantly from the clarinet’s middle register. Again, pitches and rhythms were generated by chance operations though I employed much more control as composer in terms of dynamics, articulations and overall shape – anything generated by the chance operations that I did not find attractive was dismissed. The contrast between this and the first section is obvious: *Fast* contains short, fast, punchy, folk-like phrases and material – a direct juxtaposition to the long, smooth, melancholic, overall quieter material of *Grave*.

After 97 notes, from b. 46 into b. 47 (a prime number), the final phrase from *Grave* is re-presented, a little slower than the 120 M.M. of *Fast* (though much faster than the 60 M.M. of *Grave*), to re-emphasise that short phrase, and insert another degree of symmetry into the work. The section ends with an extended, ‘thoughtful’ rest/pause, intended to separate the third and final section, *Mini cadenza*, from the preceding body of the piece.



Fig. 3.18: Excerpt from *Primes*

Mini cadenza comprises just two (a prime number) phrases, each containing seven (a prime number) pitches. Only the pitches are specified – rhythms, durations, dynamics, articulations, expression, and so on, are left to the performer’s discretion, and may be realised differently in every performance of the piece. The section, like an “after-thought”, wraps up the piece in whatever manner chosen by the performer. The idea for this was inspired by Finnish clarinet

virtuoso Kari Kriiku's performance with the New Zealand Symphony Orchestra of Magnus Lindberg's *Clarinet Concerto* (2002).¹⁷ Lindberg left the clarinet cadenzas up to the discretion of Kriiku, who could perform them differently at different performances.

PERFORMANCE HISTORY (as of 12 July 2010)

- 28 Oct 2009 Andrzej Nowicki (clarinet) at Adam Concert Room, New Zealand School of Music (Kelburn campus), Wellington
- 28 May 2010 Andrzej Nowicki (clarinet) at Adam Concert Room, New Zealand School of Music (Kelburn campus), Wellington
- 4 June 2010 Andrzej Nowicki (clarinet) at St Mark's Church, Lower Hutt
- 6 June 2010 Andrzej Nowicki (clarinet) at Waikanae Memorial Hall, Waikanae

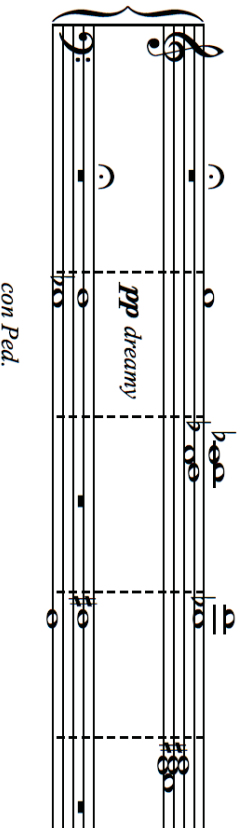
¹⁷ New Zealand Symphony Orchestra (conducted by Pietari Inkinen), Saturday 12 June 2009, Michael Fowler Centre, Wellington. The piece was composed by Lindberg especially for Kriiku.

XI. *After Clive Bell*

Piano solo

After Clive Bell was composed in response to the 'Momentary Pleasures' call-for-works, for the 2010 ISCM (International Society for Contemporary Music) in Sydney, Australia. To conform with the requirements for submission, this piece was composed entirely in a single day. My work was inspired by Clive Bell's treatise *Art* (1914), whose philosophy I reject in favour of a pluralist approach (see Appendix III).

After Clive Bell mixes serial and aleatoric techniques. The length of each gesture is determined by the performer. Although certain pitches do reoccur and dominate, much of the musical language involves chromatic saturation and contrasting close-position dissonant chords with open-position dissonant chords – consider the very opening:



The musical score for the opening of 'After Clive Bell' is presented in a grand staff with treble and bass clefs. The piece begins with a piano (*pp*) dynamic and a 'dreamy' character. The first measure features a dissonant chord with notes G4, A4, B4, and C5 in the treble, and F4, G4, and A4 in the bass. The second measure continues with a similar dissonant texture, including notes like B4, C5, and D5 in the treble, and G4, A4, and B4 in the bass. The score includes various accidentals such as flats and naturals, and a 'con Ped.' instruction at the bottom.

Fig. 3.19: Excerpt from *After Clive Bell*

Rather than moving towards a climax, the work moves towards a musically frozen, repetitive, static ending, which de-emphasises conventional ideas of Western tonality and form. The cyclic music of gamelan, the music of Japanese *shakuhachi* and *shō*, and rhythmic African and Aboriginal Australian music have all been musical influences that have encouraged me to embrace concepts that do not conform with Western musical expectations and conventions.



The musical score for an excerpt from 'After Clive Bell' is shown in a grand staff. It begins at measure 19. The music is characterized by a static, repetitive texture with a 'frozen' quality. The dynamics range from *pp* to *pppp*. The score features various accidentals, including flats and naturals, and includes a 'con Ped.' instruction at the bottom.

Fig. 3.20: Excerpt from *After Clive Bell*

PERFORMANCE HISTORY (as of 12 July 2010)

27 June 2010 Sam Jury (piano) at Adarn Concert Room, New Zealand School of Music
(Kelburn campus), Wellington

XII. *Outside my front door* Electroacoustic

Outside my front door is a ‘soundscape’ piece¹ and a work for fixed media through the lens of *acoustic ecology* (or ecoacoustics), a mixed discipline concerned with the “interrelationship between sound, nature, and society.”² My other compositions involve cross-culturalism and transcription, improvisation, and an ‘aesthetics of imperfection’ (see Hamilton, 2007). For me, acoustic ecology was the next obvious approach for broadening my compositional palate and for producing a work comprising recorded sounds (i.e. a work of *musique concrète*) in which I construct a listening experience based on a recorded natural reality that I have subtly embellished.

Musique concrète composers, following the tradition established by Pierre Schaeffer and others in Paris in 1948, are concerned with assembling pieces of music exclusively from recorded sounds. This contrasts with the *Elektronische Musik* tradition established shortly after in Cologne by Herbert Eimert, Werner Meyer-Eppler and others. Famously, Karlheinz Stockhausen was amongst the first to marry the two schools with his *Gesang der Jünglinge* (1956) (see Simms, 1986), combining pre-recorded voice with electronic pulses and tones.

The embellished natural reality of *Outside my front door* requires a carefully considered playback volume for any performance or listening. It is not a loud acousmatic piece; it is one in which its natural and man-made sounds could be mistaken as occurring ‘perhaps just outside the window’. To this end, the piece is mixed at a lower volume level than usual.

Acoustic ecology’s origins can be traced to Canadian composer R. Murray Schafer, who was interested in how we “hear the acoustic environment as a musical composition.”³ Philosopher Allen Carlson (1979 & 2005) argues for a theory of aesthetics of natural environments, and natural soundscapes fall under this category. Thanks to Carlson’s work it is now widely accepted in the philosophical literature that it is possible to appreciate natural environments as one appreciates an artwork. Therefore, one can appreciate a soundscape piece analogously with appreciating a photograph of a natural landscape. Both are artworks created by artists – the photographer takes visual ‘snapshots’ of the environment while the composer takes aural ones.

¹ Consider Luc Ferrari’s important acousmatic work *Presque Rien no. 1* “*Le lever du jour au Bord de la Mer*” (1970), which is a 21-minute audio recording of a seaside wharf at sunrise.

² Westerkamp (2002), p. 52.

³ Wrighison (2000), p. 10.

Moreover, the composer's contribution to a soundscape piece is not trivial; Hamilton identifies some of these compositional decisions, "when to start recording, the kind of microphone, its location and direction, and so on."⁴ In order to make these compositional decisions significant, I limited the duration of the work to one minute.⁵ I believe that the miniature form in electroacoustic music captures the listener's cognitive 'detective' capacities, prompting, for soundscape pieces, such questions as 'where was this recorded?', 'what exactly is producing these sounds?', 'what sounds, if any, have been superimposed?', and 'what exactly about the musicality of these natural sounds were attractive to the composer?'.

Compositional decisions of (a) choosing when to start and stop recording, (b) when to begin and end the piece, and (c) microphone type and placement, play significant roles in the realisation and representation of the original soundscape – it is *how* the composer expresses his/her attraction to the sounds, through the creative process of value choices, such as where the piece should start and what the fidelity of the recordings should be. This expression will be influenced both by the composer's own real-time experience of the soundscape whilst undertaking the recordings, and the composer's intended ecological statement in composing the piece (if indeed there is one).

This, however, assumes that the composer is also the *recordingist*. If this is not the case, and the composer is assembling a soundscape piece with sampled recordings, the composer's non-experience of the acoustic ecology will undoubtedly lead to different value choices being made during the creative process of composition. The decision-making would be *more analogous* on the continuum to 'standard' *musique concrète* composition, rather than the present 'through the lens of acoustic ecology' *musique concrète*, even if the composer has some degree of an acoustic ecological approach in mind.

Furthermore, there is unresolved debate amongst soundscape composers, and indeed, amongst acoustic ecologists, regarding whether or not to *non-include* man-made sounds in soundscape pieces, perhaps by removing them from the recording via studio editing, or by avoiding recording them in the first place (see Dunn, 1997). It seems to me that there is no problem in creating a soundscape piece with recordings that do not contain man-made sounds invading the natural acoustic ecology, *if* there are no man-made sounds invading the natural acoustic ecology at the time of recording. However, if there *are* man-made sounds invading the natural acoustic ecology at the time of recording, choosing to eliminate them from the piece is a compositional

⁴ Hamilton (2007), p. 62

⁵ Limiting it to one minute also made it possible for me to submit it to the Vox Novus "60x60" electroacoustic music composition series, for which it was accepted for the "2010 Scarlet Mix" – an hour-long acoustic concert comprising sixty-second pieces from sixty composers from all over the globe.

decision which seems to me to undermine the project of the acoustic ecologist, being not solely concerned with purely natural acoustic ecosystems, but also with how human social and technological life *interrupts* natural acoustic ecosystems. A similar line is defended by soundscape composer Francisco López (1998). Furthermore,

[It is] important to remember that the original impetus for soundscape awareness came from composers and musicians. We are the ones that make listening and working with sound and music our profession. It is therefore a logical extension that we would also be concerned about the ecological health of our acoustic environment and all living beings within ... The question is, how can soundscape composition enhance such environmental listening awareness? What is its role in inspiring ideas about balanced soundscapes and acoustic ecology? How can the soundscape composer raise listening awareness in an already overloaded sound world with yet another sound piece? What is the ecological stance that we take through our compositions both as listener and composer? ... And how can we convince other ecologists that the pollution of our soundscape is as much of an environmental issue as the pollution of water and air – that indeed, it is the ‘voice’ which makes the world’s environmental problems audible to all those who care to listen?⁶

My own approach for *Outside my front door* involves contrasting the natural sounds of where I live, with any man-made sounds invading that natural acoustic ecology. Even as “the opportunity to experience “natural” sounds decreases with each generation due to the destruction of natural habitats”⁷ many of us nevertheless continue our current lifestyles, and this is what I aim to bring attention to in this short piece. As a composer and sound-lover, I regret the loss of diversity in the natural acoustic ecology, as an animal-lover or plant-lover regrets the loss of biodiversity in natural environments.

I waited for a pleasant summer’s day, and for the tuis to appear (as they often did at that time of the year) to the pohutukawa tree outside my front door. I recorded in short bursts that afternoon, trying different microphone positions and directions, and so on. I chose two one-minute audio clips from this pool of recordings and decided to superimpose them, embellishing reality. The sounds of chicks chirping and tuis calling are contrasted with the sounds of planes flying overhead, cars driving past and my neighbour’s creaky gate swinging in the wind, until, at 0’58”, the piece ends suddenly when the gate slams shut – reverb added (the only instance of electronic manipulation of recorded sound in the piece).

Although this piece does not draw upon any cross-cultural musical material, it is indicative of an approach in which the sounds of an ‘other’ are presented as music. In this piece, I present natural and technological sounds together, *as music*, just as I present cross-cultural music,

⁶ Westerkamp (2002), p. 52.

⁷ Wrighison (2000), p. 12.

instruments, and musical materials together, in other works, in an attempt to ‘open the audiences ears’ to exciting new musical possibilities.⁸

PERFORMANCE HISTORY (as of 12 July 2010)

- 1 June 2010 Presented by Vox Novus at ICMC at the Electronic Music Foundation, New York, USA
- 2 June 2010 Presented by Vox Novus at ICMC at the Electronic Music Foundation, New York, USA
- 3 June 2010 Presented by Vox Novus at ICMC at Wang Center Chapel, Stony Brook University, New York, USA
- 4 June 2010 Presented by Vox Novus at ICMC at Wang Center Chapel, Stony Brook University, New York, USA
- 5 June 2010 Presented by Vox Novus at ICMC at Wang Center Chapel, Stony Brook University, New York, USA
- 8 July 2010 Presented by Vox Novus at the Nelson School of Music, Nelson, New Zealand

SCHEDULED FUTURE PERFORMANCES

- 14 July 2010 Presented by Vox Novus at the Adam Concert Room, New Zealand School of Music (Kelburn campus), Wellington
- 31 July 2010 Presented by SMP Ensemble at the Adam Concert Room, New Zealand School of Music (Kelburn campus), Wellington
- 4 Aug 2010 Presented by Vox Novus at Ton-Art-Expo, Margit Haupt, Karlsruhe, Germany

⁸ I am reminded of two of John Cage’s famous quips, “Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating” and “Which is more musical, a truck passing by a factory or a truck passing by a music school?” (Cage quoted in Morris, 1967, p. 472). Part of a composer’s mission should be to further develop the role of music both *as an artform*, and *in the artworld*. Part of this innovation is challenging what it is for something to count as music.

28 Aug 2010 Presented by Vox Novus at the International Sound Art Festival Berlin,
in Berlin, Germany

CHAPTER FOUR

CONCLUSION

Music composition is a creative process shaped by the traditions, values, intuitions and beliefs of the composer. Cross-cultural composition is a particular practice that is now widely acknowledged and engaged in by many contemporary composers. A cross-cultural composition practice offers new possibilities that composing strictly within the Western art tradition does not allow. These possibilities include accessing new timbres, tuning systems, and other mediums of expression. The utilisation of non-Western musical instruments, the adoption of non-Western concepts of form and structure, and consideration of the musical aesthetics of musical traditions outside of the Western tradition is a challenging and enriching path to the future for composers of today.

This thesis has examined topics relevant to cross-cultural musical creation such as participant observation, tuning systems, notational systems, composer/performer collaboration, aesthetics, and issues of cultural appropriation. In navigating these issues I have kept in mind that all musical traditions have equal validity and value, and I have attempted to show due respect and sensitivity to other musical traditions throughout my creative endeavours.

In the words of Philip Glass, “Traditions are imploding and exploding everywhere – everything is coming together, for better or for worse, and we can no longer pretend we’re all living in different worlds because we’re on different continents.”¹ Glass’s observation resonates with my own sense of the state of musicking in a global musical environment as well as my personal approach to musical creativity: by synthesising elements of Western and non-Western music making with respect and sensitivity, I acknowledge the increasing global intersections of musical composition in my own works and the potential of this synthesis to bring about new modes of musical practice and embodied knowledge.²

¹ Glass (n.d.), <<http://www.brainyquote.com/quotes/quotes/p/philipglas200892.html>> Accessed 10/07/2010.

² I kindly thank one of my anonymous thesis examiners for suggesting the wording of this final sentence, which I have inserted verbatim in place of its earlier version.

APPENDICES

APPENDIX I

Compose Case Study – Lou Harrison

American composer Lou Harrison (1917-2003) is regarded by many as a pioneer of cross-cultural music composition, especially for combining gamelan and sometimes other Asian instruments with Western instruments (see Spiller, 2009; Miller & Lieberman, 2004). It is almost impossible to consider the topic of cross-cultural composition without acknowledging the music of Lou Harrison.

Many of Harrison's earliest mature works were percussion pieces utilising found objects and scrap metal, such as *Suite for Percussion* (1942) and *Double Music* (1941 – joint authorship with John Cage):

DOUBLE MUSIC

ALLEGRO MODERATO
VONTR, BUFFALO BELLS
PERCUSSION QUARTET

JOHN CAGE - LOU HARRISON

1 SISTRUM

2 JAPANESE TANGLE GONG 1

3 TAM TAM (SH)

4 NOTED BRASS BELLS

(KERTAN)

f NOTED GONGS (GONG BEATERS)

Fig. 1.1: John Cage and Lou Harrison (first half of first page): *Double Music* (1941), published by C. F. Peters Corporation, USA (1961) p. 5

Harrison was interested in Asian musics, especially Korean music, and learnt to play *piri*, a double-reed bamboo wind instrument, studying under traditional Korean music expert Dr. Lee Hye Ku (von Gunden, 1995). He composed many new works using this instrument, including *Moongunkwha*, *Se Tang Ak* (1961), *Quintal Tarjung* (1961), *Prelude for Piri and Harmonium*

compositions for American gamelan include *La Koro Suro* (1972) and *Suite for Violin and American Gamelan* (1974 – joint authorship with violin soloist Richard Dee). Harrison then studied Javanese gamelan under Pak Cokro¹ in California, and, initially at Cokro's invitation, composed many traditional-style gamelan pieces (using conventional forms and modes) for Javanese gamelan, such as *Gending Samuel* (1976), *Gending Pak Cokro* (1976), *Bubaran Robert* (1976 – revised, with added piccolo trumpet solo, in 1981), *Lancaran Daniel* (1976), *Lagu Sociseknum* (1976), *Gending Paul* (1977), *Gending Jody* (1977), *Gending Alexander* (1981), and many, many others (see Miller & Lieberman, 2004).²

Lagu "SOCISEKNUM", *Slendro*
Bwma: .3.5 15.3 66226 ②
 J ̣. 3 3 5^N . 7 5^P 3 6 6 ② J
 July/1976

Fig. 14: Lou Harrison: *Lagu Sociseknum* (1976), published in Harrison & Nelson [eds] (1981), p. 12

Superficially, this looks like the notation of a standard Javanese gamelan piece. The colotomic structure is indicated above the notation (T = *ketuk*, N = *kenong*, P = *kempul*, and the *gong* *ageng* note is circled). However, there are clues that the piece is a work by a Western composer: the octave leap (from low 6 to 6) in the final *gatra* is alien in traditional Javanese gamelan music, and Harrison asks the *bonang* player to ignore the low 6 in extrapolating the *bonang* part:

fr "SOCISEKNUM"
 [B] *Suggested bonangan*
 J 2 3 2 3 3 5 5 5 1 5 1 5 1 5 3 6 3 6 6 2 6 2 J
 3 3 3 5 5 1 5 . 3 6 6 ②

Fig. 15: Supplement: Lou Harrison: *Lagu Sociseknum* (1976), published in Harrison & Nelson [eds] (1981), p. 13

Other than that, the *bonang* player plays authentic, traditional *mipil* technique (doubling, alternately, the two forthcoming notes of the *balungan*), though the rest after the 5 in the second *gatra* of the *balungan* could also be interpreted as a cue for *gembyangan* technique (octaves syncopated against the *balungan*), as typically a *bonang* player fills in the 'rest' in the *balungan* line with the previous note. In *Lagu Sociseknum*, the very first rest, in the first *gatra*, gets 'filled in' with a two, the previous note/last note of the cycle, so that the *mipil* pattern 2323 is

¹ Although born Cokrowasito ('Cokro' for short), Indonesian honours bestowed upon him resulted in several formal name changes, from K.R.T. Wasitodipuro and K.R.T. Wasitodiningrat to K.P.H. Notoprojo.

² These works are *in the convention* of traditional Javanese gamelan – it is both rare and humbling for a composer to submit so completely to the tradition of another culture.

The above excerpt contains the extrapolation of the first six *gatra* for *bonang* and *bonang panerus*, above the *balungan* line. The fifth *gatra* is the only one out of the first six *gatra* of the piece that comprises traditional style *mipil*.³ In the first *gatra*, instead of filling in the rest (the muted struck tones) with a 6, the previous note, and switching to *gembayanan*,⁴ Harrison instructs the *bonang* to play an ascending four note scale, 2356 – uncharacteristic for *bonang*, but ultimately the melody that Harrison desired (Diamond, 1987). The third *gatra* is a transposition of the first, one tone lower, so its rest is filled in similarly, with 1235. The second and fourth *gatra* utilise a version of *mipil* that Harrison has constructed: instead of 3535 over *balungan* 3 5, as in the fourth *gatra*, the *bonang* plays 3565, replacing the first note of the pattern with the adjacent higher note of the second note of the pattern, creating a generally up-then-down stepwise melodic contour:

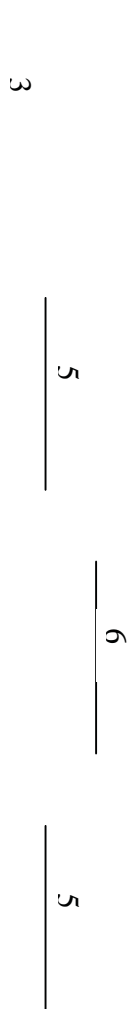


Fig 1.8: Melodic contour of *bonang* part in Harrison’s *Bubaran Robert*

This style of decoration is again used in the second half of the fourth *gatra* – 2353 over 2 3 – and the second *gatra* is a transposition of the fourth, up one tone, so is used again there also. The sixth *gatra* employs *gembayanan* style playing as, unlike the other occasions, the rest is filled in with the previous note, traditionally requiring a player to play a syncopated rhythm in octaves – however the rhythm that Harrison gives is his own, and is not the traditional *gembayanan* rhythm, and nor is the *bonang panerus* counterpart of that *gembayanan* rhythm (throughout the rest of the excerpt, however, the *bonang panerus* does play a Javanese style doubling of the *bonang* part). All of these clues together give the piece a distinctively non-Javanese feel – though to a listener not familiar with the conventions of Javanese gamelan, the difference may not be apparent at all.

These pieces, *Lagu Socisekun* and *Bubaran Robert*, also exemplify Harrison’s approach to the process of composition for gamelan. For the Javanese, the *balungan* is considered a “core melody,”⁵ which is implied in a gamelan piece even if no *balungan* instruments are playing, from which the embellishing instruments *flesh out* their melodies. However, “[for Lou Harrison] the *balungan* is the melody. It is where Lou Harrison spends his compositional energy, it is what he writes and re-writes, it is what has to “work” before adding the other layers of the piece

³ Doubling, alternately, the next two notes of the *balungan* – see Chapter 1 Section III.

⁴ Octave syncopation against the *balungan* – see Chapter 1 Section III.

⁵ Body, pers. comm., 2010.

and preparing a performance.”⁶ Thus his alterations to the embellishing parts are justified, as they must, for him, contribute to the aesthetic success of the *balungan*.⁷ Consider *Bubaran Robert* again. Once analysed, the *balungan* melody can be shown to comprise five ‘melodies’⁸ – small melodic cells, which Harrison repeats or applies simple serialist techniques to. My analysis is influenced by Alves’ (2001), though I have a different interpretation to him, indentifying the melodies as more closely related:

<i>Balungan for Bubaran Robert (Slendro scale – 1, 2, 3, 5, 6)</i>	Melodicle treatment in <i>Bubaran Robert</i> (each <i>gatra</i> = 1 melodicle)
5 6 <u>xx</u> 6 5 6 3 5 3 5 <u>xx</u> 5 3 5 2 3	A B A ¹ B ¹
2 1 2 3 2 <u>xx</u> 2 3 2 1 2 3 2 3 5 6	C A ² C D
5 6 <u>xx</u> 6 5 6 3 5 3 5 2 3 2 1 2 3	A B B ¹ C
2 <u>xx</u> 2 3 2 1 2 3 2 3 5 6 3 <u>25 35</u> 6	A ² C D E

1. Underlining denotes double-speed (i.e. quavers)
 2. ‘x’ denotes striking the previous key though muted by holding it tight with free hand

A¹ denotes a transposition of A, down one scale step
 A² denotes a retrograde inversion of A, transposed down three scale steps
 B¹ denotes a transposition on B, down one scale step
 E is ultimately related to C: 3 25 35 6 = 3, 2, 3, 5 (C, up one scale step)⁹

Fig. 19: Structure of Harrison’s *Bubaran Robert*

I show above that *Bubaran Robert*’s ‘main melody’ (as conceived by Harrison) comprises a simple, accessible, Western-style form. The first line consists of melodicle A, then B, then a transposition of A, down one scale step, and then a transposition of B, also down one scale step. The second line consists of new melodicle C, then A² (a transposed retrograde inversion of A – essentially the same notes as C, except for the muted 2’s on the second beat of the *gatra*, rather than a 1), then C again, then D – an ascending melody that ends on the two pitches that also make up A. The third and fourth lines are exactly the same as the first and second, except for the fact that A¹ is skipped, shifting all of the other melodies forward one slot, and allowing an extra one to fit in at the end, E – a (non-Javanese) cadence-like figure with submetrical (quaver) movement. The whole structure is repeated as a traditional Javanese gamelan form is.

⁶ Diamond (1987), p. 100.

⁷ Harrison displays an understanding of Javanese gamelan *pathet* (mode) conventions – the first section of *Philemon and Baubis* (1987) for violin and Javanese gamelan, for example, ends with the typical *slendro manyura* cadence 3 2 1 6 (Alves, 2001).

⁸ ‘Melodies’ defined as “motivic neume-like arrangements which could be diatonic, chromatic, transposed, inverted, used in retrograde, or joined to form a mode” by von Gunten (1995), p. 7.

⁹ Michael Norris, pers. comm., 2010.

Harrison also composed works that combine Indonesian gamelan with other instruments – in pieces such as *Main Bersama-sama* (1978) for Sundanese gamelan and horn, *Threnody for Carlos Chávez* (1978) for Sundanese gamelan and viola, *Double Concerto for Violin, Cello, and Gamelan* (1982) for Javanese gamelan, violin and cello, *Gending in Honor of Aphrodite* (1986) for Javanese gamelan, choir, and harp, *A Cornish Lancaran* (1986) for Javanese gamelan and soprano saxophone, *Philemon and Baukis* (1987) for violin and Javanese gamelan, and *Concerto for Piano with Javanese Gamelan* (1987), amongst others. In these works, it is expected that the Western instruments be tuned to match the pitches of the gamelan as closely as possible.

Take, for instance, *Main Bersama-sama*, for Sundanese (West Javanese) gamelan with French horn, which plays a solo melody line alternately with *suling* in a question-answer style. In this piece, the *bonang* part does not anticipate the main pitches, but continues the main pitches in an iterated octave style:

The image shows a musical score for the piece 'Main Bersama-sama'. It consists of seven staves, each labeled with an instrument: *suling*, *saron*, *bonang*, *mrida*, *gambang*, *kendang*, and *gong*. The *suling* staff is the highest, followed by *saron*, *bonang*, *mrida*, *gambang*, *kendang*, and *gong* at the bottom. The score is written in a Western staff notation with a key signature of one flat (B-flat) and a 4/4 time signature. A section labeled 'PENGALIHAN' is indicated by a bracket above the *suling* staff. A measure marker '20' is placed above the *suling* staff. The *bonang* part is characterized by a rhythmic pattern of eighth notes that continues the main pitches of the other instruments in an iterated octave style.

Fig. 1.10: Lou Harrison (bb. 16-21): *Main Bersama-sama* (1978), published by Hermes Beard Press, USA (1989)

p. 36

In traditional Javanese gamelan music, the fourth note of a *gatra* is considered the strong beat, and the *bonang* and other elaborating instruments anticipate the strong pitch by playing patterns that lead up to an emphasis of it throughout the *gatra*. Here, Harrison switches this Indonesian notion for a Western one, as the strong beat (first beat of the bar) is continued throughout the bar, rather than in anticipation of it. The relationship between the *bonang* and the main pitches (bracketed above) illustrates this point. The first bar continues the C, the second bar continues the B, the third bar continues the G (going to first inversion G chord on beat three), and so on. This compromise means the piece still sounds traditional, while allowing Harrison to construct a

solo melody with clear Western harmonic structures. Spiller (2009) argues that “Harrison conceived the gamelan part he composed as a kind of chordal accompaniment that explicitly supports the melody’s implied harmony, with the structural pitches providing a kind of bass line... and the other gamelan instruments providing... decorating figurations that prolong the bass note’s harmony.”¹⁰ A traditional *bonang* part would be dissonant against Harrison’s harmonic scheme.

Conversely, consider *Concerto for Piano with Javanese Gamelan*:

III (strong)

Бука: Bonang: 5 3 1 6̣ 3 2 1 2 3 2

The image shows a musical score for the introduction of the third movement of 'Concerto for Piano with Javanese Gamelan'. It features two staves: a piano part on the left and a bonang part on the right. The piano part is in 3/4 time and begins with a melodic line. The bonang part provides a rhythmic accompaniment. Above the piano staff, a cipher notation for the bonang is provided: 'Бука: Bonang: 5 3 1 6̣ 3 2 1 2 3 2'. The cipher notation includes a circled '2' under the '6̣' and a circled '2' under the final '2'. The piano part has dynamic markings like 'f' and 'mf', and the bonang part has 'f' and 'mf' markings. The score is labeled 'III' and '(strong)'.

Fig. 1.11: Lou Harrison (first half of first page, third movement): *Concerto for Piano with Javanese Gamelan* (1987), published by Hennes Beard Press, USA (1990) p. III (1)

In the above extract, the *buka* (introduction) is given, to be played by the *bonang*, and the *balungan* and gong notes’ cipher notation is then given above the piano part. The piano is playing a melody two octaves apart (reminiscent of *gambang*) which essentially decorates the pitches of the *balungan* as the pitches often coincide (b. 2 – E and 2 together on first beat of the bar; b. 3 – E and 2 together on first beat of the bar; b. 4 – F and 3 together on first beat of the bar, and so on). Here, Harrison shows a more end-weighted harmonic scheme. Consider the last three quavers of b. 5: A, F, A, then F on the strong beat of b. 6, as the gamelan *balungan* strikes the same pitch. Also consider beats three and four of b. 6: quavers descending by step, F, E, D, C, to B on the strong beat of b. 7, as the gamelan *balungan* also strikes that pitch. Harrison has carefully constructed the piano solo so that the gamelan musicians can play according to what is traditional, and not have to alter their patterns to fit in with the added solo part, all the while accounting for the anticipatory nature of the embellishing instruments.

¹⁰ Spiller (2009), p. 42.

Harrison has thus employed at least two different approaches to composing for gamelan and Western instruments: from a Western-style perspective (*balungan* as melody, front-weighted harmonic schema), and from a Javanese-style (*balungan* as skeletal melodic framework, end-weighted melodic schema).¹¹

Harrison also composed much music for Western instruments inspired by gamelan – for instance, *Suite for Violin, Piano and Small Orchestra* (1951), *Concerto in Slendro* (1961), and *Elegy: To the Memory of Calvin Simmons* (1982) evoke the sounds, scales and textures of Javanese gamelan. For instance, *Concerto in Slendro* brings together gongs, found percussion, tack pianos (pianos with thumb-tacks pressed into the hammers for a more metallic sound) and celesta, with a violin solo over the top – an interesting precursor to Harrison’s American gamelan compositions.

¹¹ In my own pieces for gamelan and Western instruments in traditional Javanese style, *Ketawang Anggun* and *Ladrang Santai* I employ the latter approach (the kind of style of Harrison’s *Concerto for Piano with Javanese Gamelan*), and in *Gending Tarikan* I employ the former – as the *balungan* strongly defines the melody of the piece; the rhythmic implications of the piece, the *pathet*, and so on. However, the Western solos still work within an anticipatory schema, emphasising important *balungan* pitches:

The figure displays a musical score excerpt from *Gending Tarikan Pelog Nem*. It consists of three staves. The top staff is labeled '(Accordion)' and shows a melodic line starting at measure 16. The middle staff is labeled '(Balungan)' and shows a sequence of notes with fingerings: 1 - 2 4 2 1 - 6 5. The bottom staff is labeled '(Gamelan short score)' and shows a complex texture with multiple voices, including a prominent G# note in the first beat of the next bar.

Fig. 1.12: Excerpt from *Gending Tarikan Pelog Nem*

In the above excerpt, the accordion plays the G# (*pelog* 4) just before the *bonang* (second voice of short score), which again plays it just before the *balungan* instruments. This canon-like technique emphasises that dissonant note, which resolves, in the *balungan*, on the D (*pelog* 1) on the first beat of the next bar. This D is already anticipated, however, in both the accordion and *bonang* on the fourth beat of the bar before, sounding simultaneously with the *balungan*'s G#. According to a front-ended harmonic schema, that whole first beat of the next bar can be considered a B-flat7 in first inversion, a tritone away from the chord of the fourth beat of the bar before, an E7. The harmony there shifts at the same interval as the melodic outline there in the *balungan* (4 2 1 – an augmented fourth). This is my own development of the style initiated by Harrison.

Harrison's *Elegy, To the Memory of Calvin Simmons* for large mixed chamber ensemble, incorporates gamelan techniques in the instrument part-writings:

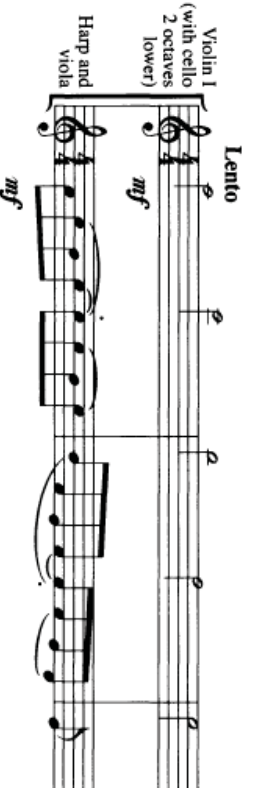


Fig. I.15: Alves' abstraction of Lou Harrison's *Elegy, To the Memory of Calvin Simmons* (1982), bb. 17-19, published in Alves (2001) p. 49

The reduction above shows a *mipil* style technique – the violin (and cello two octaves lower) perform what one could consider a *balungan*, and the harp and viola together perform in a conventional *bonang* style.¹²

Harrison's music has left an unprecedented mark in the domain of cross-cultural composition. His music remains influential to many composers who synthesise music-cultures in their own works. The significance of Harrison's music and musical thinking has become even more pertinent since his death, both with the popularity of world and 'fusion' popular music, and contemporary globalisation: "Truly he is an example of a world musician, one who 'cherishes, conserves, considers, and creates'."¹³

¹² This is very similar to my appropriation of gamelan techniques (via prescriptive transcription) on Western instruments in my piece *Wigena*:

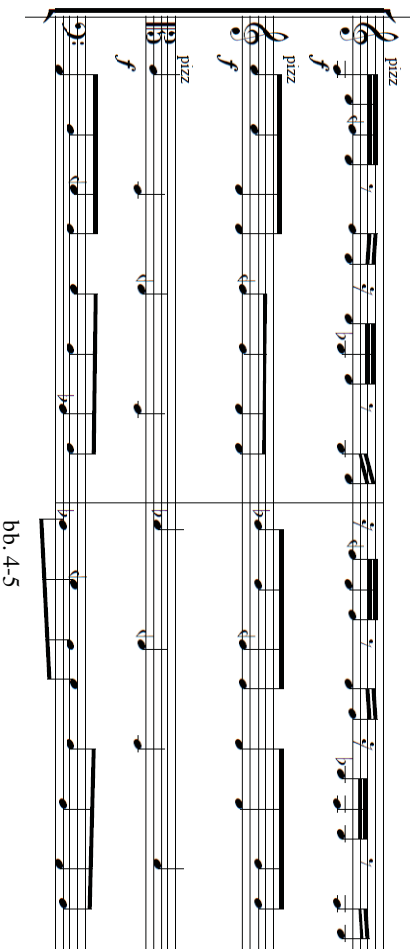


Fig. I.16: Excerpt from *Wigena*, string quartet part only

Here, the viola performs the *balungan* of traditional Javanese piece *Ketawang Wigena pelog nem*, while the cello plays what the *bonang* might play in a traditional performance of the piece, and similarly for first violin (*bonang paneris*) and second violin (*peking*).

¹³ von Gunden (1995), p. 283.

APPENDIX II

Folk and non-Western music in Western art music composition

This appendix provides an exposition of the developments in Western art music that lead up to the explosion of cross-cultural composition, “[the] most remarkable development in 20th-century music;”¹⁴ outlining the development of the context in which my own cross-cultural compositions – which use non-Western instruments, prescriptive transcription of non-Western material, and material heavily influenced by and/or based on non-Western music – are set.

In Western music there is a tradition of exoticism and influence of folk traditions. Many prominent Western art music composers incorporated folksong into larger scale pieces – salient examples include Beethoven’s *Variations* op. 107 (1819), Schubert’s *Diversissement à la Hongroise* (1824), *Sonata in C major “Reliquie”* (1825), Brahms’ *21 Hungarian Dances* (1869) and the Polovtsian Dances from Borodin’s opera *Prince Igor* (1890); and in Saint-Saëns’ *Samsou et Dalila* (1876) the composer evokes the exotic sounds of the Middle East by employing the Arab *Hijāz* mode (augmented second between second and third degrees of the scale) over an asymmetrical rhythm grouped 3+3+2 (Locke, 1991):

The image shows a musical score for a piece titled "Allegro moderato malinconico". The score is written on a grand staff with a treble clef and a 4/4 time signature. The melody is characterized by an augmented second interval between the second and third degrees of the scale. The rhythm is grouped 3+3+2. The score includes a piano (p) dynamic marking and a fermata over a note. The score is published in Locke (1991), p. 268.

Fig. II.1: Camille Saint-Saëns: Act III, Bacchantele in *Samsou et Dalila* (1876), published in Locke (1991), p. 268

Schubert’s treatment of a Swedish folk-carol in his *Sonata in C major “Reliquie”* transforms the original tune into a more ‘classical’ melody “in a marvellously Schubertian way” (Brown, 1972):

¹⁴ Craig (1986), p. 16.

The image shows a musical score for Franz Schubert's Sonata in C major "Reliquie" (1824). It consists of three staves of music in 3/4 time and C major. The first staff is marked "Allegro" and is identified as a "Swedish folk-carol". The second staff is marked "Andante" and "pp" (pianissimo), and is connected to the first staff by a slur. The third staff is identified as "Sonata in C major, D. 840 (later)" and continues the melodic line from the second staff.

Fig. II.2: Franz Schubert: *Sonata in C major* "Reliquie" (1824), published in Brown (1972), p. 178

These early composers made use of known folk and non-Western music to develop their own musical language in their compositional output, generally without directly studying or researching that traditional music. The serious study of traditional musics by composers occurred much later. While some of these composers no doubt were genuinely inspired by folk and non-Western music, some composers perceived commissions for folksong arrangements as “hack-work.”¹⁵

Bartók’s interest in European folk music was famously sparked in 1904 when he overheard Lidi Dósa, a Hungarian woman who was a servant at the house he was staying at in Slovakia at the time, singing a simple folk tune (Chalmers, 2008). Captivated, Bartók asked her to sing it again; he memorised the tune and in 1905 published an arrangement of it, *Piros alma* (Red apple), in Hungarian magazine *Magyar Lant* (Schneider, 2006). After this, Bartók and friend Kodály began collecting, transcribing, and arranging folk music from Transylvania, Hungary, Romania, Bulgaria, and many other places (Stevens, 1993). Kodály completed a PhD in 1906 analysing the strophic forms of the collected folk vocal music from Hungary, and later chose one of these tunes for his *Peacock Variations* (1939); similarly, Bartók built pieces around some of these collected folk songs, such as in his *Improvisations on Hungarian Peasant Songs* (1920) (Stuckenschmidt, 1969).

Unlike almost all other composers before them, Bartók and Kodály engaged in a rigorous study of the folk music that also appeared in their music. The engagement of these two composers in an early form of ethnomusicology was crucial to the development of cross-cultural composition. This fieldwork exposed Bartók to irregular prime number metres (for instance, 5/8, 7/8, 11/8) and the ‘asymmetry’ possible even in 4/4 metres (for instance, 2+3+3) (Stuckenschmidt, 1969). These rhythmic devices “dominate the style of his early piano works, including the collection

¹⁵ Brown (1972), p. 173.

For Children, and the later Fifth String Quartet (1934), the Music for strings, percussion, and celesta (1936), and the six Bulgarian Dances from *Mikrokosmos*.¹⁶

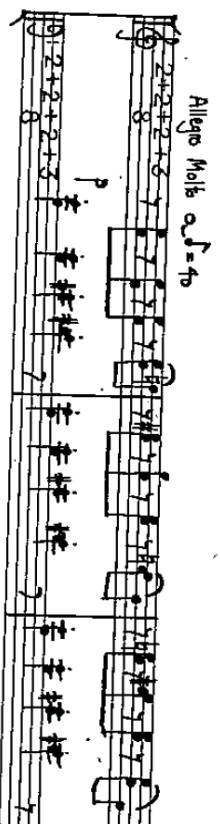


Fig. II.3: Béla Bartók: from the fifth Dance in Bulgarian Rhythm from *Mikrokosmos* (1926-1939), published in Stuckenschmidt (1969), p. 35 – an irregular, asymmetrical treatment of grouping accents in “9/8”

Furthermore, through his fieldwork, Bartók was exposed to microtonality and bitonality (Stuckenschmidt, 1969). These techniques also influenced his composition – piano works such as the first of his *Fourteen Bagatelles* (1908) employ bitonality, “One key signature for the right hand, and another one for the left.”¹⁷ Melodies are presented alternately, with the melody of one key rising and the melody of the other key falling, easily and accessibly establishing the bitonality of the piece:

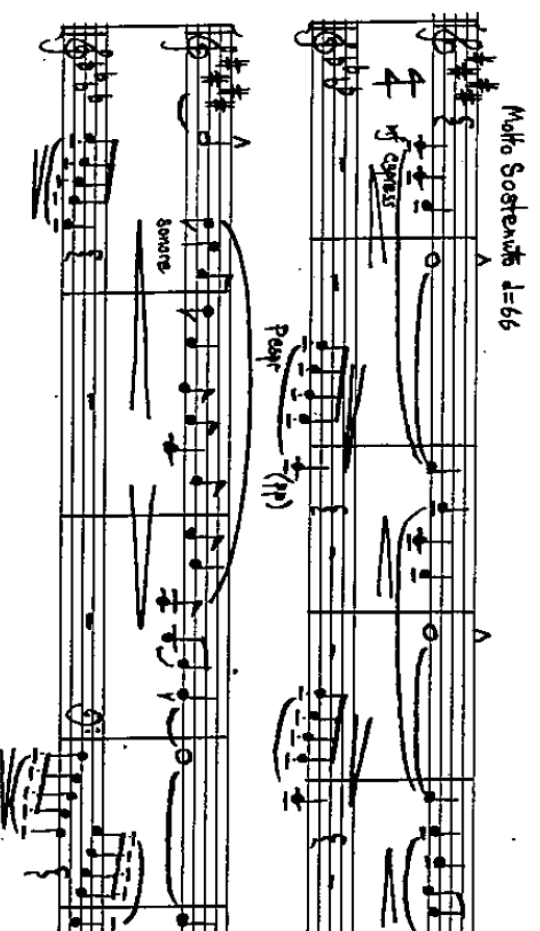


Fig. II.4: Béla Bartók: Bagatelle No. 1 from *Fourteen Bagatelles* (1908), published in Stuckenschmidt (1969), p. 75 – C-sharp minor played by the right hand, C Phrygian played by the left hand

Microtonal music was espoused by Czech composer Alois Hába, influenced by Ferruccio Busoni's essay “Sketch of a New Esthetic of Music” [1907] (1962) in which alternative divisions of the octave are advocated. From 1920, Hába composed in quartertones, third-, sixth-,

¹⁶ Stuckenschmidt (1969), p. 35.

¹⁷ Chalmers (2008), p. 76.

and even twelfthtones – creating an octave comprising seventy-two micro-steps. Hába’s research into Moravian folk music informed his employment of microtones in his compositions – “He found, as Bartók and Kodály had done in the Balkans, that there are divergences from the intervals of the seven-note scale in folk-song which are not to be dismissed as bad intonation.”¹⁸ Hába felt that his identification of microtones in Moravian folk music justified his use of them in his own compositions (McCredie, 2002). In fact, the division of notes ‘equally’ is just one approach – indeed, all the advantages of equal temperament notwithstanding, why discount another approach if both are still capable of successful musical expression?

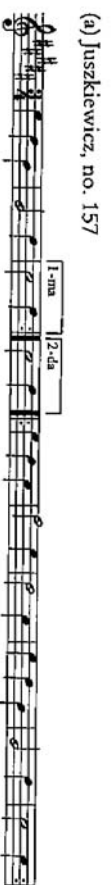
Stravinsky, during his early period, was influenced by folk music and had possession of Anton Juszkiewicz’s published collection of 1,785 folk tunes (van den Toorn, 1987). When composing *The Rite of Spring*,

Stravinsky delved into folklore sources, drawing variously on a book of Lithuanian wedding songs, Rimsky’s folk-song arrangements, and his own memories of peasant singers... Having assembled his folk melodies, Stravinsky proceeded to pulverize them into motivic bits, pile them up in layers, and reassemble them in cubist collages and montages.¹⁹

In his treatment of folk tunes in *The Rite of Spring*, Stravinsky developed the material to varying degrees:

Example 1

(a) Juszkiewicz, no. 157

Musical notation for Example 1(a), showing a folk tune in G major, 2/4 time. The melody consists of eighth and quarter notes. A bracket above the first two measures is labeled '1-ma' and '2-da', indicating the first and second endings.

(b) Introduction

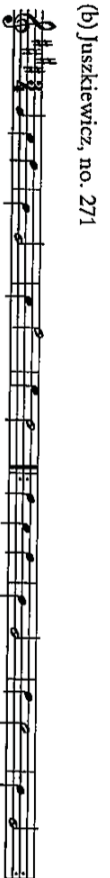
Musical notation for Example 1(b), titled 'Introduction'. It shows a complex, layered melody in G major, 2/4 time, with multiple voices and a dense texture.

Example 2

(a) Juszkiewicz, no. 249

Musical notation for Example 2(a), showing a folk tune in G major, 2/4 time. The melody is a simple sequence of eighth and quarter notes.

(b) Juszkiewicz, no. 271

Musical notation for Example 2(b), showing a folk tune in G major, 2/4 time. The melody is a simple sequence of eighth and quarter notes.

¹⁸ Stuckenschmidt (1969), p. 44.

¹⁹ Ross (2009), pp. 97-98.

(c) Skerchbook, p. 7

Musical notation for (c) Skerchbook, p. 7. It consists of two staves of music in 2/4 time. The upper staff has a treble clef and a key signature of one sharp (F#). The lower staff has a bass clef and a key signature of one flat (Bb). The music features a rhythmic pattern of eighth and sixteenth notes with various accidentals.

(d) "Spring Rounds"

Musical notation for (d) "Spring Rounds". It consists of two staves of music in 2/4 time. The upper staff has a treble clef and a key signature of one sharp (F#). The lower staff has a bass clef and a key signature of one flat (Bb). The music features a rhythmic pattern of eighth and sixteenth notes with various accidentals. A box containing the number 48 is placed above the first measure of the upper staff.

Example 3

(a) Juszkiewicz, no. 142

Musical notation for (a) Juszkiewicz, no. 142. It consists of a single staff of music in 2/4 time with a treble clef and a key signature of one sharp (F#). The music features a rhythmic pattern of eighth and sixteenth notes with various accidentals.

(b) Skerchbook, p. 7

Musical notation for (b) Skerchbook, p. 7. It consists of a single staff of music in 2/4 time with a treble clef and a key signature of one sharp (F#). The music features a rhythmic pattern of eighth and sixteenth notes with various accidentals.

(c) "Ritual of Abduction"

Musical notation for (c) "Ritual of Abduction". It consists of a single staff of music in 2/4 time with a treble clef and a key signature of one sharp (F#). The music features a rhythmic pattern of eighth and sixteenth notes with various accidentals. A box containing the number 37 is placed above the first measure, and a box containing the number 46 is placed above the last measure, which is followed by the text "etc.".

Musical notation for (c) "Ritual of Abduction". It consists of a single staff of music in 2/4 time with a treble clef and a key signature of one sharp (F#). The music features a rhythmic pattern of eighth and sixteenth notes with various accidentals.

Fig. II.5: Igor Stravinsky: *The Rite of Spring* (1913), published in van den Toorn (1987), pp. 11-12

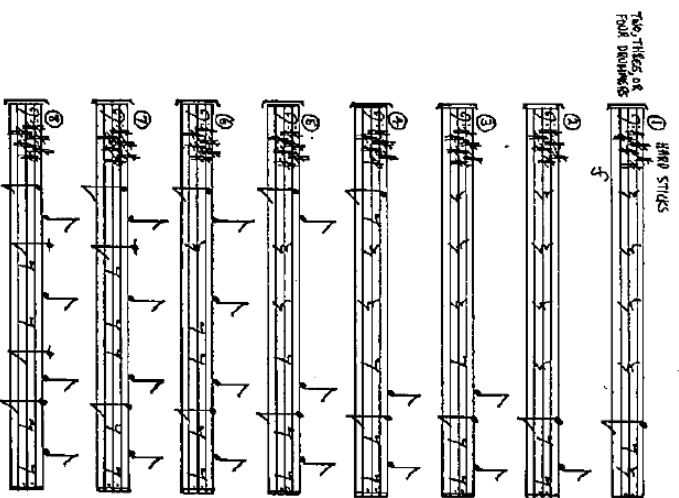
Furthermore, his raw, driving, unpredictable, punchy rhythms in the *Les Augures Printaniers* movement evoke the sounds of folk music – inspired by, but not derived from, folk material:

Fig. II-6: Igor Stravinsky (first half of first page): *Les Aigures*, *Printaniers* movement from *The Rite of Spring* (1913), published by Boosey & Hawkes, UK (1967) p. 10

American minimalist composers La Monte Young, Terry Riley, Steve Reich and Philip Glass developed major musical interests in non-Western musics (Schwarz, 2008). Glass worked with iconic sitar virtuoso Ravi Shankar on a film score for cult classic *Chappaqua* (1966-7) and Glass's *String Quartet* (1966), amongst other pieces, focused on the Indian treatment of rhythms, "in terms of recurring cycles of tones, of rhythmic pulses added and subtracted."²⁰

Reich has always had a special interest in percussion, and as well as expressing an interest in gamelan (see Chapter 1, Section V), in 1970 he studied under master African drummer, Gideon Alorwoye, in Ghana, West Africa (Ross, 2009). His participant observation there culminated in his epic composition *Drumming* (1971), lasting over eighty minutes:

²⁰ Ross (2009), p. 548.



The performance begins with two titles of four drummers (usually this) playing in unison at measure 1. After one drummer moves to the second measure and adds the second drum beat, the other drummer(s) join after him immediately at measure 2 but at 5 or 8 seconds' intervals. The process of gradually substituting beats for rests within the pattern is particularly witty, at least 6 or 8 seconds of each drummer's entry. All drummers have mastered the fully consistent pattern at measure 8.

Fig. II.7: Steve Reich (first page): *Drumming* (1971), published by Hendon Music Inc, USA (1973), printed in Reich (2002) p. 65

Famously, twelve-tone theory pioneer Arnold Schoenberg has objected to the influence of folk and non-Western music in Western art music, boldly stating that

Folklorists who, whether they are forced to (through a shortage of theories of their own) or not (because, after all, the available musical culture and tradition could find room even for them) wish to apply to the inherently primitive ideas of folk music a technique that suits only a complicated style of musical thinking.²¹

I believe I have shown just how enriched the Western art music tradition has become through the influence of folk and non-Western music. Although not all traditional musical material may suit an overly contrapuntal treatment (Michael Norris, pers. comm., 2010), it seems Schoenberg is all too eager to assume that ‘primitive’ music (‘primitive’ is of course an expunged term in anthropology and ethnomusicology) is not capable of fine-grained musical thinking, which is not true, and has been available to Western music scholars since Bartók and Kodály began collecting folk music – and, indeed, before that too by world music enthusiasts such as the mathematician Alexander John Ellis (see Ellis, 1885). Furthermore, the classical musical systems of Indonesia, China, India, and the Middle East (to name but a few) can rival Western

²¹ Schoenberg, quoted in Stuckenschmidt (1969), p.157.

art music's repertoire for complexity and intricacy. Schoenberg is, to quote political scientist Charles Taylor, unnecessarily "being inhospitable to difference."²² Music delights; why privilege one single tradition (Western) over all the others?

Moreover, Schoenberg quips "[traditional music and art music] may not be as different as oil and olive oil or holy water and washing water, but they mix as badly as oil and water."²³ I disagree with this statement, in fact much of my composition portfolio is an attempt to successfully mix the two using various compositional approaches (see Composition Portfolio Preface). Schoenberg's objection does not have any weight behind it and nor does he offer any supporting evidence. I hold that cross-cultural composition offers the possibility of a new aesthetic – a medium through which a composer can succeed in developing and outputting his/her own unique musical style.

²² Taylor (1994), p. 60.

²³ Schoenberg, quoted in Stuckenschmidt (1969), p. 163.

APPENDIX III

Aesthetics

It will become apparent why any matter pertaining to philosophy begins with a definition of the appropriate terms.¹ By ‘aesthetic appreciation’, I refer to the sensory and emotional experience one has when one engages with an acute drama, inspects a Monet, listens to a Bach sonata, surveys a beautiful landscape, and so on. When one is *experiencing* X aesthetically, they are *aesthetically appreciating* X. As Carolyn Korsmeyer notes, “Just as one cannot decide that soup is well seasoned without sipping it, so one cannot conclude that music is lyrical and moving without hearing it.”² No second-hand account will suffice to make the aesthetic judgement.”³ When one has an ‘aesthetic reaction’, one is responding emotionally, deciding how positive or negative (where on the continuum between the two) the experience in question is, and an ‘aesthetic judgement’ is the application of that reaction – for example, when one says they prefer Beethoven’s Symphony VII to his Symphony IV. So, when one compares aesthetically, one must go through two steps after appreciating (experiencing) – one must have an emotional response, and then must make a judgement regarding that response (and the extent that these judgements are ‘rational’ is, at best, an open empirical question, not for discussion here).

Formalism in aesthetics is the view that what one aesthetically appreciates in experiencing an artwork is strictly the *internal* components, ‘lines and colours combined in a particular way, certain forms and relations of forms.’⁴ Bell (1914) calls this ‘Significant Form’. For music then, this is specifically “tonally moving forms”⁵ – ‘tonal’ in reference to ‘tones’, not in opposition to ‘atonal’. According to this view, the content of music is *sounds* and these sounds are arranged in *forms*. For the formalist, there is no other content in the music – for instance, among other things, *feelings*. Although a performer may perform passionately, and the audience may weep at the melancholy they perceive, the feeling *itself* was not transmitted as musical content; after all, how can a piece of music *be sad*? Rather, formalists such as Hanslick (1986) appeal to physiology and psychology to explain the feelings associated with certain music, not aesthetic appreciation.

¹ My definitions are influenced by Kingsbury (2009), Barwell (2009), and many of Kendall Walton’s papers (especially 1970 & 1993).

² The extent to which a skilled musician can “hear” a piece in his/her mind by reading its score carefully is at best an open empirical question that cannot be explored within the scope of this thesis.

³ Korsmeyer (2005), p. 269.

⁴ Bell (1914), p. 8.

⁵ Hanslick (1986), p. 29.

Moreover, formalists reject that any *external* component of the artwork is aesthetically valuable. Bell rejects that the social and political aims of the artist are of aesthetic value and he rejects that any knowledge about the artwork is of aesthetic value – for instance the era in which it was created, who by, for what reasons, and so on (Bell, 1914).

Kendall Walton (1970, 1993) and Allen Carlson (1979, 2005) oppose this view. They argue that external components are indeed of aesthetic value. They point to examples with which they show that one cannot fully aesthetically appreciate an artwork without understanding something of its social or political aim, or its history, “Robert Rauschenberg once carefully obliterated a drawing by de Kooning, titled the bare canvas “Erased De Kooning Drawing”, framed it, and exhibited it,”⁶ and his doing so is aesthetically significant. Consider John Cage’s ‘4’33’’ (1952). This piece of music is like no other composed before it, and aesthetically appreciating its performance without taking into account certain external components (e.g. conventions and expectations) changes the aesthetic experience of the piece. In other words, proponents of this view argue that the formalist necessarily *misses something* when he/she experiences ‘4’33’’; Cage’s *intentions* behind the piece ‘4’33’’ – “may be, in part, to *deaestheticize* our experiences, to get us to enjoy sounds themselves without admiring them or their creators”⁷ [my italics] – are indeed aesthetically pertinent, on this view.

Similarly, on this view, *knowledge* about a piece makes a difference, “One might simply not think to listen for a recurring series of intervals in a piece of music, until he learns that the composer meant the work to be structured around it.”⁸ Knowing the intentions of a piece seems to heighten one’s aesthetic experience of it, and makes it possible to *properly perceive* all of the internal components the formalists are exclusively concerned with.

Branching off from this view, Frankfurt School philosopher Theodor Adorno argues that a piece must be aesthetically experienced through his (Marxist-influenced) sociology of art – only by understanding pertinent facts about composers, their social statuses, and so on (a *socially responsible* understanding), can a piece of music be properly perceived (Hamilton, 2007).

For the formalist, as Noël Carroll (2005) rightly points out, “the intended primary function of exhibiting significant form is a necessary condition for art status.”⁹ This has serious consequences – let us consider one example. Advertising jingles still constitute ‘music’¹⁰

⁶ Walton (1970), p. 335.

⁷ Walton (1993), p. 505.

⁸ Walton (1970), p. 337.

⁹ Carroll (2005), p. 114.

¹⁰ While there is a distinction between ‘high art’ and ‘low art’ and jingles are not exemplars of high art – nevertheless, low ‘commercial’ art *is still art*. For more on this, see Fisher (2005). Similarly, Adorno has his own ideas on the dialectic between high/low art and its commodity status (see Hamilton, 2007).

despite the fact that significant form is not their primary function – *facilitating advertising and marketing* is their primary function (see Walton, 1999), and it follows that when one aesthetically experiences a jingle, one should do so *knowing what it exists for*, not *just* in terms of its internal components (harmonies, voice-leading, lines, shapes, tone colours, and so on), otherwise one’s aesthetic appreciation may be misinformed. Moreover, Zangwill (2001) argues that music is aesthetically valuable in the way it serves its extra-musical functions.

These positions do not persuade me. Neither the formalist view, nor its opposition from the Kendall/Carlson/Zangwill camp or the Frankfurt School/Adorno camp resonates with me. Instead, I find Carroll’s pluralist option favourable – what one means by *art* (or even just by *music*) is so incredibly diverse, *especially across cultures*, it does not make sense to suppose that there is only one right way to aesthetically appreciate it (see Carroll, 2005; Weitz, 1956). Morris Weitz believes that the debate between the formalists and their opponents “radically misconstrues the logic of the concept of art.”¹¹ Indeed, especially considering art’s diversity, one should not privilege one way of appreciating art over another. It is that sensitivity and respect to social and cultural contexts requires us to appreciate appropriately regarding those contexts, not a general theory that must be adhered to by appreciators across all art.

An important analogy can be made between the aesthetic experience of a work and one’s approach to aesthetic experience. I will embrace two important terms now infamous in the literature of the natural and social sciences – *actual sequences* and *robust processes*:

One explanation of [Australia’s victory over England in the 1974-1975 cricket tests] would walk us through a play by play description of the tests, detailing each dismissal, run by run and out by out. An alternative would appeal to the strengths and weaknesses of the opposing sides: in particular, Australia’s strengths in fast bowling and fielding. These two explanations do not conflict and each is of value. The play-by-play explanation is an actual-sequence explanation, for it identifies *the particular possible world* that we inhabit. But if it is true that Australia in that series was much the stronger side, we could know the precise sequence of plays without knowing something very important. Namely, had Australia not won that way, they would have won in another and similar way.¹²

I propose that an ‘actual sequence’ approach to analysing, understanding, or experiencing a piece of music is one in which the listener perceives ‘this sound’, then ‘this sound’, then ‘this sound’, until the end of the piece. In other words, the ‘actual sequence’ approach describes the whole in terms of its individual parts through time. This approach is identified by Martin Lodge (1991) – however it is not obvious that it is adopted universally. A ‘robust process’ approach, rather, perceives something extra *overall*, such as an external form, or a specific process at work, or any non-musical property that is not identifiable simply by analysing the pieces constituent

¹¹ Weitz (1956), p. 28.

¹² Sterelny (1995), p. 258.

parts as they appear through time. Indeed, something vital to a piece may be lost by not considering a work's robust process, if indeed there is one; for example, Goehr (2005) mourns a loss in aesthetic experience "when we hear the music of a flamenco or a blues guitarist in a concert hall,"¹³ as the etiquette and framework of the concert hall changes how the audience must listen and behave, which is very different to how those musical styles are otherwise experienced in clubs, bars, or other venues, for instance. Moreover, an actual sequence account misses something vital about works such as Terry Riley's *In C* (1964) and Steve Reich's *Clapping Music* (1972) – namely, that there is something important about the piece that is lost if the actual sequence is all that is perceived.¹⁴ Of course, 'actual sequence' and 'robust process' are not mutually exclusive terms, and will indeed describe approaches of a dual ontology and will be useful when employed alongside each other – i.e. employing a *plurality* of explanatory approaches and not arbitrarily privileging one approach over the other (see Sterelny, 1996).

Note that I am not advocating *relativism*, rather, I am arguing that there is likely to be several appropriate ways to appreciate artworks given their social and cultural contexts. There may also be inappropriate ways – I presume that one cannot have genuinely experienced a Beethoven symphony – or even Cage's '4'33'' – by listening to it in one's sleep, for example, but perhaps it is appropriate to do so for music within some other social or cultural context, however.

¹³ Goehr (2005), p. 221.

¹⁴ In these specific cases it is the free movement through melodic cells in *In C* and the shifting/phasing process in *Clapping Music*.

APPENDIX IV
Compact disc supplement¹⁵

Disc can be located inside back cover.

Traditional Javanese gamelan repertoire

1. *Ladrang Gleyong Pelog Nem*

2. *Ketawang Asmarandana (Wiled) Slendro Manyura*

3. *Lancaran Udan Mas Pelog Barang*

performed by Gamelan Padhang Moncar, including myself, and students of the New Zealand School of Music
(directed by Budi S. Putra)

Extract from traditional Balinese gamelan repertoire

4. *Pengipuk from Puspanjali*

performed by Gamelan Taniwaha Jaya, including myself (directed by Gareth Farr)

Yanqqin standard repertoire

5. 将军令 (The General's Order)

6. 天山诗画 (Festival of Tianshen Mountains)
performed by Wang Hui (*yanqqin*) and myself (drum)

7. 打虎上山 (Climbing Mountain to Kill the Tiger)

performed by Wang Hui (*yanqqin*)

Pre-compositional research activities

8. *Lelagon Prau Layar Pelog Nem*

performed by Gamelan Padhang Moncar, including myself (directed by Budi S. Putra) with Tristan Carter (violin)
and the New Zealand School of Music Jazz Choir (directed by Julian Raphael)

9. Terry Riley's *In C*

performed by Andrzej Nowicki and Karlo Margetić (clarinet), Pieta Hextall (trumpet), Lauryn Williamson
(saxophone), Simon Eastwood (doublebass), and Richard Robertshaw, Mike Lemmon, Catherine Robertshaw,
Pippa Ström, and myself (Javanese gamelan instruments) as The SMP Ensemble

10. Helen Bowater's *Zingaro* (my arrangement)

performed by Andrzej Nowicki (clarinet), Kylie Nesbit (bassoon & viola) and myself (Javanese gamelan instruments)
as The SMP Ensemble

¹⁵ All tracks on this compact disc are my own recordings (except track 8, which was recorded by Roy Carr – senior technician at the New Zealand School of Music).

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COMPOSITION PORTFOLIO

Anton Killin

1. Cycles, Shadows
2. Wigena
3. Melody for Violin and Yangqin
4. To –
5. Ketawang Anggun Slendro Manyura
6. Ladrang Santai Slendro Sanga
7. Gendhing Tarikan Pelog Nem
8. Mernecolion
9. Podróże
10. Elegy
11. Tabula Rasa
12. Primes
13. After Clive Bell
14. Outside my front door

Extended programme notes for all of the following works can be found in the thesis that precedes this composition portfolio.

Ketawang Anggun Slendro Manyura, Ladrang Santai Slendro Sanga and Gendhing Tarikan Pelog Nem share a combined extended programme note, *Three Pieces for Gamelan in Traditional Central Javanese Style with Western Instruments*. However, they should be considered separate pieces, not three movements of a single piece.

ANTON KILLIN

Cycles, Shadows

for clarinet, viola doubling bassoon (or viola and bassoon), and Javanese *gender* (*slendro*)

Cycles, Shadows is dedicated to Jack Body and was composed for performance by Andrzej Nowicki (clarinet), Kylie Nesbit (bassoon and viola), and myself (*gender*). It was premiered in New Zealand on 3 October 2009 at the Adam Concert Room in Wellington.

The cycles-within-cycles and extreme performance requirements are directly inspired by Jack Body's *Epicycle* string quartet, while the rhythms are inspired by traditional Chinese *erhu*.



photo of Andrzej Nowicki, Kylie Nesbit, and myself courtesy of Megan Ward

Performance Instructions

Gender player

Strike *gender* with the traditional Javanese *tabuh* (beaters)

A "+" sign attached to a note requires the performer to strike the key with the wooden end of the *tabuh*.

This should be sounded sharp and clear.

Dampen according to the score (rests = no sound! -- unless *l.r.* is indicated)

Attempt to avoid all instrument 'squawks' and 'buzzes' - this may involve checking the resonating tubes of the instrument before performance

Cycles, Shadows

TRANSPOSSED SCORE

Virtuosic! $\text{♩} = 120$
Cheeky and quirky

ANTON KILLIN

Clarinet in Bb

Musical notation for Clarinet in Bb. The staff shows a melodic line starting with a *ff* dynamic. It includes a *pp* section with a *muta in bn* instruction. The notation features various articulations like accents and slurs.

Viola
doubling Bassoon

Musical notation for Viola doubling Bassoon. The staff shows a melodic line starting with a *ff* dynamic. It includes a *muta in bn* instruction. The notation features various articulations like accents and slurs.

Javanese Gender
laras slendro

Musical notation for Javanese Gender. The staff shows a melodic line starting with a *f* dynamic, followed by a *p* dynamic. The notation includes a *laras slendro* instruction and various articulations like accents and slurs.

gdr

Musical notation for gdr. The staff shows a melodic line starting with a *mp* dynamic. It includes a *mf* section. The notation features various articulations like accents and slurs.

bn

Musical notation for bn. The staff shows a melodic line starting with a *mp* dynamic, followed by a *mf* dynamic. The notation features various articulations like accents and slurs.

cl

Musical notation for cl. The staff shows a melodic line starting with a *f* dynamic. It includes a *f* section. The notation features various articulations like accents and slurs.

bn

Musical notation for bn. The staff shows a melodic line starting with a *f* dynamic. It includes a *f* section. The notation features various articulations like accents and slurs.

gdr

Musical notation for gdr. The staff shows a melodic line starting with a *mp* dynamic, followed by a *mf* dynamic. It includes a *mp* section. The notation features various articulations like accents and slurs.

9

11 **A**

13

15

15

17

cl

bn

A little slower $\text{♩} = 100$
Corrective, teasing, evocative

19

cl

bn

21

bn

ff

mf

23

bn

poco rit.

accel.

Tempo primo $\text{♩} = 120$
Cheeky and quirky

B

25

cl

bn

gdr

ff

f

1 6 3

f

p

3

Tempo rubato
♩ = c. 108
Pompous

27

cl

gdr

30

cl

fl.

accel.

32

cl

mp

mf

mf

bn

mf

Tempo primo ♩ = 120
Cheeky and quirky

34

cl

f

bn

f

gdr

mp

f

6 5 1

5,5

5,5

5,5

6,6

l.v.

36

cl

bn

A little slower still $\text{♩} = 94$
Kindly teasing

38

cl

bn

ff

ff *p*

40

bn

fl.

p *fp*

gdr

p 5,5

42

bn

mp fl.

mp

gdr

2 5,5

44

bn

mp

gdr

5,5 6 5,5 2 5 5

46

bn

poco rit. *fp*

accel.

gdr

1,1 2,2 5

Tempo primo $\text{♩} = 120$
Cheeky and quirky

48 **C**

bn

gdr

50

gdr

52

gdr

quasi-rubato: as fast as possible!

54

bn

56

cl

bn

3

6

3

3

6

6

58

cl

bn

dd

f

f

fl.

fl.

60

cl

bn

ff

ff

' Pompous

ff

p

62

bn

f

du

f

64

cl

bn

D

fl.

ppp

muta in va

f

7

Cheeky and quirky

66

68

70

72

74

Tempo rubato ♩ = c. 108
Nostalgic

76 *f*

Violin part, measures 76-77. Measure 76 starts with a forte (*f*) dynamic. The melody features a descending eighth-note scale with a slur and a fermata over the final note. Measure 77 continues the scale, marked *mf* and *chru* (chiarissimo).

78 *ff* *mp*

Violin part, measures 78-79. Measure 78 begins with a fortissimo (*ff*) dynamic. The melody is a descending eighth-note scale with a slur and a fermata over the final note. Measure 79 continues the scale, marked *mp*.

accel.

E

Tempo primo $\text{♩} = 120$
Cheeky and quirky

80 *ff* *pp* *f* *p*

Violin and Cello parts, measures 80-81. Measure 80 features a fortissimo (*ff*) dynamic in the violin part and a piano (*pp*) dynamic in the cello part. Measure 81 continues with a forte (*f*) dynamic in the violin part and a piano (*p*) dynamic in the cello part. The cello part includes a five-fingered scale.

82 *fl.* *cresc.*

Violin and Cello parts, measures 82-83. Measure 82 features a fortissimo (*ff*) dynamic in the violin part, marked *fl.* (flautissimo). Measure 83 continues with a crescendo (*cresc.*) dynamic in the violin part and a piano (*p*) dynamic in the cello part.

84 *mp* *f* *mf* *pizz.* *mf* *mp*

Violin and Cello parts, measures 84-85. Measure 84 features a mezzo-piano (*mp*) dynamic in the violin part. Measure 85 continues with a forte (*f*) dynamic in the violin part and a mezzo-forte (*mf*) dynamic in the cello part. The cello part includes a *pizz.* (pizzicato) marking.

Confident, strong, symbiotic

86 **F**

cl *f mp ff f pesante*

va *f pesante*

arco

88

cl *fi.*

va

accel.

Tempo primo ♩ = 120
Righteous, proud

90

cl *mf ff*

va *mf ff*

gdr *ff f fff*

2 5 3 3 3

ANTON KILLIN

Wigena

for string quartet, Javanese instruments, and Javanese *rebab* solo

Wigena is a prescriptive transcription of a traditional Javanese gamelan piece, recast for pizzicato string quartet with gamelan instruments. *Kenong*, *kempul* and *gong ageng* mark the traditional colotomic structure of the work, and the melodic leader of the gamelan, the *rebab* (a two-string vertical fiddle) appears here as a soloist.

Performance Instructions

The gong, kempul & kenong player

Instruments required

Gong ageng, *kenong* (*pelog* 1 & 5), *kempul* (*pelog* 5 & 6)

♩ denotes *gong ageng*

p denotes *kempul*

♪ denotes *kenong*

Gong ageng and *kenong* notes are to be left to ring on (*l.v.*).

Kempul notes are to be dampened.

The *kenong* and *kempul* notes are already notated to be played slightly (a semiquaver) after the beat, though, the exact timing may be varied at the performer's discretion, so long as it falls in-between the viola's two notes that immediately precede and follow it.

The rebab player

The *rebab* transcription is intended as a melodic and rhythmic guide only.

Notes may be decorated/ornamented in the performer's own style, *etc.*, though the general melody as notated is robust.

Wigena

ANTON KILLIN

Folk-like expression $\text{♩} = 72$ **accel.**

The musical score is written for four staves. The top staff is for the Rebab, the second and third staves are for the String Quartet, and the bottom staff is for the Kenong, Kempul, and Gong. The time signature is 4/4. The Rebab part begins with a folk-like expression and a tempo marking of quarter note = 72. The String Quartet part is marked 'pizz' (pizzicato) and 'f' (forte). The Kenong, Kempul, and Gong part is marked 'f' (forte). The score includes an 'accel.' (accelerando) marking. The music consists of a series of eighth notes in the Rebab part, with corresponding notes in the String Quartet and Kenong, Kempul, and Gong parts. The String Quartet part is marked 'pizz' and 'f'. The Kenong, Kempul, and Gong part is marked 'f'. The score includes an 'accel.' (accelerando) marking.

Rebab

String Quartet

Kenong, Kempul, Gong

pizz

f

(accel.)

4 ♩=108

rit.

Musical score for measures 4-6, measures 7-10, and measure 11. Measure 4 is marked *mf*. Measures 7-10 are marked *f* and include *pizz* markings. Measure 11 is marked *mf*. The score includes treble and bass staves with various musical notations such as notes, rests, and dynamic markings.



6 ♩=60

♩=90 (First time through)

with expression; there is room for improvisation on this melody (dotting notes, or ornamenting/decorating notes in performer's own style, etc.)

Musical score for measures 6-11. Measure 6 is marked *mf*. Measures 7-10 are marked *mf* and include *pizz* markings. Measure 11 is marked *mf*. The score includes treble and bass staves with various musical notations such as notes, rests, and dynamic markings.

A⁹

9

10

11

12



12

13

14

15

15 **B**

15 **B**



18 *3rd time through: rit. poco a poco (until Section C)*

18 *3rd time through: rit. poco a poco (until Section C)*

21

f

f



24

C ♩ = 80 (3rd time through)

27

Musical score for measures 27-30. The score is written for voice and piano. The vocal line (top staff) contains notes with stems and rests, including a fermata over a note in measure 29. The piano accompaniment consists of a right-hand part (treble clef) and a left-hand part (bass clef). The right hand plays a melodic line with eighth and sixteenth notes, while the left hand provides harmonic support with chords and single notes. Measure numbers 27, 28, 29, and 30 are indicated at the beginning of their respective staves.



30

Musical score for measures 30-33. The score is written for voice and piano. The vocal line (top staff) contains notes with stems and rests, including a fermata over a note in measure 32. The piano accompaniment consists of a right-hand part (treble clef) and a left-hand part (bass clef). The right hand plays a melodic line with eighth and sixteenth notes, while the left hand provides harmonic support with chords and single notes. Measure numbers 30, 31, 32, and 33 are indicated at the beginning of their respective staves.

D*2nd time through: accel. poco a poco (until Section E)*

33

34

35



36

3rd time through: rit. poco a poco al fine

37

38

39

E ♩ = 116 (2nd time through)

39

1.2.



42

42

45

3.

3.

ff

ff

ff

ff

ANTON KILLIN

Melody for Violin and Yangqin

for violin and Chinese *yangqin* (dulcimer)

Melody for Violin and Yangqin was composed for performance by Elena (violin) and Wang Hui (*Yangqin*). It was premiered in New Zealand on 26 March 2010 at the Massey Concert Hall in Wellington, and first performed in China on 12 June 2010 at the Little Egret Music Hall in Xiamen.



photo of Elena and Wang Hui courtesy of Wang Hui

Melody for Violin and Yangqin

ANTON KILLIN

Grave con grazia (♩ = 50-60)

Musical score for Violin and Yangqin, measures 1-4. The Violin part is in treble clef with a key signature of one flat (B-flat) and a 4/4 time signature. It begins with a half rest, followed by a quarter note B-flat, a quarter note A, and a quarter note G. A triplet of B-flat, A, and G follows, then a quarter note F, a quarter note E, and a quarter note D. The Yangqin part is in treble clef with a key signature of one sharp (F-sharp) and a 4/4 time signature. It begins with a half rest, followed by a quarter note F-sharp, a quarter note G, and a quarter note A. A triplet of B, C, and D follows, then a quarter note E, a quarter note F, and a quarter note G. Dynamics include *pp*, *mp*, *p*, and *pp*. A *3* indicates a triplet.

Musical score for Violin and Yangqin, measures 5-8. The Violin part continues with a quarter note C, a quarter note B, and a quarter note A. A triplet of G, F, and E follows, then a quarter note D, a quarter note C, and a quarter note B. The Yangqin part continues with a quarter note A, a quarter note G, and a quarter note F. A triplet of E, D, and C follows, then a quarter note B, a quarter note A, and a quarter note G. Dynamics include *f*, *mf*, *f*, *p*, *f*, *mf*, and *p*. A *3* indicates a triplet.

Musical score for Violin and Yangqin, measures 9-12. The Violin part continues with a quarter note A, a quarter note G, and a quarter note F. A triplet of E, D, and C follows, then a quarter note B, a quarter note A, and a quarter note G. The Yangqin part continues with a quarter note F, a quarter note E, and a quarter note D. A triplet of C, B, and A follows, then a quarter note G, a quarter note F, and a quarter note E. Dynamics include *p*, *pp*, *p*, *mp*, and *mf*. A *3* indicates a triplet.

Musical score for Violin and Yangqin, measures 13-16. The Violin part continues with a quarter note G, a quarter note F, and a quarter note E. A triplet of D, C, and B follows, then a quarter note A, a quarter note G, and a quarter note F. The Yangqin part continues with a quarter note E, a quarter note D, and a quarter note C. A triplet of B, A, and G follows, then a quarter note F, a quarter note E, and a quarter note D. Dynamics include *mp*, *fp*, *f*, and *ff*. A *3* indicates a triplet.

13

Two staves of music. The top staff has a treble clef and a key signature of one sharp (F#). It contains a half note G4, a quarter note A4, and a quarter note B4, all beamed together. The bottom staff has a bass clef and contains a half note G3, a quarter note A3, and a quarter note B3, all beamed together. Measure 13 includes dynamic markings *pp* and *d*. Measure 14 includes dynamic markings *pp* and *d*. Both measures feature a triplet of eighth notes (G, A, B) in both staves.

16

Two staves of music. The top staff has a treble clef and a key signature of one sharp (F#). It contains a half note G4, a quarter note A4, and a quarter note B4, all beamed together. The bottom staff has a bass clef and contains a half note G3, a quarter note A3, and a quarter note B3, all beamed together. Measure 16 includes dynamic markings *f* and *mf*. Measure 17 includes dynamic markings *f* and *p*. Both measures feature a triplet of eighth notes (G, A, B) in both staves.

19

Two staves of music. The top staff has a treble clef and a key signature of one sharp (F#). It contains a half note G4, a quarter note A4, and a quarter note B4, all beamed together. The bottom staff has a bass clef and contains a half note G3, a quarter note A3, and a quarter note B3, all beamed together. Measure 19 includes dynamic markings *d* and *pp*. Measure 20 includes dynamic markings *d* and *mf*. Both measures feature a triplet of eighth notes (G, A, B) in both staves.

22

Two staves of music. The top staff has a treble clef and a key signature of one sharp (F#). It contains a half note G4, a quarter note A4, and a quarter note B4, all beamed together. The bottom staff has a bass clef and contains a half note G3, a quarter note A3, and a quarter note B3, all beamed together. Measure 22 includes dynamic markings *mp* and *fp*. Measure 23 includes dynamic markings *mp* and *ff*. Both measures feature a triplet of eighth notes (G, A, B) in both staves.

ANTON KILLIN

To -

for Javanese musician (male voice and Javanese gender)

To - was composed especially for my Javanese gamelan teacher, Budi S. Putra. It is a short work inspired by my transcribing of Indonesian vocal music. The lyric, *Saya orang lewat* (I'm a passerby) is my own poetic response to the Edgar Allen Poe verse *To -*.

To -

ANTON KILLIN
translation assistance from YONO SUKARNO

$\text{♩} = 60$ Mournful
Molto rubato

Voice

laras pelos

Javanese gender

1 2 2 2 6 7 7 6 7 2 5 4

Sa - ya o - rang le -

mp *p* *mf* *p* *mf*

p *pp* *mp*

4

3 2 2 6 7 6 7 2 7 7 7 5 4

wat Sa - ya o - - - rang

f *mf* *p* *pp*

8

5 4 3 6 4 2 2 3 2 3 4 4 5 6

le - wat rang

mp *mf* *f* *mp* *f*

p *mp*

ANTON KILLIN

Ketawang Anggun Slendro Manyura

for Javanese gamelan and viola solo

Ketawang Anggun Slendro Manyura was composed for violist Kylie Nesbit and Gamelan Padhang Moncar. It is based on traditional Javanese gamelan conventions such as form, scale, mode, and tempo structure.

Ketawang Anggun Slendro Manyura

ANTON KILLIN

Scordatura Matching the pitches of the gamelan instruments

A

Viola (solo)

kendhang enters

BUKA (*bonang barung* only)

rit.

MERONG (*utti*)
TANGUNG speed

Balungan/Cipher

Gambang

A

Gamelan Short Score



10

mf con espressione

DADI speed

1 3 3 6 (3) 3



13

3 3 1 6 6 -

16

2 3 3 5 1 -



19

B *gl.*

NGELIK

6 6 (3) 6 6 2

B

22

Musical score for measures 22-24. The score is written for a grand staff (treble and bass clefs). Measure 22 shows a melodic line in the treble and a bass line with a whole note chord. Measure 23 continues the melodic line with a more complex bass line. Measure 24 shows the melodic line continuing and the bass line with a whole note chord.



25

Musical score for measures 25-28. The score is written for a grand staff (treble and bass clefs). Measure 25 shows a melodic line in the treble and a bass line with a whole note chord. Measure 26 continues the melodic line with a more complex bass line. Measure 27 shows the melodic line continuing and the bass line with a whole note chord. Measure 28 shows the melodic line continuing and the bass line with a whole note chord.

28

Musical score for measures 28-30. The score is written for a piano with a treble and bass clef. Measure 28 features a melodic line in the treble clef and a bass line in the bass clef. Measure 29 contains a triplet of eighth notes in the treble clef, with a bass line consisting of a single note. Measure 30 continues the melodic development in both hands.



31

Musical score for measures 31-34. Measure 31 shows a complex melodic passage in the treble clef with a bass line. Measure 32 features a triplet of eighth notes in the treble clef, with a bass line of a single note. Measure 33 continues the melodic line in both hands. Measure 34 concludes the passage with a final melodic flourish in the treble clef and a bass line.

34



37

pizz. arco

40

pizz.

1.



43

C

(DADI iteration of A [MERONG])

C

46

Musical score for measures 46-48. The score is written for a grand staff with three systems. The first system consists of a treble clef staff with a melodic line and a bass clef staff with a bass line. The second system also consists of a treble clef staff with a melodic line and a bass clef staff with a bass line. The third system consists of a treble clef staff with a melodic line and a bass clef staff with a bass line. The music is in a minor key and includes various rhythmic patterns and articulations.



49

Musical score for measures 49-52. The score is written for a grand staff with three systems. The first system consists of a treble clef staff with a melodic line and a bass clef staff with a bass line. The second system also consists of a treble clef staff with a melodic line and a bass clef staff with a bass line. The third system consists of a treble clef staff with a melodic line and a bass clef staff with a bass line. The music is in a minor key and includes various rhythmic patterns and articulations. The word "arco" is written above the first system, and "(pizz.)" is written below the first system. The word "arco" is written above the second system, and "(pizz.)" is written below the second system. The word "arco" is written above the third system, and "(pizz.)" is written below the third system.

52

D

Musical score for page 52, measures 52-54. The score is in 3/4 time and D major. It consists of a vocal line and a piano accompaniment. The vocal line has lyrics "(MERONG)". A double bar line is present between measures 52 and 53.



54

Musical score for page 54, measures 54-57. The score is in 3/4 time and D major. It consists of a vocal line and a piano accompaniment.

57

arco

Musical score for measures 57-60. The score is in 3/4 time and B-flat major. It features a violin part and a piano accompaniment. Measure 57 contains a triplet of eighth notes in the piano part. Measure 58 contains a triplet of eighth notes in the violin part. Measure 59 contains a triplet of eighth notes in the piano part. Measure 60 contains a triplet of eighth notes in the violin part. The piano part consists of a steady eighth-note accompaniment.



60

Musical score for measures 60-63. The score is in 3/4 time and B-flat major. It features a violin part and a piano accompaniment. Measure 60 contains a triplet of eighth notes in the piano part. Measure 61 contains a triplet of eighth notes in the violin part. Measure 62 contains a triplet of eighth notes in the piano part. Measure 63 contains a triplet of eighth notes in the violin part. The piano part consists of a steady eighth-note accompaniment.

63

63

64 *pizz.*

65



66

poco a poco accel.

pizz.

66

67 *poco a poco accel.*

68

69

70

69 **F**

Musical staff for measure 69. The upper staff contains a melodic line with a fermata over a half note. The lower staff contains a triplet of eighth notes.

(NGELIK)

Musical staff for measure 70, showing a triplet of eighth notes in the bass line.

Musical staff for measure 71, featuring a complex melodic line with slurs and a bass line with a triplet of eighth notes.

F

Musical staff for measure 72, featuring a melodic line with a fermata and a bass line with a triplet of eighth notes.



72

arco

Musical staff for measure 73, featuring a melodic line with a fermata and a bass line with a triplet of eighth notes.

Musical staff for measure 74, showing a triplet of eighth notes in the bass line.

Musical staff for measure 75, featuring a complex melodic line with slurs and a bass line with a triplet of eighth notes.

Musical staff for measure 76, featuring a complex melodic line with slurs and a bass line with a triplet of eighth notes.

75

Musical score for measures 75-77. Measure 75 features a melodic line in the right hand and a bass line in the left hand. Measure 76 shows a continuation of the melodic line with a fermata over the final note. Measure 77 continues the melodic line with a fermata over the final note. The bass line consists of a few chords and a final note.



78

Musical score for measures 78-81. Measure 78 features a melodic line in the right hand and a bass line in the left hand. Measure 79 shows a continuation of the melodic line with a fermata over the final note. Measure 80 continues the melodic line with a fermata over the final note. Measure 81 continues the melodic line with a fermata over the final note. The bass line consists of a few chords and a final note.

81

3 6 6 - 2 3

pizz. arco

accel.



84

3 5 (1) 3 3 -

87



90

pizz.

arco

Lively

TANGGUNG speed

Lively

93 **F**

Musical staff for measure 93. The melody starts with a quarter rest, followed by a quarter note G4, an eighth note A4, a quarter note B4, and a quarter note C5. A fermata is placed over the B4 note. This is followed by a triplet of eighth notes: G4, A4, and B4. The staff concludes with a quarter note C5.

w.v.

MERONG

Musical staff for measure 94. The melody consists of the following notes with fingerings: (6) G4, 3 A4, 3 B4, 5 C5, 1 D5, 6 E5, 6 F5, 6 G5, - A5, 2 B5, 3 C6.

Musical system for measures 95-98. It includes a vocal line and a piano accompaniment. Measure 95 features a dynamic marking **F**. The piano part consists of chords and arpeggiated figures in the right hand and bass notes in the left hand. Measure 96 has a dynamic marking **F**. Measure 97 includes a fermata over the vocal line. Measure 98 features a dynamic marking *n* (pianissimo) and a fermata over the vocal line.

98

Musical staff for measure 99. The melody consists of the following notes with fingerings: 3 G4, 5 A4, 1 B4, 3 C5, 3 D5, 6 E5, (3) F5, 3 G5, 3 A5, 5 B5.

Musical system for measures 100-103. It includes a vocal line and a piano accompaniment. Measure 100 features a dynamic marking *n*. Measure 101 includes a fermata over the vocal line. Measure 102 includes a fermata over the vocal line. Measure 103 includes a fermata over the vocal line.

103

Musical score for page 103, measures 1-5. The score includes a vocal line with lyrics "1 6 6 6 - 2 3 3 3 5 1 -" and piano accompaniment. A double bar line is present at the end of measure 5.



108

G

NGELIK

Musical score for page 108, measures 6-11. The score includes a vocal line with lyrics "6 6 (3) 6 6 2 5 - 6 6" and piano accompaniment.

Musical score for page 108, measures 12-17. The score includes a vocal line with lyrics "6 6 6 6 6 6" and piano accompaniment. A box containing the letter "G" is placed above the vocal line in measure 13.

113



118

poco a poco rit.
pizz.
mp

123

2 3 3 5 (1) 3 3 -



127

mf arco

molto rit. w.v.

6 - 6 2 3 3 -

molto rit.

131

6 3 2 1 - (long) 6

n

ANTON KILLIN

Ladrang Santai Slendro Sanga

for Javanese gamelan, *gerong* (small male unison choir) and guitar solo

Ladrang Santai Slendro Sanga was composed for myself (guitar), Gamelan Padhang Moncar, and friends studying vocal performance at the New Zealand School of Music. It is based on traditional Javanese gamelan conventions such as form, scale, mode, and tempo structure.

Ladrang Santai Slendro Sanga

ANTON KILLIN



Gerong
(Male Choir)

Scordatura Each string tuned down one semitone & then tune guitar so A-flat = slendro 5

Guitar

kendhang enters

MERONG (tuti)

BUKA (*bonang barung* only)

TANGGUNG speed

Balungan/Cipher

3 5 6 3 5 2 1 3 3 5 2 - 1 6 (5) 2 1 5



bonang panerus

(*bonang barung* only)

peking (top voice), *bonang barung* (lower voice)

balungan (top to bottom: *seron, demung, slenthem*)

Gamelan short score

DADI speed

rit.

7 6 5 5 3 5 2 5 3 2 3 2

12

16

5 2 1 2 2 2 1 1 6 3

1.

20

5 3 (5) 2 1 5 6 5

24

24

5 3 5 2 5 3 6 3

2.

28

B

NGELIK (tutti; with singers & soloist)

mf unisono, though with individual expression & movement

B



31

34

lon and glass there we all

du *d* *du* *du* *ff*

1 5 3 2 5 3

37

are, Un - der a Po - hu - tu - ka

du *f* *d* *du* *ff*

2 6 1 6 5 2 1 5

41

(on final time through only, poco a poco rit.)

wa Sing - ing - - - - - drink - - - - - ing - - - - - play -

6 3 3 5 2

C (DADI iteration of A [MERONGI])

44

1.2.

ing - - - - - gui - - - - - tar

stumpy!

1 6 (5) 2 1 5 6 5

C

1.2. etc

48

D.S. (several times)

51

molto rit.

3.

ing

guit

mf tar

n

8

chu

d

f

1

6

(gong)

5

molto rit.

3. (or final)



ANTON KILLIN

Gendhing Tarikan Pelog Nem

for Javanese gamelan, accordion solo and clarinet in B-flat solo

Gendhing Tarikan Pelog Nem was composed for accordionist Jonathan Berkahn, clarinetist Andrzej Nowicki, and Gamelan Padhang Moncar. It is loosely based on traditional Javanese gamelan conventions such as form, scale, mode, and tempo structure, which I have developed especially for this piece.

Gendling Tarikan Pelog Nem

ANTON KILLIN

Lively

Clarinet in B \flat

Accordion

LANCAR speed

Balungan/Cipher

Lively

peking (upper voice), saron & bonang barung (lower voice)

denung (upper voice), slenthem (lower voice)

Gamelan short score



9

1 2 3 5 6 5 3 2 1 2 3 5 6 5 3 2 7 5 7 5 6 5 3 2 1 2 3 5



13

A Solemn

KETAWANG form/colotomic structure
Kendhang may adopt a more *Lancaran* approach to drumming

UMPAK (transition)
 (dampen key while striking)

6 x x 7 5 3 x x 2 4 6 (5) 6 5 3 2

TANGGUNG speed

A Solemn
peking (upper voice), *bonang* bars
 (lower voice)

balungan (upper to lower:
 sarons, demungs, slenthem)

etc. (from here, traditional Ketawang gong structure)

accordion tacet 2nd time through

16



19

(5) 3 5 3 2 4 1 - 2 4 2 1 - 2 3

22

23

24



25

26

27

28

27



30

DADI speed

33

mf *p* *mf*

1 - 2 4 2 1 -

upon repeat (of bb. 32-64): clarinet tacet for 2nd time through this passage (bb. 32-39)

36

mf *f* *ff* *mp* *p* *mf*

6 5 3 5 7 6 6 (5) 6 5

1.

40 [2.]



44

48



51

clarinet enters here

60

1.

f

mf *f* *ff* *mf* *p* *mf* *f*

4 2 5 - 6 3 5 - 2

1.

D.S. performing through both repeats
for 1st and 2nd time bars at bb.39/40

64

2.

mf *f* *ff*

SUWUK (ending)

(6) 6 5 4 2 4 - 2

D.S. performing through both repeats
for 1st and 2nd time bars at bb.39/40

molto rit.

2.

67

dnu *d* *fu* *f*

6 5 3 2 - (6ons) 6

ANTON KILLIN

Mermecolion

electroacoustic

A mermecolion is a somewhat obscure mythical creature. It is a hybrid, combining the body of a giant ant with the head and foreparts of a lion. The combination of such physically contrasting species is the motivation and inspiration for this short electroacoustic piece, in which several soundworlds are combined to create a hybrid soundworld: strings and flutes, Balinese gamelan, and electronic sounds.

Mermecolion was premiered in the United States on 3 October 2009 at the Wallstreet Club in Columbus, Ohio, and has received subsequent performances throughout the USA and also in Ireland, France, England, Spain and Canada.

ANTON KILLIN

Podróže

electroacoustic

Podróże ("Journeys") depicts the incredible story of an anonymous man's journey as a child in World War II: from Poland to the labour camps in Siberia, to Iran, and eventually to New Zealand as a 'Pahiataua child'. His narration is punctuated and ornamented with electroacoustic sounds.

Podróże was premiered in New Zealand on 6 November 2009 at the Adam Concert Room in Wellington.

ANTON KILLIN

Elegy

for piano and Javanese gamelan

I was moved to compose *Elegy* after the death of a friend. A gamelan note doubles every piano note - the slight differences in tuning between the gamelan and a piano create beating frequencies that produce a shimmering effect.

Gamelan Instrumentation

*A minimum of five gamelan players is required - though more is fine too
(just work out the 'division of labour' between yourselves!)*

- (1) Pelog peking, pelog & slendro bonang panerus, pelog kenong
(only requiring pelog 1 kenong pot and only pelog low 1 & 2, high 1 & 2, and all three slendro 2 bonang panerus pots)
- (2) Pelog & slendro saron, (pelog) gong suwuk
- (3) Pelog & slendro demung
- (4) Pelog (nem) & slendro gender, pelog demung
- (5) Pelog & slendro slenthem

Gamelan Performance Note

Strike instruments with their traditional *tabuh* (beater)

Dampen according to the score (rests = no sound! -- unless *l.u.* is indicated)

Try to avoid all gamelan instrument 'squawks' and 'buzzes' - this may involve checking the instruments before performance

Strike balungan instruments vertically (a straight downwards strike), unless a tenuto mark is given, in which case performers must aim for a sweeter sound by striking the instrument with a bit of an angle

Elegy

ANTON KILLIN

Grave, Melancholic $\text{♩} = 54$

The first system of the musical score is for the piece 'Elegy'. It features two staves: a top staff for 'Gamelan' and a bottom staff for 'Piano'. The time signature is 4/4 with a tempo of Grave, Melancholic, and a metronome marking of quarter note = 54. The key signature has one flat (B-flat). The score includes dynamic markings such as *mp*, *pp*, and *ppp*, and performance instructions like 'senza ped.'. Fingerings are indicated with numbers 1 and 2. The 'Gamelan' part has a 'Pelog gender' box above it, and the 'Piano' part has a 'Slendro gender' box above it. The system concludes with a double bar line.



The second system of the musical score continues the piece. It features two staves: a top staff for 'Piano' and a bottom staff for 'Piano'. The time signature is 4/4. The score includes dynamic markings such as *p*, *pp*, *mp*, and *f*, and performance instructions like 'senza ped.'. Fingerings are indicated with numbers 1, 2, 5, and 7. The 'Piano' part has a 'Slendro gender' box above it. The system concludes with a double bar line.

Musical score for six instruments: Pelog gender, Slendro gender, Pelog demnung, Slendro demnung, Pelog saron, and Slendro saron. The score is divided into two systems. The first system includes measures 10 and 11. The second system includes measures 12 and 13. The instruments are arranged in two rows. The top row contains Pelog gender, Slendro gender, Pelog demnung, and Slendro demnung. The bottom row contains Pelog saron, Slendro saron, Pelog slentrem, and Slendro slentrem. The score includes various musical notations such as notes, rests, and dynamic markings like *mp* and *pp*. A *Piano* marking is present at the beginning of the first system. The instruments are grouped by a brace on the left side of the first system.

10

Pelog gender Slendro gender

mp *pp*

11

Pelog demnung Slendro demnung

pp

12

Pelog saron Slendro saron

pp

13

Pelog slentrem Slendro slentrem

pp

Piano

19 Pelog + Slendro bonang panerus

Pellog pekling

Pellog saron

(Pelog) gong suwuk

Pellog demung

Slendro slenthem

Slendro saron

Piano

27

p

mp

p1 + s2

pp

f

p

pp

p

Piano

Slendro gender

Pelog gender

Slendro saron

2

30 Pelog kenong

aim not to allow any of the strikes of the beater to be heard --
rather, aim for a resonant, subtle drone
(it may be appropriate to use gender beaters for this effect)

Piano

34

Piano

ANTON KILLIN

Tabula Rasa

for Chinese *yangqin* (dulcimer) and live electronics

Tabula Rasa was composed for performance by Wang Hui (*yangqin*) and myself (live electronics). It was premiered in New Zealand on 26 March 2010 at the Massey Concert Hall in Wellington.

Tabula Rasa means "blank slate"; I approached the *yangqin* as a 'box with strings' possible of producing many different sounds when interacted with in different ways, extended by the use of live electronics.



photo of Wang Hui and myself courtesy of Jack Body

Performance Instructions

Realising the graphic score:

The *x* axis represents *time* - each graph length is ten seconds

The *y* axis represents *speed* - the top of the *y* axis requires very fast playing, the bottom requires very slow playing, and all other speeds fall in-between

The thicker the graphic gesture (line/shape), the louder the dynamic.

The thinner the graphic gesture, the softer the dynamic.

Indications of timbre/technique are notated in prose above the graphic gestures. Indications of any specific pitches are notated in circles underneath graphic gestures. Register of pitch is left to the discretion of the performer.

Shorthand

L.H. and R.H. denote left hand side, and right hand side, respectively, of the *yangqin*, from the performer's perspective.

Live Electronics Instruction Sheet

(for sound artist accompanying the *yangqin*)

The *yangqin* must be recorded through Loomer's audio software Shift (a real-time granular pitch shifting and delay programme) via microphone during the performance, requiring a stereo loudspeaker set up. Shift Version 1.0.1 is used by the composer, though any later versions will surely suffice.

Screenshots of the required default settings are supplied below in case they must be recreated from scratch. A demo of the programme can be downloaded for free, for Mac, Windows, and Linux, from Loomer's website <<http://www.loomer.co.uk/shift.htm/>> and that will be capable of a performance of this piece.

The volume of the electronics should not be too loud - enough to appear as an 'embellishment', or 'electronic extension' of the acoustic instrument, heightening its sonic capabilities, not at all overpowering the acoustic instrument.

Throughout, the sound artist can, at his/her discretion, improvise with parameters of the default settings, reacting to the fine-grained sonic detail relevant to that performance's realisation of the graphic score.

The piece begins with default setting *Chime* activated:



As the *yangqin* performer begins page 5, this should be changed to default setting *Ballerina*:



As the *yangqin* performer begins page 6, this should be changed back to *Chime*, and then back to *Ballerina* again for page 7. The second half of page 7, however, should be changed to default setting *Above and Below*:



This should be changed back to *Chime* for the first half of page 9; *Ballerina* for the second half of page 9; *Above and Below* for page 10; *Ballerina* for page 11; *Chime* for the first half of page 12; *Above and Below* for the second half of page 12. It is recommended that these changes are annotated onto the score for the sound artist to follow during performance.

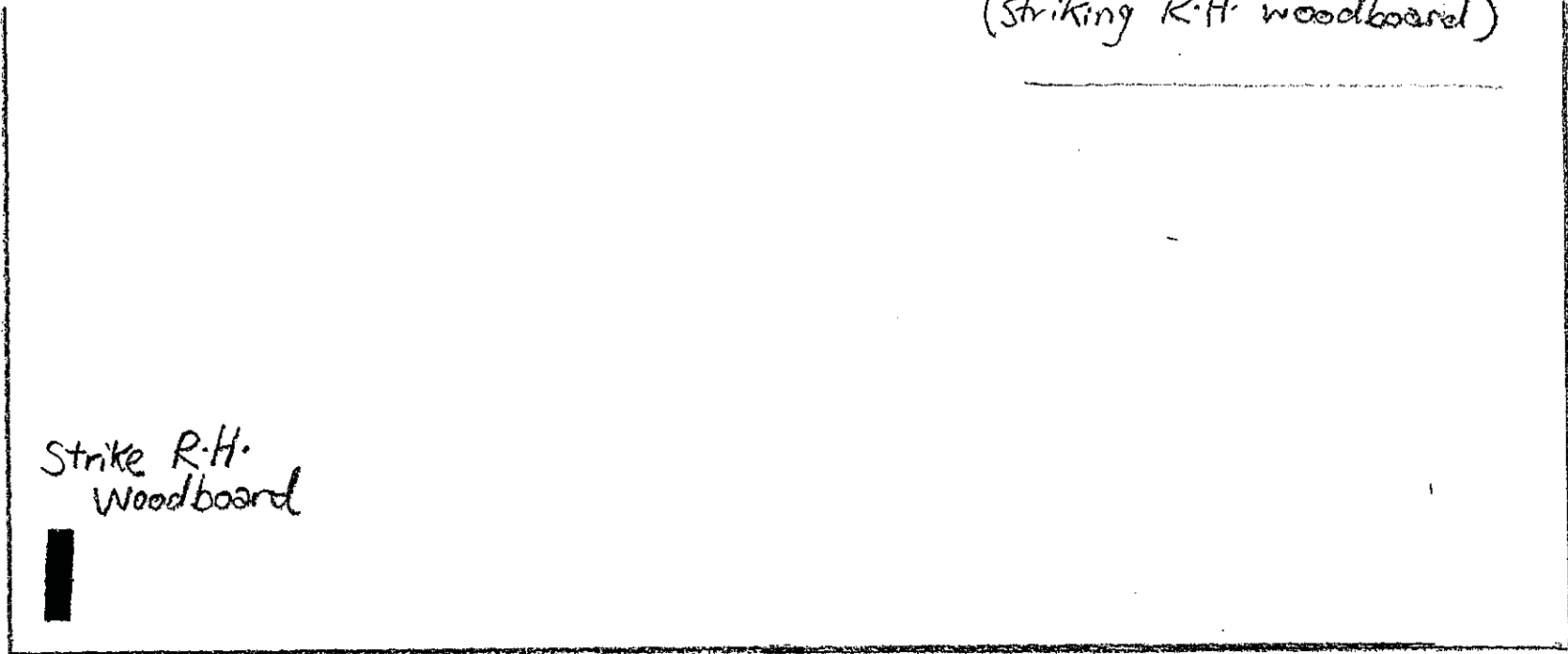
TABULA RASA

ANTON KILLIAN

for Chinese yangqin and electronics*

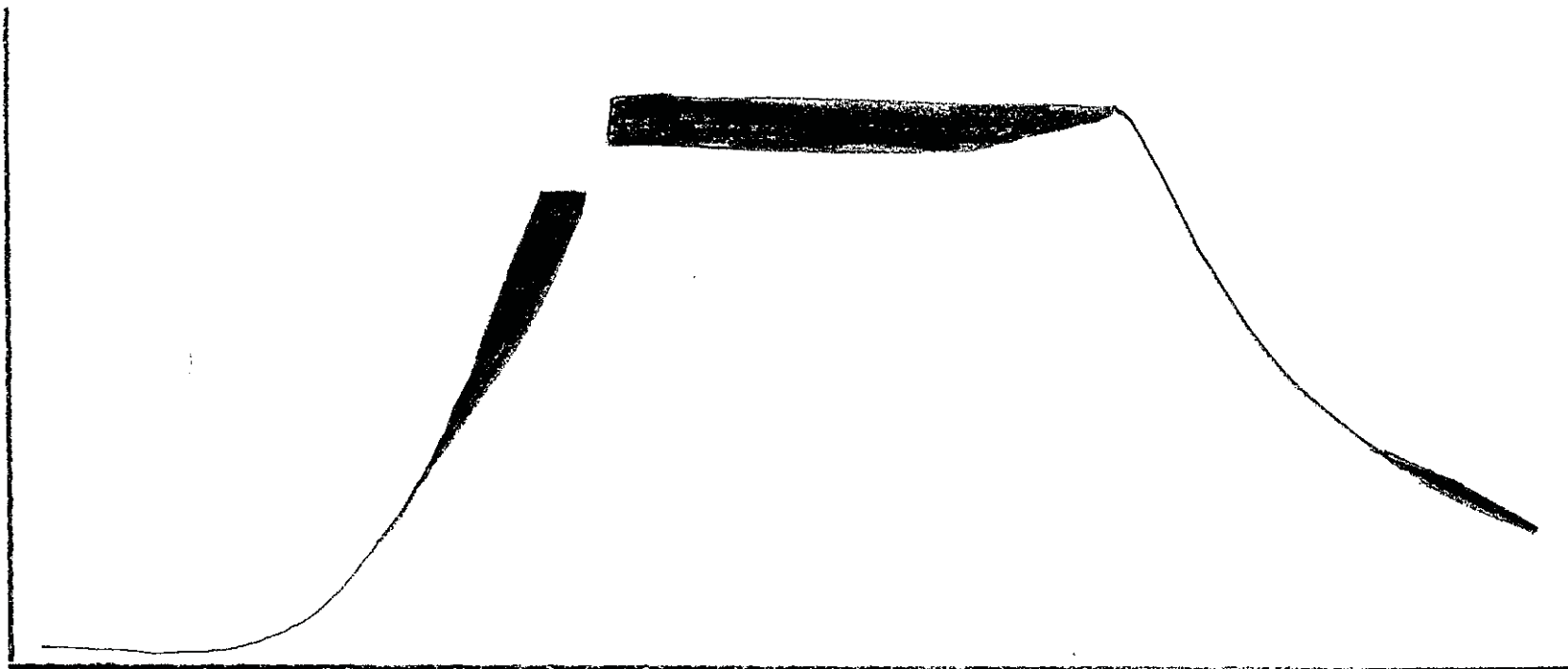
(open L.H. woodboard, revealing pins)

(striking R.H. woodboard)

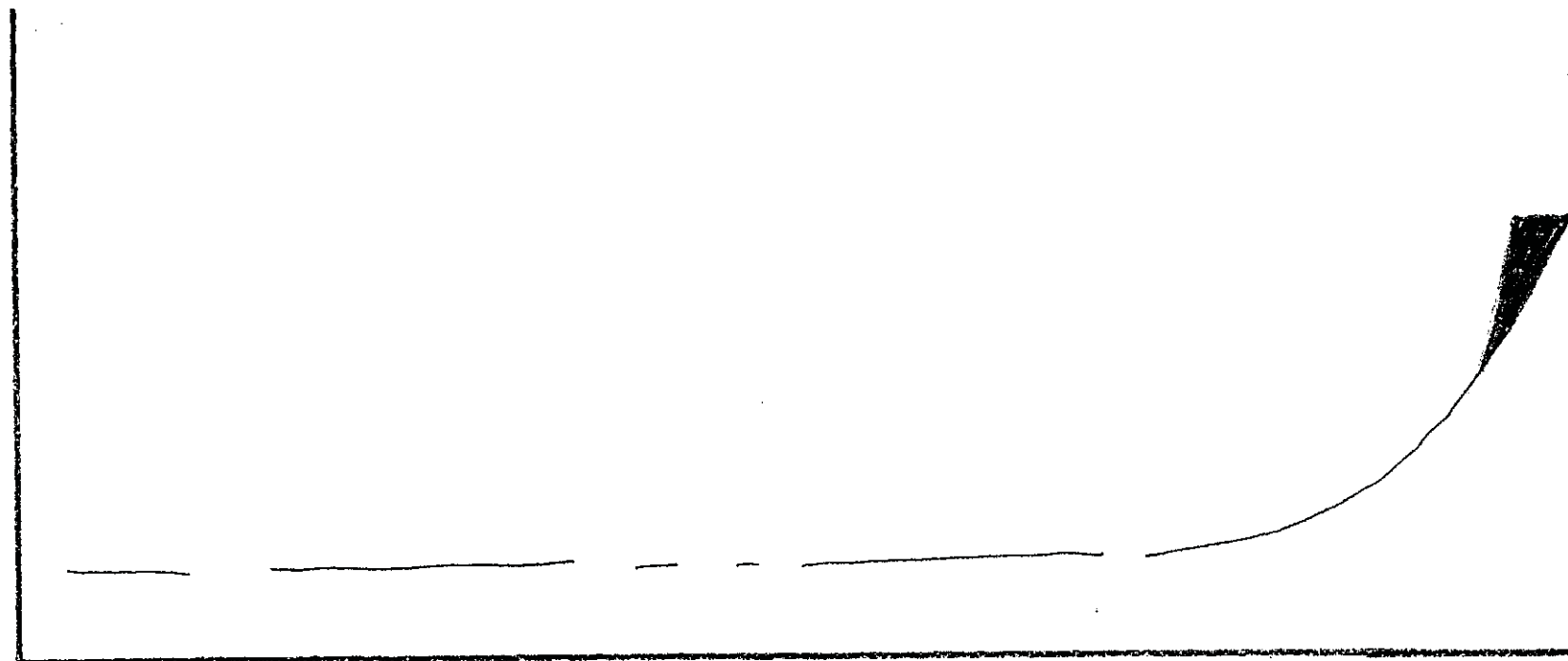


* see separate
info sheet

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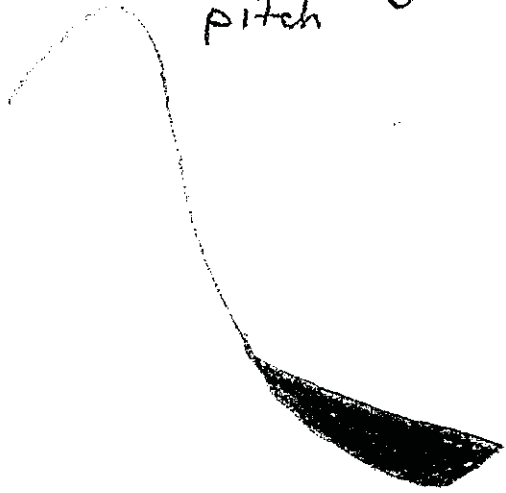


0'20"

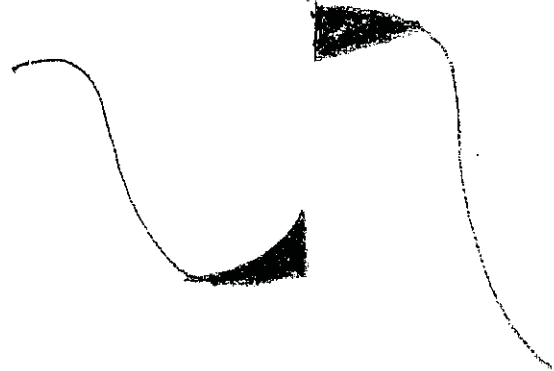


0'30"

Striking any (single)
pitch



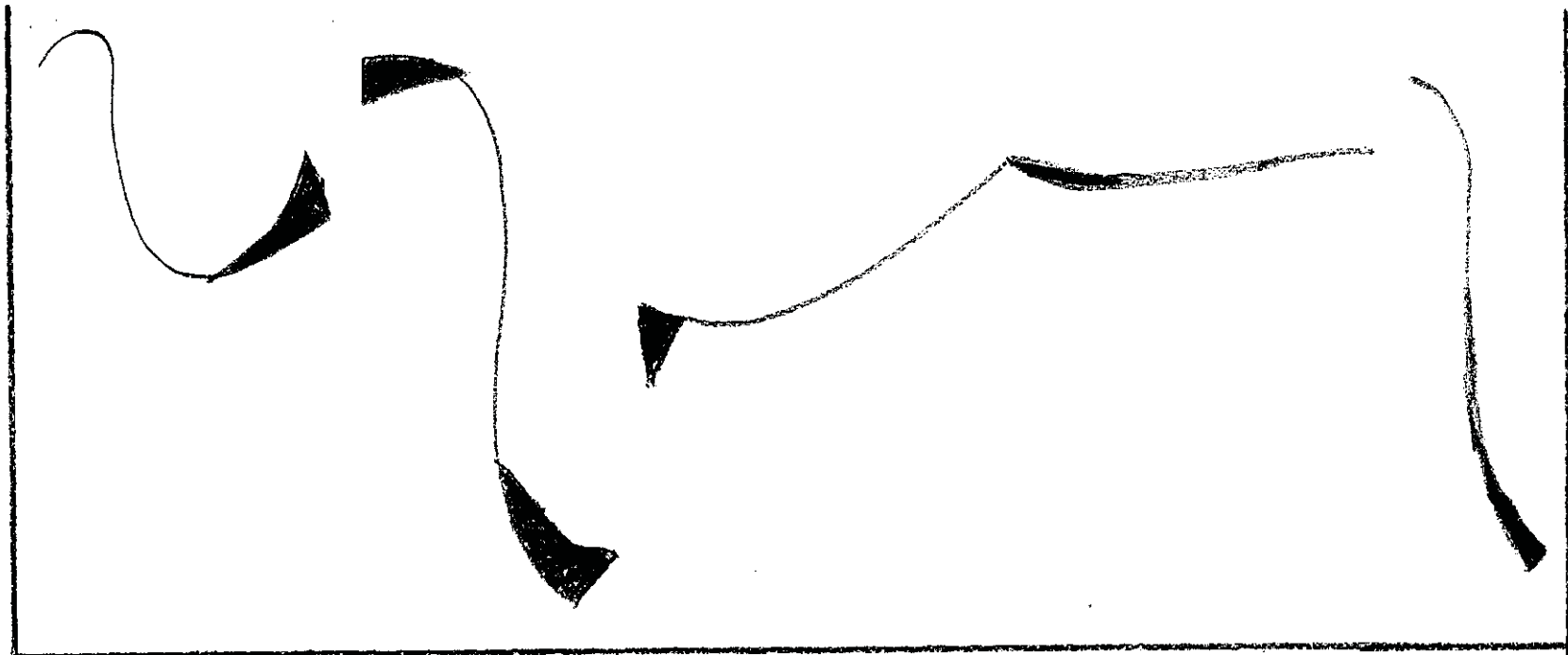
Striking any (single)
pitch, one per shape



Striking R.H.
woodboard



0'40"



0'50"

Knock (with knuckles)
Wooden underbelly

x

Knock open
L.H. woodboard

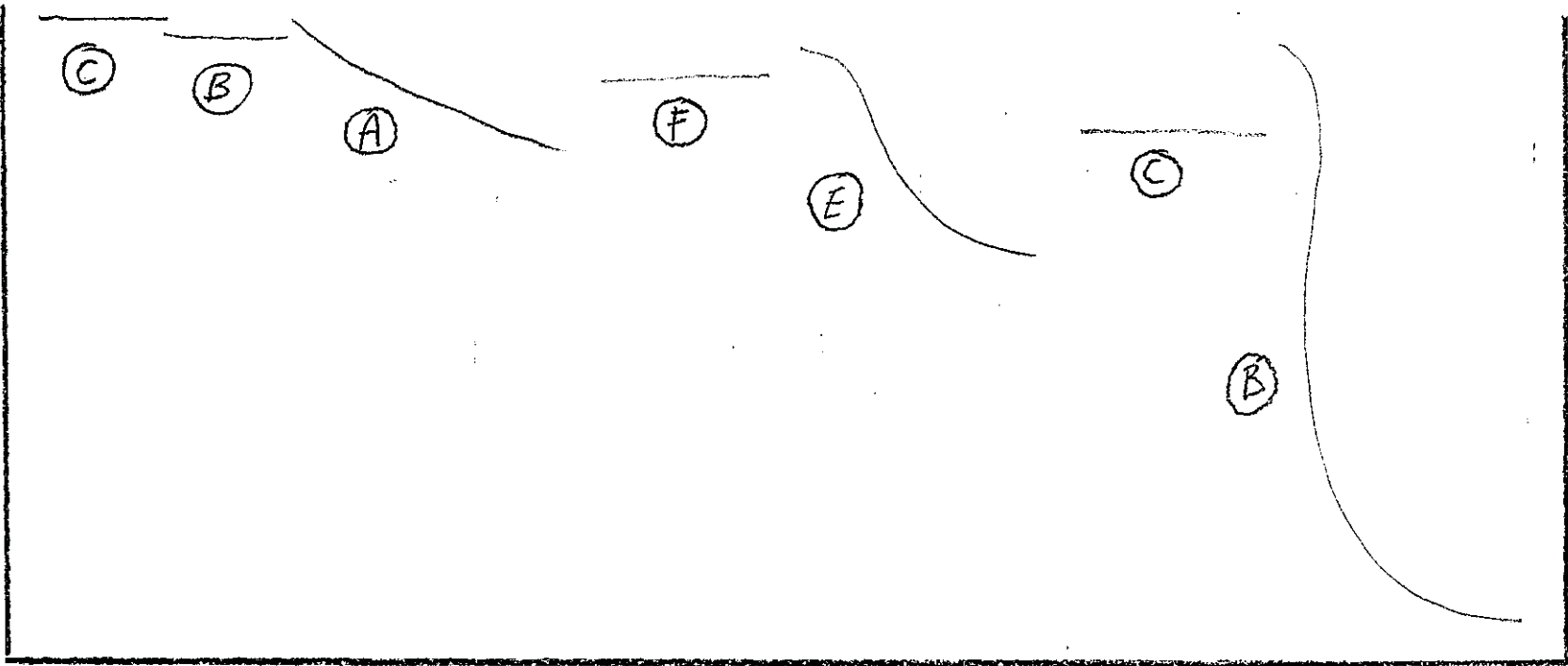
x

1'00"

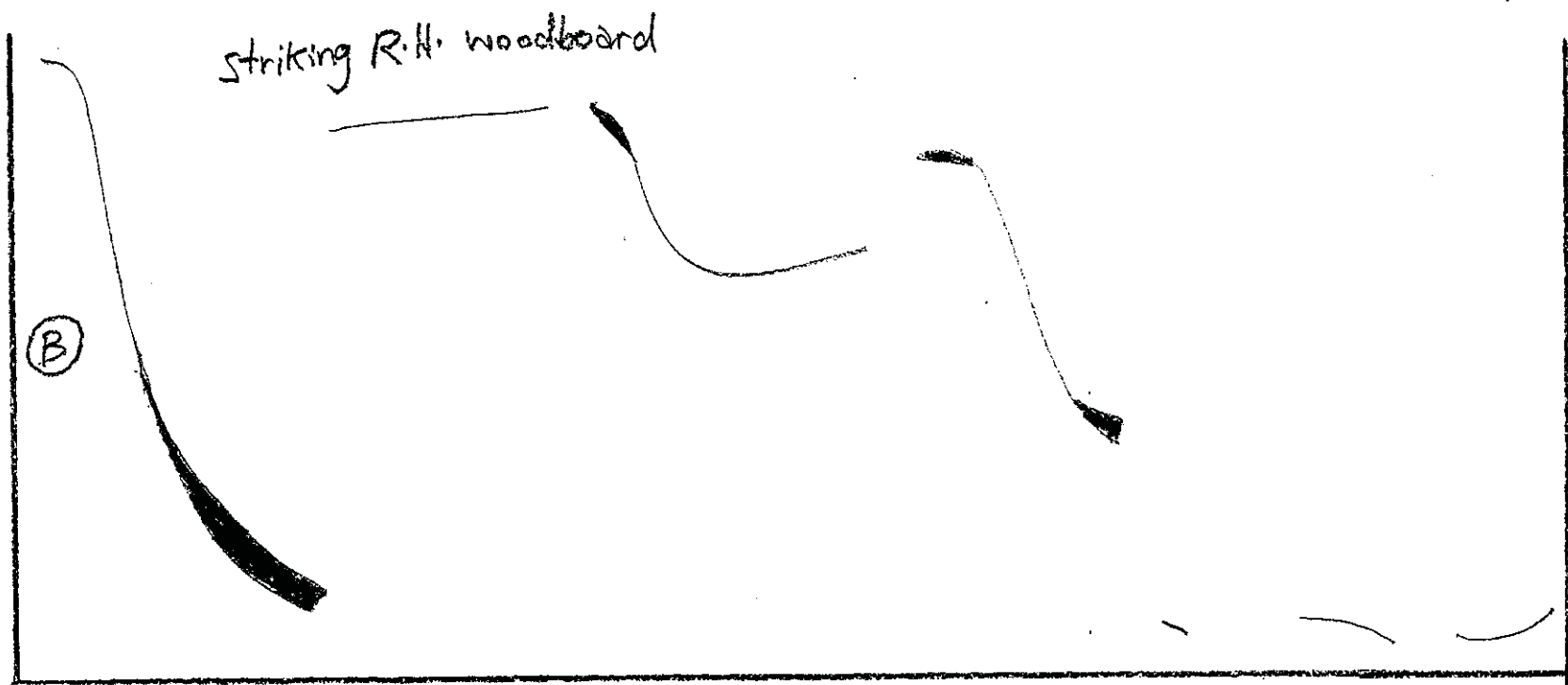
Striking nominated
pitch at any
(single)
register,
per pitch

(A)

1'10"

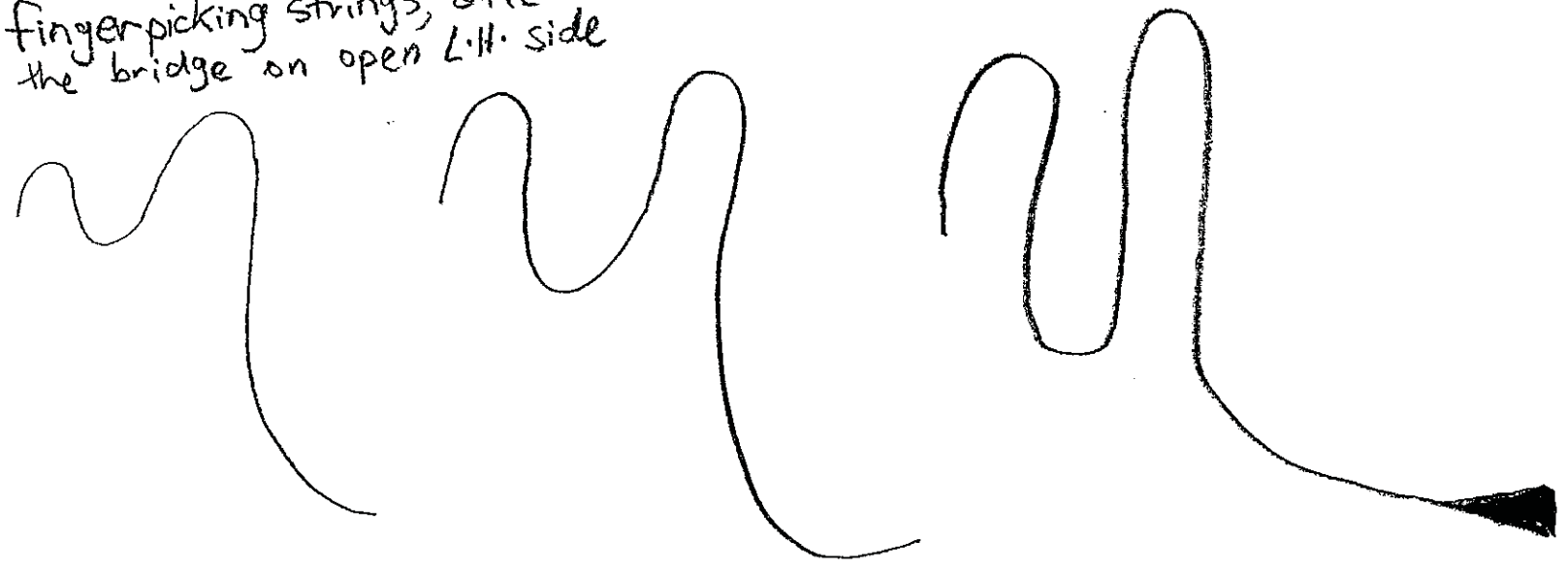


1'20"



1'30"

Fingerpicking strings, after
the bridge on open L.H. side

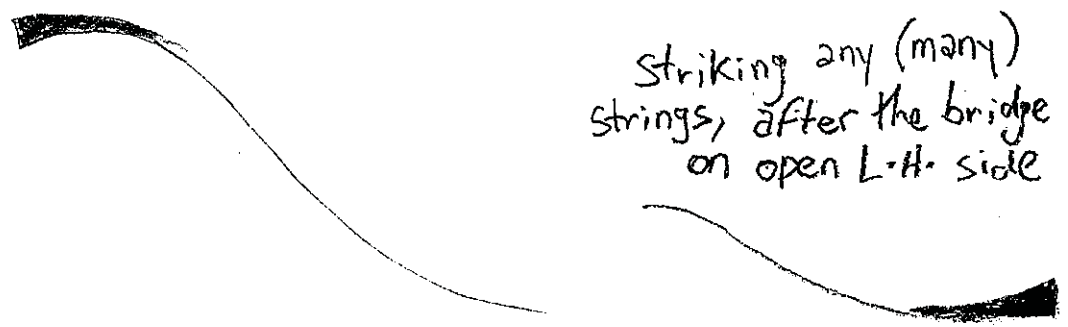


1'40"

striking L.H. (open)
woodboard



striking any (many)
strings, after the bridge
on open L.H. side



1'50"

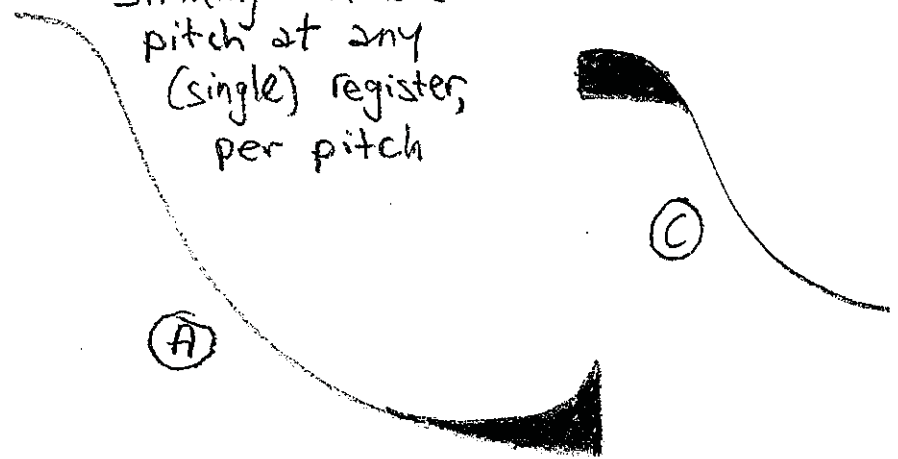


2'00"

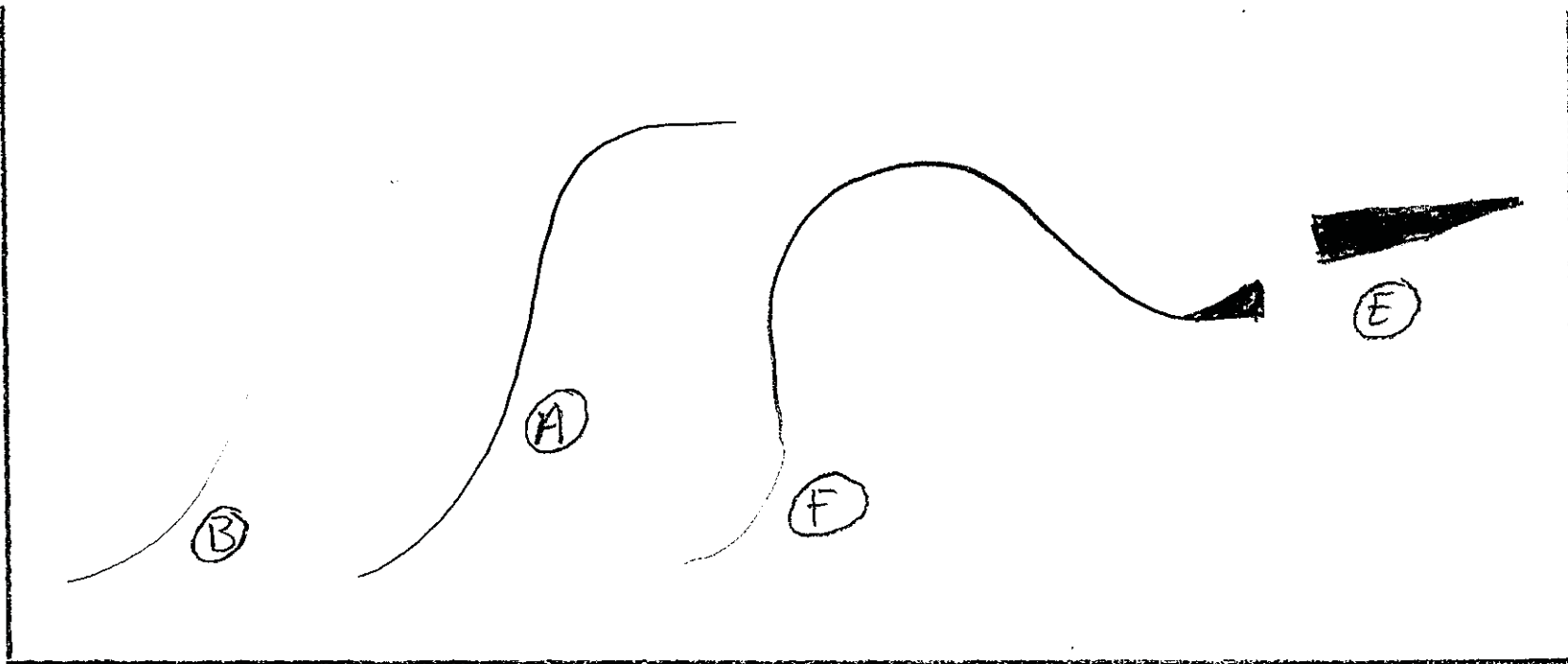
striking woodboards on both sides



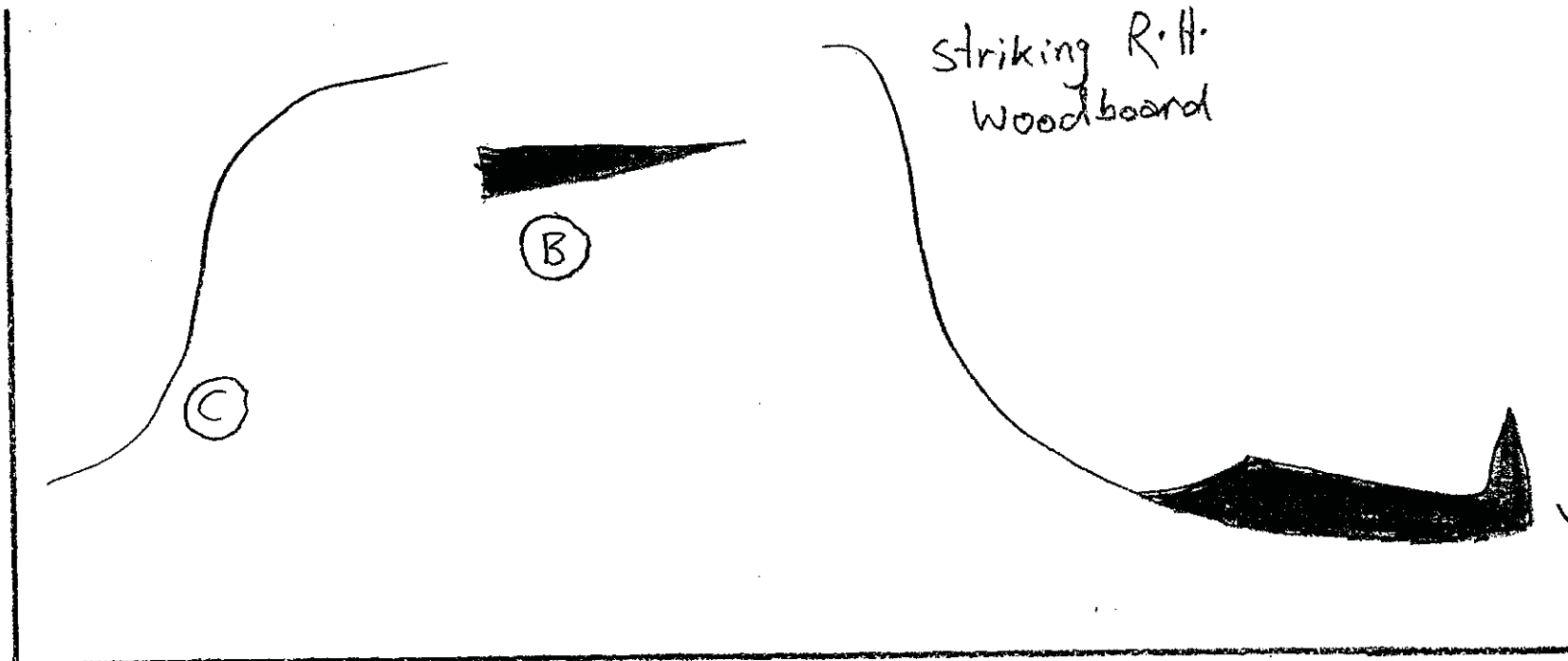
striking nominated
pitch at any
(single) register,
per pitch



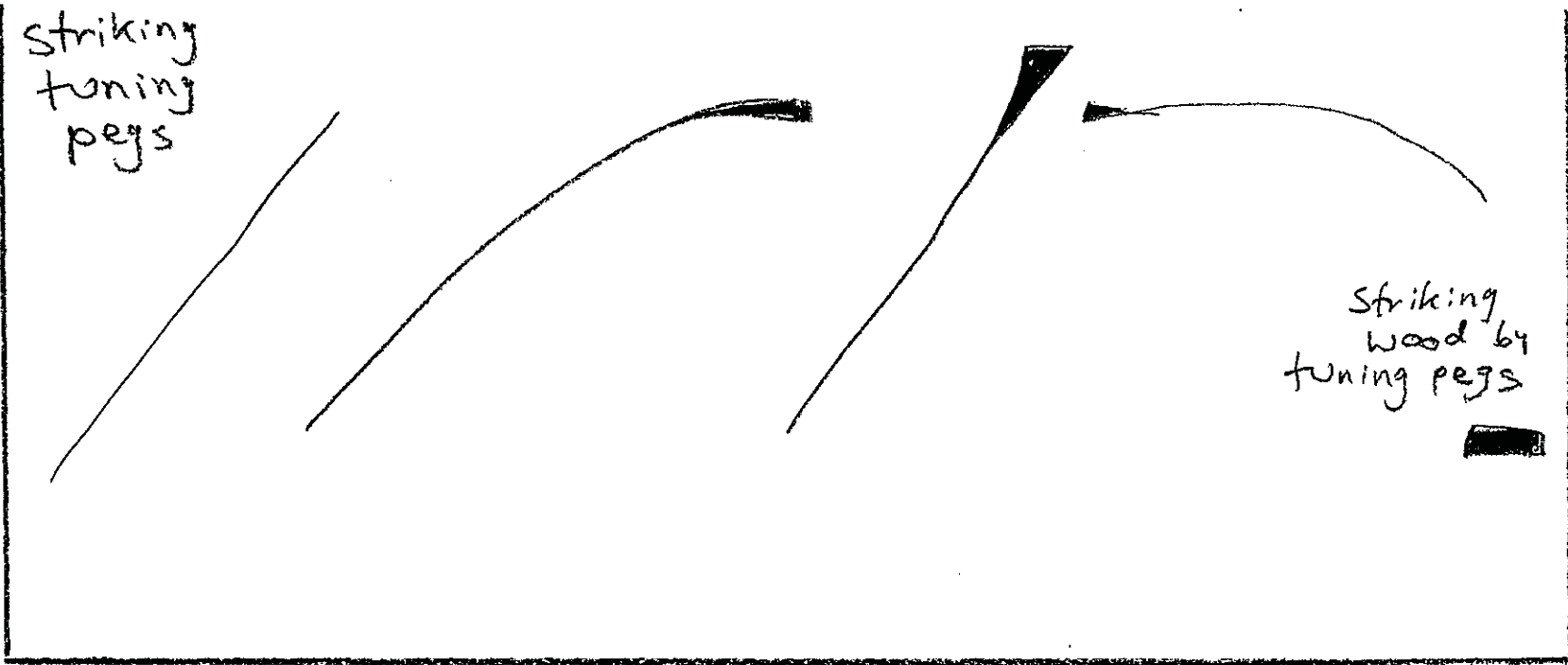
2'10"



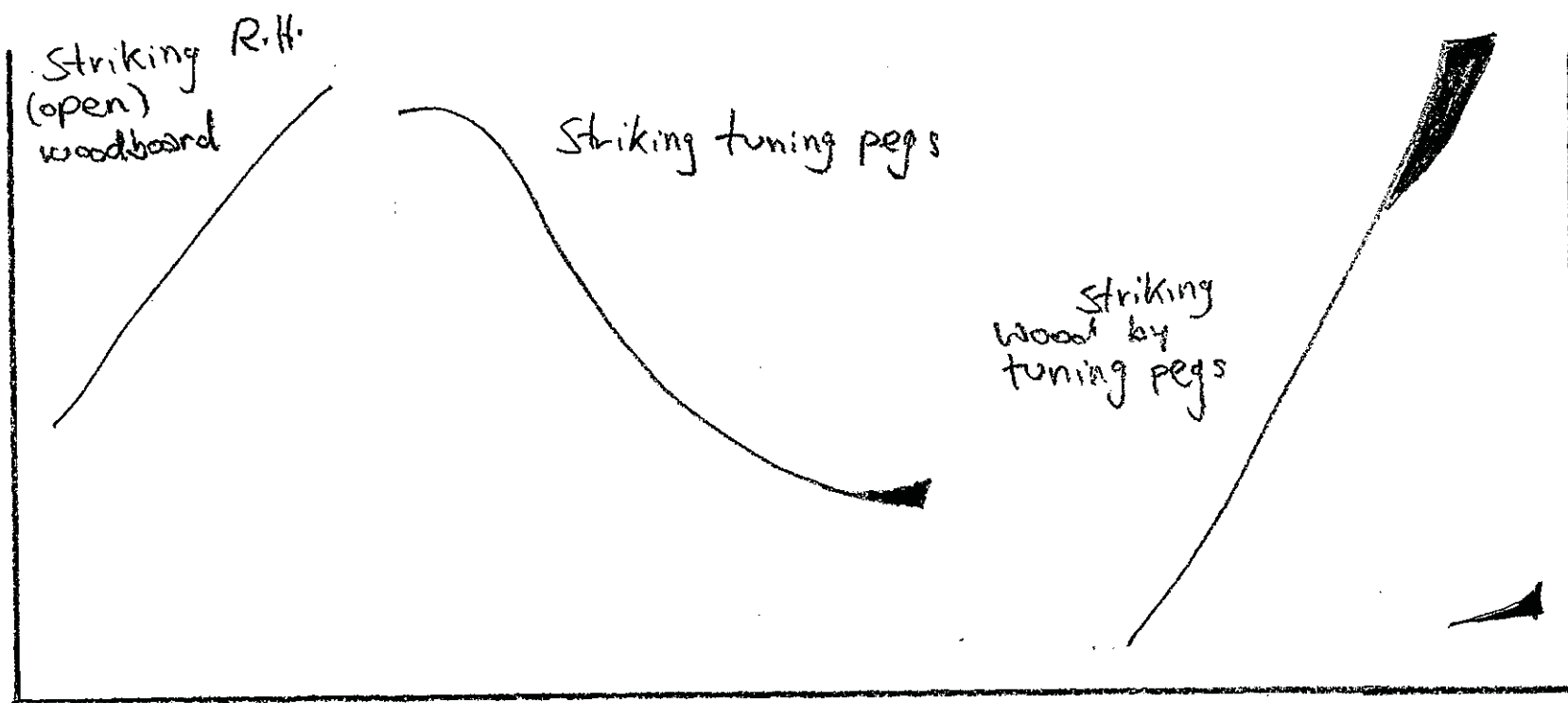
2'20"



2'30"

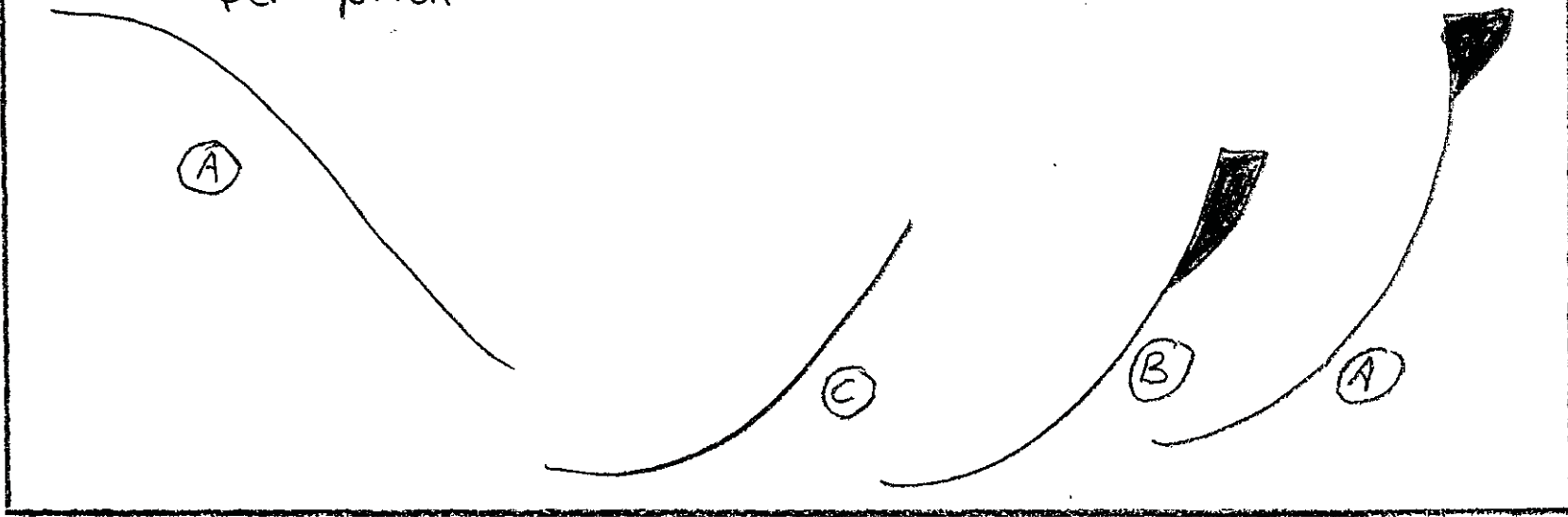


2'40"

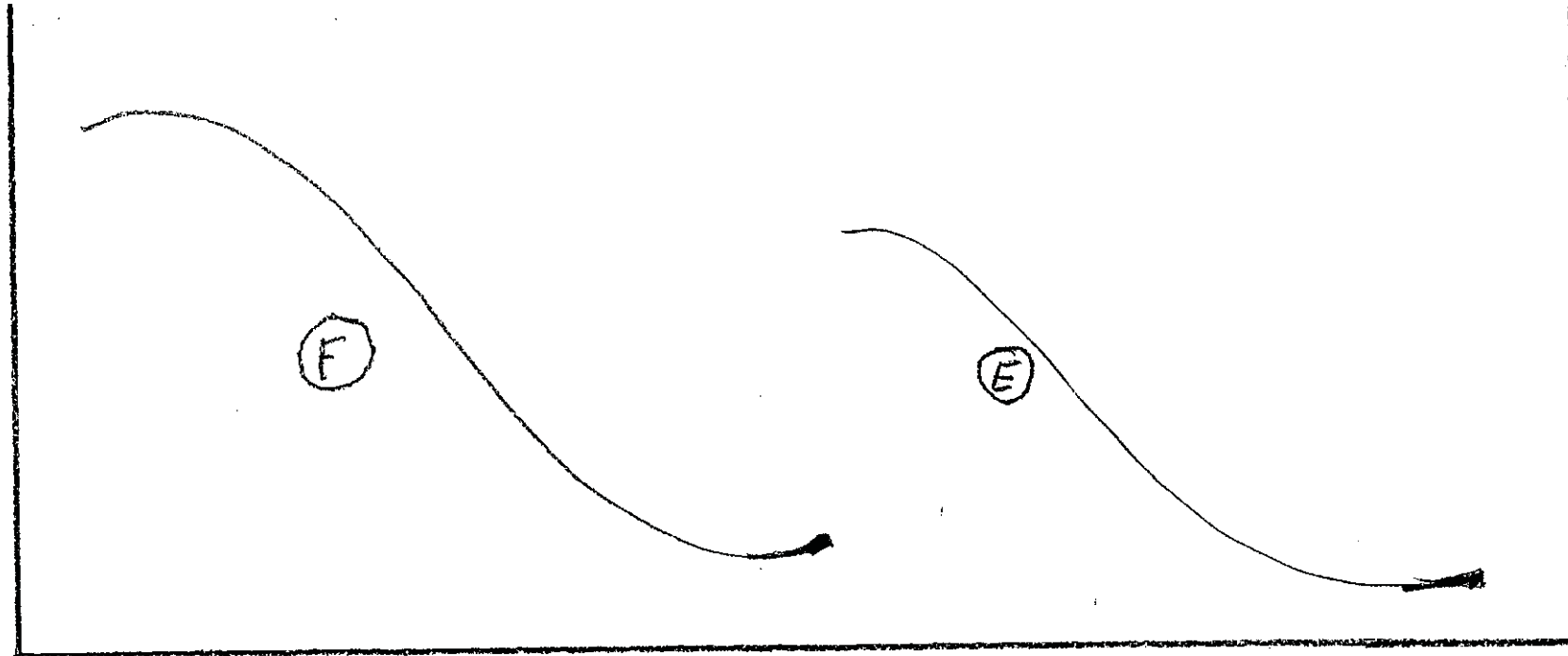


2'50"

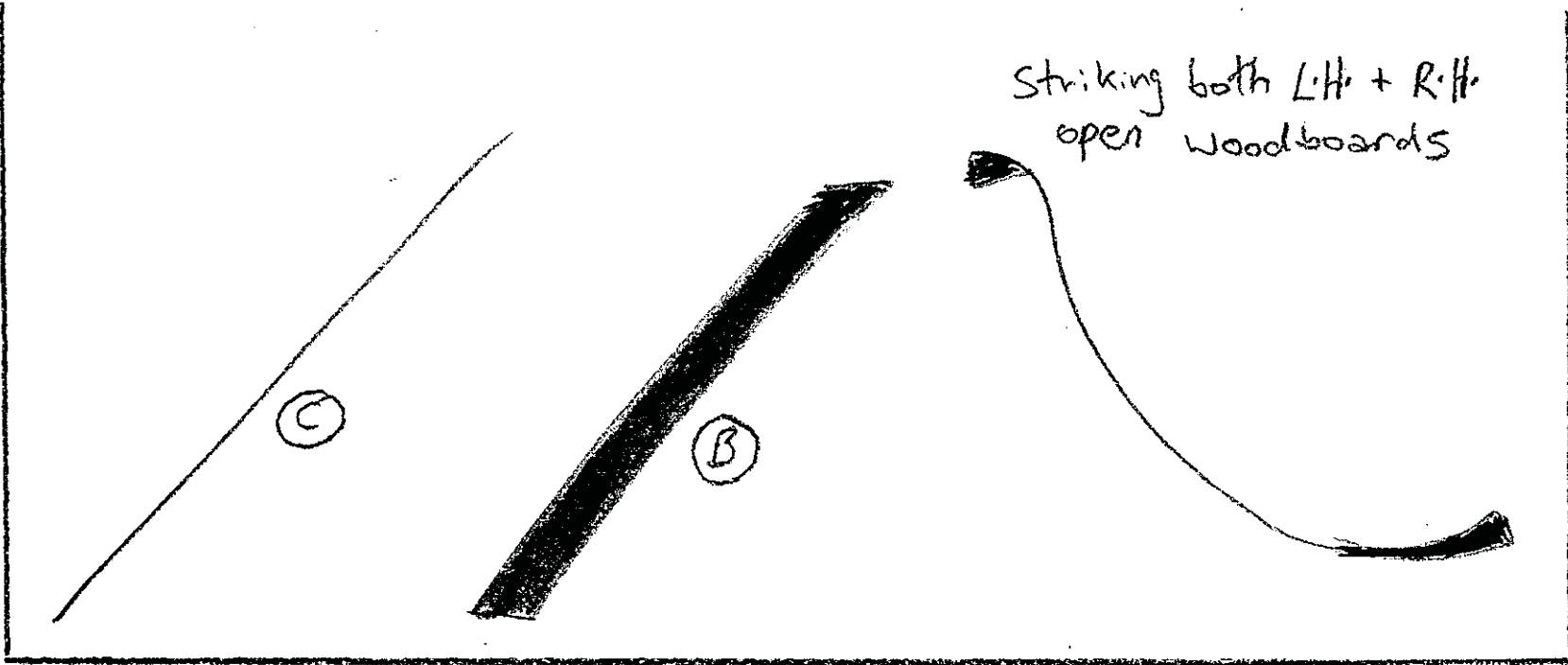
striking nominated pitch
at any (single) register,
per pitch



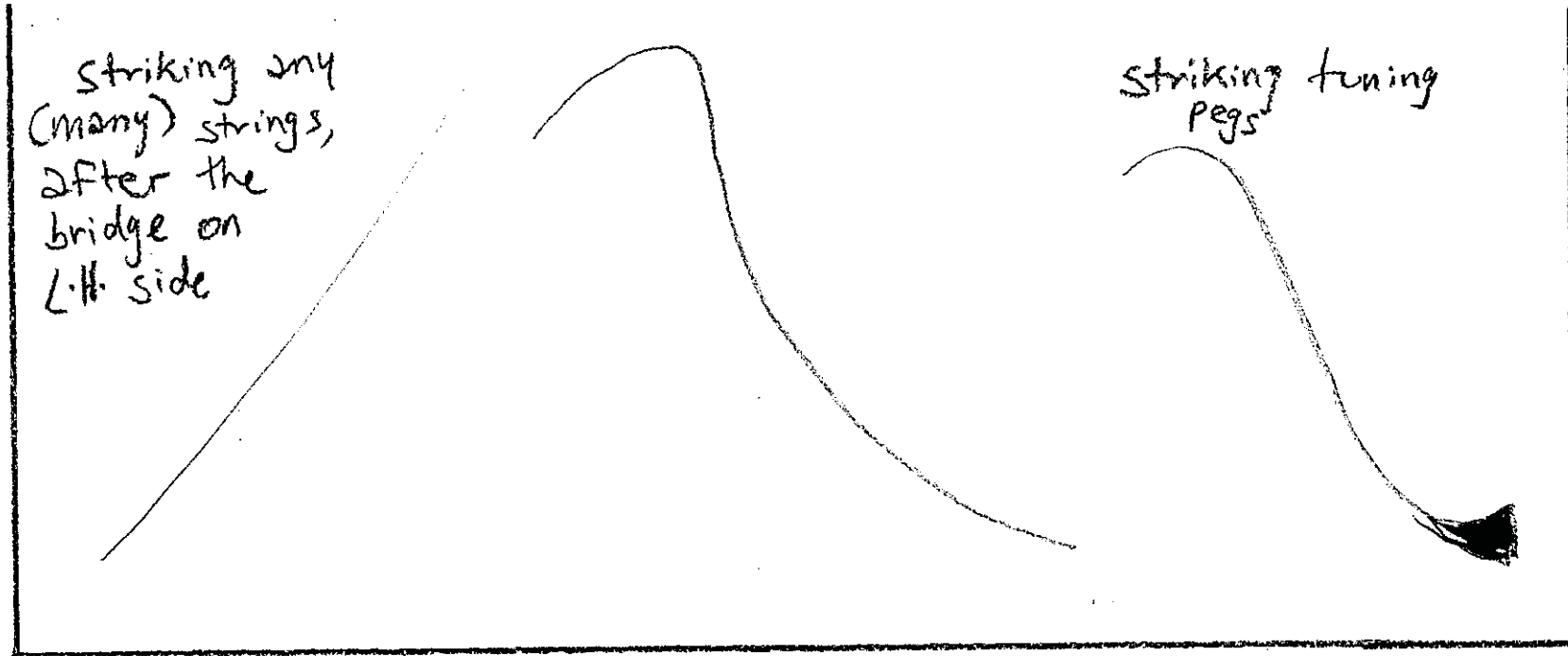
3'00"



3'10"

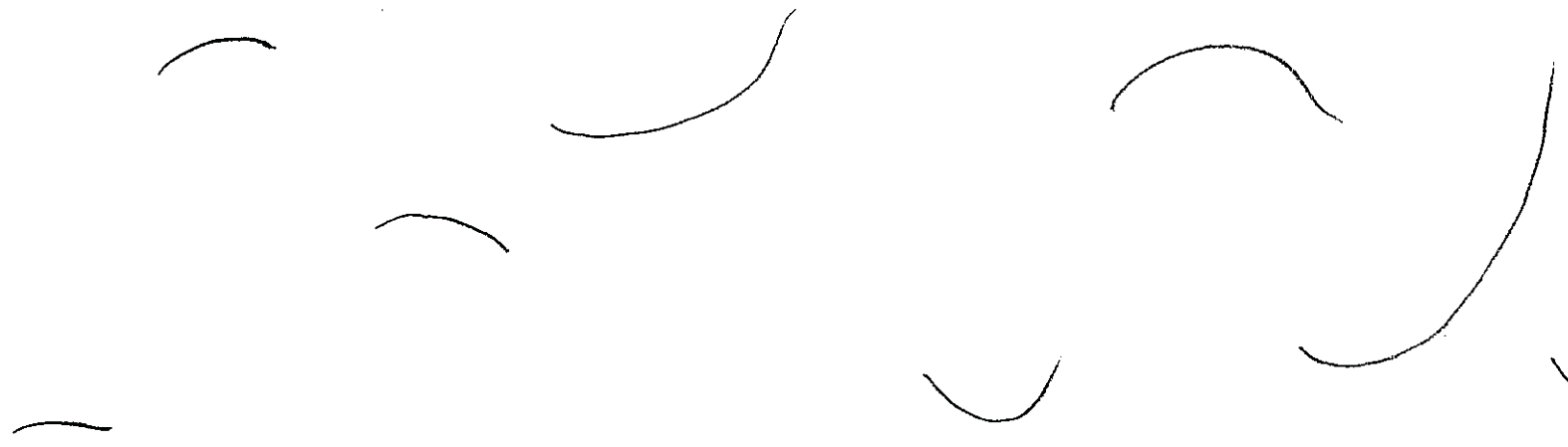


3'20"



3'30"

striking the instrument
in various places
(anywhere)

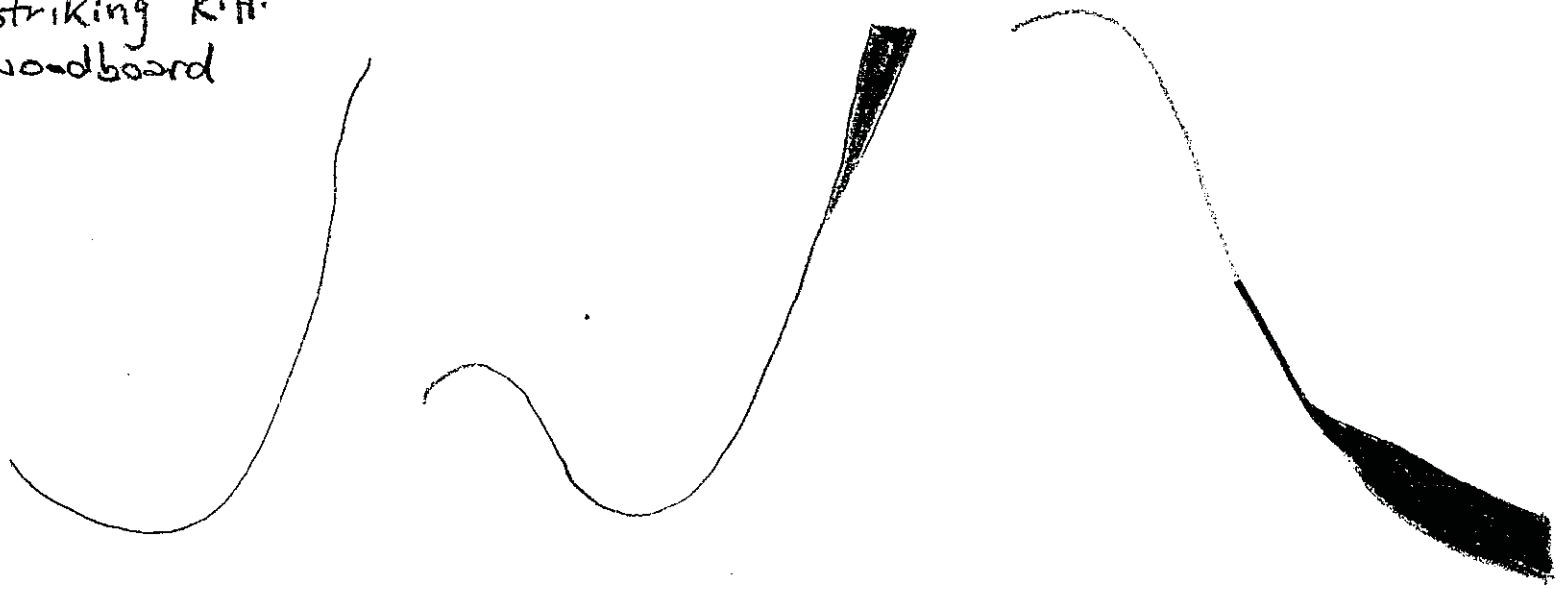


Close the
R.H.
woodboard



3'40"

striking R.H.
woodboard



3'50"

ANTON KILLIN

Primes

for clarinet in B-flat

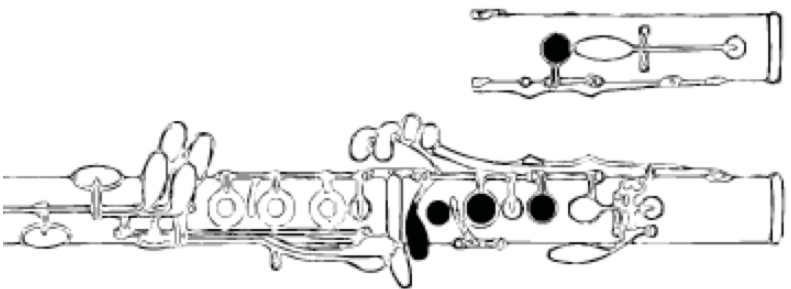
Primes was composed for performance by clarinetist Andrzej Nowicki. It was premiered in New Zealand on 28 October 2009 at the Adam Concert Room in Wellington.

Primes is composed out of prime number structures and relationships and evokes a mathematically influenced soundworld.

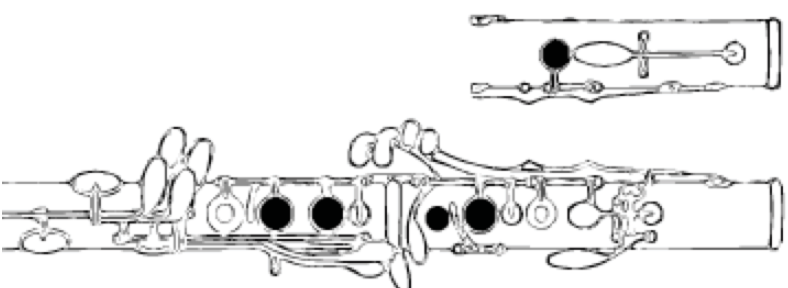


photo of Andrzej Nowicki courtesy of Rachel Brandon

Extended techniques



Multiphonic #1



Multiphonic #2

The overall volume ratio (of both 'fundamental tone' and 'multiphonic tone') should be as even as possible.

The effect should be performed as quietly as the performer can successfully create it. (This may mean that it is louder than the given *ppp*.)

Notes labelled with a V sign (eg. *b. 31*) may be slap-tongued (optional), or otherwise they should be *percussive sounding*, at the performer's discretion.

à Andrzej Nowicki

Primes

ANTON KILLIN

TRANSPOSSED SCORE

Grave $\text{♩} = 60$

Agitated, Isolated, Melancholic

vibrato; widening vibrato on longer notes

multiphonic #2

26

30

senza vib.

V = optional slap-tongue
(or, at least percussive sounding)

Fast ♩ = 120
Hopeful

33

35

39

42

45

A little slower
Nostalgic

(Hold it!!!!)
Thoughtful
expression

48

Mini cadenza (like an "after-thought"). Own rhythm, own tempi, own expressive feeling(s), etc.

very expressive

ANTON KILLIN

After Clive Bell

piano solo

After Clive Bell was composed in a single day to comply with the rules for submission to the 2010 ICISM Momentary Pleasures concert. Pianist Sam Jury premiered this piece in New Zealand on 27 June 2010 at the Adam Concert Room in Wellington.

Each of the spacious and slow moving sound events that comprise this work invites a reflection on the colours and movements of lines internal to the piece. The performer determines the exact motion of these events, an ever-changing flow from moment to moment, and ever-changing with every performance of the piece.

After Clive Bell

on momentary pleasures

piano solo

ANTON KILLIN

Very slow and spacious, molto rubato
♩ = 4-7 seconds; vary length of each chord/event

Musical score for measures 1-7. The score is written for piano solo. It features a treble and bass clef. The music is characterized by long, spacious notes and chords. The first measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The second measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The third measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The fourth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The fifth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The sixth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The seventh measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The dynamic marking *pp dreamy* is present. The tempo/mood is indicated as *con Ped.*

Musical score for measures 8-15. The score is written for piano solo. It features a treble and bass clef. The music is characterized by long, spacious notes and chords. The eighth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The ninth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The tenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The eleventh measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twelfth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The thirteenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The fourteenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The fifteenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The dynamic marking *p* is present. The tempo/mood is indicated as *con Ped.*

Musical score for measures 16-18. The score is written for piano solo. It features a treble and bass clef. The music is characterized by long, spacious notes and chords. The sixteenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The seventeenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The eighteenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The dynamic marking *pppp express.* is present. The tempo/mood is indicated as *con Ped.*

(irregular rhythms & subtle accents)

Musical score for measures 19-26. The score is written for piano solo. It features a treble and bass clef. The music is characterized by long, spacious notes and chords. The nineteenth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twentieth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twenty-first measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twenty-second measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twenty-third measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twenty-fourth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twenty-fifth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The twenty-sixth measure has a treble clef with a whole note chord (F4, A4, C5) and a bass clef with a whole note chord (D3, F3, A3). The dynamic marking *pp* is present. The tempo/mood is indicated as *con Ped.*

ANTON KILLIN

Outside my front door

electroacoustic

Outside my front door is a short electroacoustic piece capturing the soundscape of my own place of residence. Outside my front door I hear the chirping of new born chicks, the distinctive call of Tuis (Aotearoa's famous songbird), planes whizzing overhead, cars driving past, and the creaky gate next door slamming shut.

Outside my front door was premiered in the United States on 1 June 2010 at the Electronic Music Foundation in New York and received its first performance in New Zealand on 8 July 2010 at the Nelson School of Music in Nelson.