

**CREATIVE COLLABORATION IN AND AS
CONTEMPORARY PERFORMANCE PRACTICE**

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ABSTRACT

Situated within the practice-led research paradigm, this thesis comprises a folio of recordings of four new works for piano and a dissertation, *Creative Collaboration in/as Contemporary Performance Practice*. Using the specific examples of the collaborative projects involving myself as performer and four Australian composers, this study integrates artistic practice and qualitative analysis to investigate collaborative creativity in composer–performer dyads working within the contemporary Western art music tradition.

Three of the four recorded collaborations are used as case studies in the dissertation. Framed by the contemporary theories of collaborative creativity proposed by Vera John-Steiner and the creative cognition theory developed by Thomas Ward, Steven Smith and Ronald Finke, the discussion aims to provide insight into the creative processes of musical work-realisation and the way collaboration between composers and performers impacts on content-generation, notation, interpretation, and transmission of new musical works.

Challenging the apparent schism between the ‘constructive’ and the ‘reproductive’ modes of musical practice characteristic of Western art music, a model of musical work co-construction is proposed, in which the ‘musical work’ is seen as a complex and dialectic interplay between the generative, interpretive, and performative processes that the composer and the performer engage with through a bi-directional feedback loop that exists within the collaborative setting.

The study draws on a variety of qualitative research approaches and the method of Thematic Analysis specifically, enabling the identification of key themes through which to conceptualise, interpret and report the results of the research. The rigorous investigation of the collaborative case studies suggests that co-creative engagement between contemporary performers and composers in the process of musical work-realisation significantly enhances artistic outcomes and has important implications for contemporary performance and notational practices, the locus of creativity, and the participatory nature of artistic practice.

DECLARATION

This is to certify that:

- i. the thesis comprises only my original work towards the PhD except where indicated in the Preface,
- ii. due acknowledgement has been made in the text to all other material used,
- iii. the thesis is 60 000 words in length, exclusive of tables, maps, bibliographies and appendices.

Signature:

Date:

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This research project is a result of years of intense thinking, practice and collaboration, with many incredible people contributing in profound and meaningful ways along the path. First and foremost, I must express my deep and heartfelt thanks to the four wonderful composers – Kate Neal, Damian Barbeler, Anthony Lyons and Steve Adam – whose generosity, creativity, friendship, and infinite patience with me enabled the initiation of this project and for it to materialise in ways I could not have imagined possible! I would like to thank my dear friend, mentor and chamber-music partner Dr. Stephen Emmerson, who collaborated on one of the projects in this study and who provided unfailing support and intellectual nourishment throughout the journey. Our many conversations about music and the essence of creative practice as research from the performer's perspective have been invaluable to my thinking and writing. Deep gratitude must also go to my close friend, colleague and role model Genevieve Lacey – a musician and collaborator extraordinaire. Her exceptional imagination was the catalyst for two of the collaborations in this thesis (Damian Barbeler and Steve Adam). In addition, her friendship and musical spirit have been an ongoing inspiration during this research. I must also thank the visionary conductor-composer John McCoughey, a musician of profound integrity, who has supported this work by generously providing the opportunity to premiere Anthony Lyon's *Trace Elements* and Steve Adam's *Ion-Chance-Star-Avion* suite in his Astra concert series.

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PERFORMANCE FOLIO: CD AND DVDS

Performance Folio CD

Track 1 Kate Neal: *Particle Zoo II* for piano and ensemble, 2009 (Sonya Lifschitz, piano; Arcko Symphonic Project directed by Timothy Phillips). Recorded live by ABC FM on 17/07/2010, North Melbourne Town Hall.

Track 2 Damian Barbeler: *Bright Birds* for two pianos, 2012 (Stephen Emmerson and Sonya Lifschitz, pianos). Recorded by ABC FM on 1/23/2013 at Iwaki Auditorium, Melbourne.

Tracks 3-8 Antony Lyons: *Trace Elements* for piano and computer, 2012 (Sonya Lifschitz, piano; Anthony Lyons, electronics). Recorded March–August 2012 at Federation Hall, Victorian College of the Arts, Melbourne.
Hiver
Solaris
FIFTH
Unsubmissive Plant
Diffraction
I-Meditate (Magnets)

Tracks 9-13 Steve Adam: *Ion-Chance-Star-Avion* for piano and computer, 2012 (Sonya Lifschitz, piano; Steve Adam, electronics). Recorded July 2012 at BlackPearl Studio, Melbourne.
Ion
Chance
Star
Avion

Performance Folio DVD 1

Track 1 Sal Cooper/Kate Neal: *Song for a Comb* – Animation Film, 2009 (Sal Cooper, director; Kate Neal, composer; Sonya Lifschitz, piano).

Track 2 Kate Neal: *Particle Zoo II* for piano and ensemble, 2009 (Sonya Lifschitz, piano; Arcko Symphonic Project directed by Timothy Phillips). Recorded live by ABC FM on 17/07/2010, North Melbourne Town Hall

Track 3 Damian Barbeler: *Bright Birds* for two pianos, 2012 (Stephen Emmerson and Sonya Lifschitz, pianos). Recorded live by ABC FM on 7/04/2012 at Four Winds Festival, Bermagui, NSW.

Performance Folio DVD 2

Track 1 Antony Lyons: *Trace Elements* for piano and computer, 2012 (Sonya Lifschitz, piano; Anthony Lyons, electronics). Recorded live on 31/09/2012 at 11th Hour Theatre, Melbourne.

Hiver
Solaris
FIFTH
Unsubmissive Plant
Diffraction
I-Meditate (Magnets)

Track 2 Steve Adam: *Ion-Chance-Star-Avion* for piano and computer, 2012 (Sonya Lifschitz, piano; Steve Adam, electronics). Recorded live on 31/09/2012 at 11th Hour Theatre, Melbourne.

Star
Chance
Ion

Supporting Material DVD 3

This DVD contains selected excerpts from the recorded collaborative sessions with composers Kate Neal, Damian Barbeler, and Anthony Lyons. These excerpts form part of the discussion in Chapters Four, Five, and Six. For full track listings, see Appendix B.

INTRODUCTION TO THE THESIS

This thesis comprises a folio of recordings and a dissertation, *Creative Collaboration in/as Contemporary Performance Practice*. Taking a practice-led research approach, this study investigates how contemporary composers and performers working within the Western art music tradition collaborate to create, interpret and transmit new musical works. The folio recordings (detailed on pp. xv–xii) include four new works for piano resulting from the four collaborations set up between myself (and Stephen Emmerson) as a performer and four Australian composers: Kate Neal, Damian Barbeler, Anthony Lyons and Steve Adam. These new works are: Neal's *Particle Zoo II* (2010) for solo piano and chamber ensemble, Barbeler's *Bright Birds* (2012) for two pianos, Lyon's *Trace Elements* (2012) for solo piano and computer, and Adam's *Ion-Chance-Star-Avion* for piano and computer. Additionally, DVD 1 in the performance folio features a preliminary collaborative project between myself and Kate Neal, *Song for a Comb*, discussed in Chapter Four (Section 4.4).

The written dissertation, including extracts from reflective journals, dialogue transcripts, email exchanges, score drafts, and musical sketches, provides a detailed examination of three of the collaborations documented on the recordings (Neal–Lifschitz, Barbeler–Emmerson–Lifschitz, and Lyons–Lifschitz), placing them within the existing body of knowledge on distributed creativity in performer–composer dyads and theories of creativity and collaboration. The text is supplemented by audio and video excerpts (DVD 3) drawn from the collaborative sessions with the composers to enable a more accurate and complete characterisation of the processes and interactions within each of the three case studies.

The project with Steve Adam was excluded from the analysis in the dissertation as it relied heavily on computer technology and electronic processing – areas outside the main parameters of this research. However, the creative output resulting from this collaboration demonstrates the breadth and scope of the artistic work undertaken in this study and therefore was considered to be an important component of the performance folio.

It is imperative to emphasise that the creative practice undertaken in this study (realisation and performance of four new works) served as the primary vehicle through which new knowledge was discovered and constructed. Thus, the folio of recordings plays an important role within the thesis in communicating (in non-verbal ways) the insights and findings that emerged from this study. Conversely, the preparation of the written dissertation enabled critical reflection and elucidation of the distinct creative processes inherent in collaborative practice, which generally remain tacit, intuitive, and concealed.

My approach to writing throughout the dissertation moves between a more formal, academic language and a more personal mode of expression to reflect the different facets of the research.¹ This format was chosen in order to vividly reconstruct in text the complex, nuanced, and deeply personal ‘stories’ of the three collaborations while situating the research in broader academic scholarship. While not directly conceived or written within an autoethnographic tradition, this thesis borrows from Laurel Richardson’s notion of the ‘narrative of the self’, which she explains as “a highly personalised revealing text in which an author tells stories about his or her own lived experience”.² Conceptualising my research in this way was in keeping with the central role I took throughout the project as the researcher-observer, reflective practitioner, performer, and collaborator, whilst maintaining a strong hold on the conceptual-theoretical scaffold framing the study.

It is important to acknowledge that a study of co-creativity in composer–performer dyads carried out in a highly reflexive mode of inquiry will invariably involve a certain degree of inherent subjectivity. However, employing a rigorous and robust methodological approach to data collection and analysis enabled a more objective extrapolation of meaning from this research, although it does not claim unequivocal

¹ For an excellent discussion on balancing the more academic forms of expression and the use of personal pronoun “I” in reporting practice-led research see Andrew McNamara’s article, “Six Rules of Practice-Led Research”, Queensland University of Technology, <http://www.textjournal.com.au/speciss/issue14/McNamara.pdf> (accessed 27 January 2014).

² Laurel Richardson, “Writing: A Method of Inquiry”, *Handbook of Qualitative Research*, eds. N. Denzin & Y. Lincoln (London: Sage, 1994), 521.

objectivity. As Martyn Denscombe argues, the reflexivity in social research effectively implies a degree of subjectivity and personal bias in the interpretation of meaning. He claims that:

Contrary to positivism, reflexivity suggests that there is no prospect of the social researcher achieving an entirely objective position from which to study the social world.³

Similarly, whilst it is acknowledged that a small sample size used in this study presents a challenge to deriving definitive conclusions, focusing this research on a limited number of participants enabled an in-depth and multifaceted investigation of the collaborative processes and interactions which would not have been possible with a larger participant sample.⁴

Finally, it is important to reiterate that the recordings and the written dissertation in this thesis form an inseparable whole through which to glean the creative processes undertaken by the composers and myself (and Stephen Emmerson in the collaboration with Damian Barbeler), in the realisation of new musical works.

³ Martyn Denscombe, *The Good Research Guide*, 2nd ed. (Maidenhead: Open University Press, 2003), 333.

⁴ For scholarly discussion on the benefits of small samples in qualitative research see: Mira Crouch and Heather McKenzie, "The Logic of Small Samples in Interview-Based Qualitative Research", *Social Science Information*, 45 (December 2006): 483-499.

INTRODUCTION TO THE DISSERTATION

OVERVIEW

The dissertation reports three collaborative projects I undertook with composers K. Neal, D. Barbeler and A. Lyons between 2008 and 2012. It examines relevant literature, explains the chosen research design and methodology, and outlines the conceptual and theoretical framework underpinning the study. The central argument of the dissertation is that the lines of demarcation between the processes of composition and interpretation in collaborative composer–performer relationships are significantly more blurred than is traditionally perceived. In fact, the discussion will demonstrate that successful work-realisation is contingent on a symbiotic relationship between the multiple agencies bearing on the final creative outcome, such as the composer, performer, musical notation, instrument, and technology.

The three projects under study represent varying degrees of collaborative engagement between the composer and the performer in the processes of content-generation, notational realisation, interpretation and transmission of new work. My underlying assumption was that working closely with living composers would enable a greater understanding and familiarity with the performance aesthetics, techniques, and practices prevalent in contemporary music, leading to more informed, integrated and compelling performances. Drawing on contemporary theories of collaborative creativity as found in the work of Vera John-Steiner, this study explores the hypothesis that co-creative engagement between the contemporary performer and composer may yield artistic outcomes and discoveries greater than the sum of the individual skills.⁵

⁵ Vera John-Steiner, *Creative Collaboration* (Oxford: Oxford University Press, 2005), 35.

RESEARCH INTENTIONS, AIMS AND QUESTIONS

Prior to outlining specific aims and objectives for this study, it is important to identify the broad intentions conceived for this research:

1. To facilitate the *construction* of new musical works for piano framed by an on-going creative dialogue and skill-based exchange between the composers and myself;
2. To facilitate the *interpretation and transmission* of new musical works in a collaborative environment, framed by the action/response feedback loop established between the composers and myself;
3. To facilitate detailed documentation and observation of musical work-realisation processes in a collaborative composer–performer context;
4. To examine the collaborative case studies in light of current theory and models of distributed creativity.

Through detailed documentation of the three collaborative projects and a systematic analysis of data using the principles of Thematic Analysis approach (detailed in Chapter Three, Section 3.5), this study seeks to understand the nature of co-creativity in composer–performer relationships and its impact on musical work-realisation. Thus, the primary research aim is:

- To investigate how contemporary composers and performers interact in the processes of creating, realising, interpreting and transmitting new musical works.

The primary objective of this study is:

- To make explicit the largely intuitive (tacit) processes composers and performers experience in co-creating new works, and thus contribute to the growing field of study on distributed creativity in contemporary art music.

The secondary objectives of this study are:

- To investigate the nature and impact of the Complementarity and Integrative models of creative collaboration (as defined by Vera John-Steiner) within the composer–performer context;
- To identify and develop methodological design and analytical/interpretive tools fitted to the practice-led nature and object of this study;

- To identify the central themes underpinning the findings of the study and extrapolate their implications for the broader collaborative creativity discourse within the composer–performer context.

The central research question of this study is:

- How does collaboration between composers and performers impact on content-generation, notational realisation, interpretation-building, transmission and identity of new musical work?

THE PROCESS AND THE CREATIVE OUTPUT

The following section outlines the three collaborations examined in the dissertation.

Project 1. Collaboration with composer Kate Neal

The collaboration with Melbourne composer Kate Neal began in 2008 and was supported by two Arts Victoria grants for the Creation and Presentation of new work. The outcome of this collaboration was a work for solo piano and chamber ensemble entitled *Particle Zoo II*. The work was first premiered in Princeton (USA) at the Princeton University as part of the New Music Series on 11 May 2010, and in Melbourne at the Arts House Meat Market on 17 July 2010 with the Arcko Symphonic Project directed by Timothy Phillips. The performance was recorded and broadcast live in Melbourne by ABC Classic FM (included in the performance folio CD, Track 1).

Project 2. Collaboration with composer Damian Barbeler and pianist Stephen Emmerson

Sydney composer Damian Barbeler's *Bright Birds* for two pianos was commissioned by the Four Winds Festival where it was premiered by Brisbane pianist Stephen Emmerson and me on 8 April 2012. The extensive workshopping phase of this collaboration took place between February and April 2012. The piece was recorded at the Iwaki Auditorium (ABC studio) in Melbourne on 1 March, 2013 (included in the performance folio CD, Track 2) and was nominated for the APRA 2013 'best instrumental work of the year' category.

Project 3. Collaboration with composer Anthony Lyons

The extensive collaboration with Melbourne composer Anthony Lyons began in late 2010 and was completed in September 2012. The collaboration resulted in an electro-acoustic work for piano and computer, *Trace Elements*. The work was premiered in Melbourne at the Eleventh Hour Theatre as part of the Astra Chamber Music Society concert series on 30 September 2012 and was recorded at Federation Hall, Victorian College of the Arts, between March and August 2012 (included in the performance folio CD, Tracks 3–8).

The full biographies of the composers and performers are included in Appendix A.

METHODOLOGY AND THE RESEARCH PARADIGM

This research project employs methodological models appropriate to the study of artistic practice as both the object and the method of research. It draws on qualitative, action-based and practice-led research modalities, placing my own work and its outcomes at the centre of the study. This differs significantly from the positivist, traditional, historiographic-musicological model where research has primarily focused on studies *about* musical practice. In contrast, my study aims to understand aspects of music and its realisation *through* the practice itself employing a phenomenological approach to knowledge-construction. In this approach, knowledge is derived from a deeply immersive and reflexive relationship with one's creative practice combined with the simultaneous examination of the practice through broader socio-cultural discourse and theory. Thus, the process of enquiry involved continuous bi-directional dialogue between theory and practice.

According to Christopher Frayling, artistic research can be categorised into 'research *into* art', 'research *for* art' and 'research *through* art'.⁶ Within this tripartite framework, research *into* art (or, for the purposes of this thesis, *into* music, or better,

⁶ Christopher Frayling, "Research in Art and Design", *Royal College of Art Research Papers Series 1* (London: Royal College of Art, 1993), http://www.uacj.mx/DINNOVA/Documents/SABERES%20VERANO%202012/Christopher_Frayling.pdf (accessed 27 September 2012).

into practice) considers art, or the creative process, from a theoretical perspective, offering a critical reading of the artwork/artefact and its significance and role within a particular art movement or culture. Research *for* art, broadly speaking, seeks to generate and articulate new technologies or methodologies to benefit the artform and the artistic practice. Research *through* art, which remains controversial, takes the artistic process itself as the central subject of investigation. Kathleen Coessens, Darla Crispin, and Anne Douglas argue that “in this domain [research *through* art], the artist and his or her artistic processes are involved in a dual capacity: both as the agents of the research and as its subject and object”.⁷ These authors suggest that any artistic research will, to a larger or smaller degree, move between these three domains of inquiry. The present project likewise reflects elements of all three research domains: ‘*into*’, ‘*for*’, and ‘*through*’ practice with the prevalence of the latter due to the practice-led nature of the study. The creative process of realising, interpreting, and performing the four new musical works in collaboration with the four composers at the core of this investigation, constitutes the ‘research *through* practice’. Proposing an alternative model for the musical work-construction in contemporary art music practice, as this thesis aims to do, illustrates aspects of ‘research *for* practice’. Finally, the broader considerations of the aesthetic-philosophical discourse pertaining to the dichotomy of *work-as-product* (score) and *work-as-process* (performance), as well as contemporary theories of creativity that underpin this thesis, demonstrate how it also functions as research *into* art.

Data Collection Procedures

The data set from my collaboration with Neal is comprised of 8 hours of audio recordings documenting two collaborative sessions at Princeton University (May 5 and 7, 2010), extensive reflective journal entries, dialogue transcripts, email exchanges, and score drafts containing copious notes and markings made during the sessions.

⁷ Kathleen Coessens, Darla Crispin, and Anne Douglas, *The Artistic Turn: A Manifesto, Volume 1 of Collected Writings of the Orpheus Institute* (Belgium: Leuven University Press, 2009), 46.

The two periods of collaboration with Barbeler and Emmerson were documented in Bermagui (NSW) in February 2012 and in March 2012 at the Queensland Conservatorium of Music. The data collected during this project comprises 4.5 hours of audio documentation (Bermagui workshops), 7 hours of video documentation (Brisbane workshops), dialogue, conversation, and interview transcripts, email exchanges, score notes and markings made during the collaborative sessions, and score drafts.

The collaboration with Lyons took place at our respective studios, the Victorian College of the Arts, and the Melbourne Conservatorium of Music, between 2010 and 2012. The data from this collaboration comprises 47 hours of video documentation of the collaborative sessions, dialogue and conversation transcripts, reflective diaries, and an extensive archive of musical sketches.

Data Analysis Methods

The combination of sources outlined above provided a rich and extensive data set, enabling a rigorous coding process in line with the method of Thematic Analysis (detailed in Chapter Three, Section 3.5) as explained by Anselm Strauss and Julie Corbin, Virginia Braun and Victoria Clarke, and Johnny Saldana.⁸ This method enabled a thorough familiarisation with the data and the generation of codes, categories and themes through which to conceptualise and explain the various aspects of the research in light of its aims and questions.

While the theoretical, epistemological, and analytical approaches adopted in this study are detailed in Chapter Three (Methodology), it is important to delimit the parameters of the analysis method chosen. Braun and Clarke argue that Thematic Analysis, while often associated with such qualitative research traditions as grounded theory,

⁸ Anselm L. Strauss and Julie M. Corbin, *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 2nd ed. (Thousand Oaks, California: SAGE, 1998); Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology", *Qualitative Research in Psychology*, 3, no. 2, (2006): 77–101; Johnny Saldana, *The Coding Manual for Qualitative Researchers* (SAGE Publications, 2012). Also see Norman Denzin and Yvonna Lincoln, *Strategies for Qualitative Inquiry* (Thousand Oaks, CA: Sage, 1998); Richard Boyatzis, *Transforming Qualitative Information: Thematic Analysis and Code Development* (Thousand Oaks, CA: Sage, 1998); Greg Guest, *Applied Thematic Analysis* (Thousand Oaks, CA: SAGE, 2012).

discourse analysis, and narrative analysis, can be considered a self-contained, independent method in its own right. They explain that while compatible with various theoretical and epistemological paradigms (essentialist/realist, constructionist, phenomenological), Thematic Analysis is “essentially independent of theory and epistemology, and can be applied across a range of theoretical and epistemological approaches”.⁹ Thus, Thematic Analysis offered a flexible and creative analytic tool for the investigation in this study, while affording a rich and complex reporting of the data without necessitating conceptual alliance with the traditions of grounded theory, discourse, or narrative analysis.

CONTEXT AND INFLUENCES

The study takes its impetus from the notable shift in the cultural aesthetic of the late twentieth/early twentieth-first century, whereby scholars and music practitioners are increasingly challenging the essentially ‘work’/composer-oriented paradigm in traditional musicology and the inherently separationist model of practice within the Western art music tradition.

The thinking in this thesis on issues of collaborative work-realisation in composer-performer context is framed by Bruce Benson’s *The Improvisation of Musical Dialogue*, Lydia Goehr’s *The Imaginary Museum of Musical Works*, and Nicholas Cook’s article “Between Process and Product: Music and/as Performance” and his co-authored book, *Theory into Practice: Composition, Performance and the Listening Experience*.¹⁰ These texts serve as a framework in which to examine and re-appraise the complex and often dualistic relationship of composition and performance in Western art music culture. The conceptualisation of interpretation and performance as creative processes integral to the identity of musical works, is underpinned by the work of Eric Clarke and Nicholas

⁹ Braun and Clarke, “Using Thematic Analysis”, 4.

¹⁰ Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon Press, 1992); Bruce Ellis Benson, *Improvisation of Musical Dialogue: A phenomenology of Music* (Cambridge: Cambridge University Press, 2003); Nicholas Cook, “Between Process and Product: Music and/as Performance”, *Music Theory Online*. 7, no. 2, (April 2001); Nicholas Cook, “Theory into Practice: Composition, Performance and the Listening Experience”, in *Collected Writings of the Orpheus Institute*, ed. P. Johnson and H. Zender (Belgium: Leuven University Press, 1999).

Cook in the field of performance creativity (detailed in Chapter One). Research conducted by Cook and Clarke into distributed creativity between composers and performers informs the views taken in this study regarding notions of co-creativity and co-construction in the production of new music. Stefan Östersjö's and Paul Roe's doctoral theses on performer-composer collaborations provide a point of departure in respect of design and methodology, structure, and presentation in this thesis.¹¹ Vera John-Steiner's pioneering work on creative collaboration amongst artists and scientists serves as a model for unpacking the complexities of collaborative creativity and ways in which it facilitates a greater cohesion, integration and congruity in artistic practice.¹² Finally, my conceptualisation of this thesis within the *practice-as-research* paradigm through which to articulate the various modes of tacit and explicit 'knowing' is framed by Coessens's et al. *Artistic Turn: a Manifesto*, and Hazel Smith and Roger T. Dean's *Practice-led Research, Research-led Practice in the Creative Arts*. Both texts offer insight into the creative and analytical processes necessary for artistic practice to function as research and as a form of knowledge-construction.¹³ The aforementioned sources are addressed in greater detail in the following chapter (Literature Review).

CHAPTER OUTLINE

Chapter One: Literature Review

This chapter provides a comprehensive overview of relevant literature. It positions this research within the current 'creative collaboration' and 'performance as creative practice' discourse, outlines existing models for collaborative practice between composers and performers, and situates the study within the qualitative research paradigm.

¹¹ Paul Roe, "A Phenomenology of Collaboration in Contemporary Composition and Performance" (PhD thesis, The University of York, 2007; Stefan Östersjö, "Shut Up and Play. Negotiating Musical Work" (PhD thesis, Malmö Academy of Music, Lund University, Sweden, 2007).

¹² Vera John-Steiner, *Creative Collaboration*.

¹³ Hazel Smith and Roger T. Dean, eds., *Practice-led Research, Research-led Practice in the Creative Arts* (Edinburgh: University Press, 2009); Kathleen Coessens, Darla Crispin, and Anne Douglas, *The Artistic Turn* (Leuven: Leuven University Press, 2009).

Chapter Two: Conceptual and Theoretical Framework

This chapter engages with the ontological notion of ‘musical work’ and the phases of its production. It explores the dichotomy of ‘product’ and ‘process’ in the conceptualisation of Western art music, and examines the gradual ‘split’ of the creative musician throughout the nineteenth and twentieth centuries into two distinct agencies, that of the composer and the performer. Additionally, this chapter reflects on the inherent limitations of musical notation, explores the notion of musical interpretation, and examines the role of the ‘performance practice’ (i.e. performance traditions) in the interpretation-finding process. Finally, the chapter outlines the collaborative models prevalent in artistic partnerships as proposed by Vera John-Steiner, presents the Geneplore model used by creative cognition scientists to study creative innovation and discovery, and proposes an alternative model for the co-construction of musical work in contemporary practice.

Chapter Three: Methodology and Research Design

Chapter Three details the methodological approaches employed, and examines the notion of ‘knowledge-construction’ within the current intellectual milieu as it relates to research in the creative/performing arts. Epistemology, theoretical paradigm and research modalities (including action-based, practice-led, and performative research) are explained and data collection practices and procedures are detailed. Finally, the chapter articulates by concrete example how the data was analysed and reported using the method of Thematic Analysis.

Chapter Four: Neal–Lifschitz Collaboration

In this chapter I report on my collaboration with composer Kate Neal. The chapter provides the background and overview of this artistic partnership, details the Thematic Analysis process as it was applied to pertinent data, and offers a discussion of the processes leading to the realisation of *Particle Zoo II* from the notational and performative perspectives. The discussion in this chapter is framed by the four core themes, which emerged as central to this collaboration. These themes are extensively explored and illustrated using personal narrative, critical reflection and data extracts (including transcriptions of dialogues, journal entries, audio recordings, score excerpts,

and email exchanges), to provide an accurate and authentic characterisation of this collaboration. The themes framing this case study served as a conceptual model for the discussion in Chapters Five and Six.

Chapters Five: Barbeler–Emmerson–Lifschitz Collaboration

Chapter Five reports my collaboration with composer Damian Barbeler and pianist Stephen Emmerson. Building on the conceptual model set up in Chapter Four, the discussion addresses the four themes identified as central to this collaboration through the process of Thematic Analysis. Framed by these themes and substantiated by pertinent video excerpts, dialogue transcripts, email exchanges and annotated score examples, the account provides a thorough reflection on the processes leading to the compositional, notational and interpretative realisation of *Bright Birds*.

Chapter Six: Lyons–Lifschitz Collaboration

This chapter details the extensive collaboration with composer Anthony Lyons in the co-creation of the electro-acoustic suite for piano and computer *Trace Elements*. It begins with an overview of this collaboration, followed by a detailed presentation of the thematic map framing this case study. Subsequently, the chapter examines the generative and explorative processes (as outlined by the Geneplore model of creative cognition detailed in Chapter Two) that led to the co-creation of two of the pieces in *Trace Elements*, namely ‘Diffraction’ and ‘Hiver’. The narrative is supported by extensive data extracts in the form of video excerpts, score sketches, dialogue transcripts and journal entries.

Chapter Seven: Findings and Conclusions

The findings from the three collaborations are presented in this chapter. It begins with a summary of core aims and questions posed by the research, followed by short sections outlining the methods and the procedures employed. The findings are then summarised and discussed in light of the core themes that emerged within and across the three collaborations through systematic analysis. The chapter concludes with reflections on the outcomes of this research and recommendations for future studies in the area of distributed creativity between composers and performers.

CHAPTER ONE

LITERATURE REVIEW

1.1 OVERVIEW

The following discussion provides an overview of the broad range of literature sources consulted for this study, which may be grouped as follows:

1. Music philosophy and aesthetics
2. Collaborative creativity and creative cognition
3. Performance as creative practice
4. Artistic-practice as research and qualitative research methods

These four categories provide a convenient structure through which to examine the literature in which this research resides.

1.2 MUSIC PHILOSOPHY AND AESTHETICS

The works of Theodor Adorno, Peter Kivy, Stephen Davies, Nelson Goodman, and Roman Ingarten provided an intellectual and philosophical framework in which to consider notions of ontology in relation to musical works and their realisation in notation and performance. Of particular importance to this study were issues of authenticity in musical performance discussed at length by Kivy, the function of performance traditions in musical interpretation addressed by Adorno and Davies, and the dichotomous relationship between ‘construction’ and ‘reproduction’ in Western art music practice discussed by Goodman and Ingarten.¹⁴

¹⁴ Max Paddison, *Adorno's Aesthetics of Music* (Cambridge: Cambridge University Press, 1993); Theodor W Adorno and Max Paddison, “On the Problem of Musical Analysis”, *Music Analysis*, 1(2), 1982: 169-187, <http://www.jstor.org.ezp.lib.unimelb.edu.au/stable/854127?seq=2> (accessed 15 May 2010); Peter Kivy, *Authenticities: Philosophical Reflections on Musical Performance* (Ithaca, N.Y.: Cornell University Press, 1995); Stephen Davies, *Musical Works and Performances: a Philosophical Exploration* (Oxford: Clarendon Press, 2001); Nelson Goodman, *Languages of Art: An Approach to a Theory of Symbol* (Indianapolis: Bobbs-Merrill, 1968); Roman Ingarten, *The Work of Music and the Problem of Its Identity*, ed. Jean G. Harrell, trans. Adam Czerniawski (Berkeley and Los Angeles: University of California Press, 1986).

Additionally, the conceptual framework for this study draws on the work of Lydia Goehr, Bruce Benson, Nicholas Cook, Christopher Small, Richard Taruskin, John Rink, Robert Levinson, Michael Kraus, and Goran Hermerin.¹⁵ In her *The Imaginary Museum of Musical Works*, Goehr proposed that the concept of ‘musical work’ as an autonomously existing object separate from its performance is relatively new in musical history and did not exist prior to the 1800s.¹⁶ Goehr’s argument sparked a major debate on the subject of the ontology of musical works and the agencies involved in their construction. Benson, in his *Improvisation of Musical Dialogue*, builds on Goehr’s proposition suggesting that prior to the nineteenth century, pieces of music were not seen as ends in themselves, but were composed to facilitate musical performances for specific occasions where no clear lines of demarcation existed between the processes of composing and performing. He further argues that musical works are just as much a result of composition as they are of performance, as both the composer and the performer are effectively ‘improvising’ on the existing musical cultures, styles, performance traditions, and notational practices.¹⁷ Similarly, Cook, in his article “Between Process and Product” and his co-authored book *Theory into Practice*, posits that the conceptualisation of musical meaning is inconceivable without perceiving musical performances as integral to the identity of musical works. He argues that the tendency in Western art music scholarship to study music as ‘product’ or ‘object’ has significantly limited our understanding of what music is and what it does. For Cook, music is best understood as a *process*, embedded and inseparable from the

¹⁵ Goehr, *The Imaginary Museum*, 1992; Benson, *Improvisation of Musical Dialogue*, 2003; Christopher Small, *Musicking: The Meaning of Performing and Listening* (Middletown: Wesleyan University Press, 1998); Richard Taruskin, *Text and Act: Essays on Music and Performance* (New York: Oxford University Press, 1995); John Rink, *Musical Performance: A Guide to Understanding* (Cambridge University Press, 2002); Michael Krausz, *The Interpretation of Music: Philosophical Essays* (Oxford: Clarendon Press, 1993); Jerrold Levinson, *The Pleasure of Aesthetics: Philosophical Essays* (Ithaca: Cornell University Press, 1996); Goran Hermerén, “The Full Voic’d Quire: Types of Interpretations of Music” in *The Interpretation of Music: Philosophical Essays*, ed. Michael Krausz (London: Clarendon Press, 1993); Charles Rosen, *Freedom of Interpretation in Twentieth-century Music: Composition, Performance, Reception*, ed. T. Wyndham (England: Ashgate, 1998).

¹⁶ Goehr, *The Imaginary Museum*.

¹⁷ Benson, *Improvisation of Musical Dialogue*, 23.

socio-cultural context in which it takes place.¹⁸ The importance of musical performance in conceptualising art music and its meaning is taken further in Small's *Musicking*. Like Cook, Small argues that music functions primarily as a 'process' and an 'act', rather than an autonomous 'object', and that its meaning depends and is contingent on participation by not only composers, but also performers and listeners.¹⁹ The concepts briefly outlined here are developed in detail in Chapter Two (Conceptual Framework).

1.3 COLLABORATIVE CREATIVITY AND CREATIVE COGNITION

This section explores a cross-section of literature pertaining to creativity and creative collaboration in musical practice. The literature is divided into three sub-categories:

1. Collaborative Creativity in Arts and Music Contexts
2. Creativity and Creative Cognition
3. Models of Practice: Composer–Performer Collaborations

1.3.1 Collaborative Creativity in Arts and Music Contexts

'Collaborative', 'distributed', and 'group' creativity is being increasingly discussed within the fields of psychology, sociology and the performing arts. While such authors as Keith Sawyer, Peter Renshaw, Margaret Barrett, Stephanie Pitts, Christopher Small, Jock Abra, Mihaly Csikszentmihalyi, Clair McCoy, Paul Paulus, Bernard Arjan Nijstad and many others have greatly contributed to this field, it is the work of Vera John-Steiner and her seminal research into creative collaborations amongst artists and scientists that has been of foremost influence on this research.²⁰ A strong thread in John-Steiner's thought is that despite the largely romanticised notion of the 'creative

¹⁸ Cook, "Between Process and Product".

¹⁹ Small, *Musicking: The Meanings of Performing*.

²⁰Keith Sawyer, "Improvised Conversation: Music, Collaboration and Development", *Psychology of Music* 27, no. 2 (1999): 192-205; Keith Sawyer, *Group Creativity: Music, Theatre, Collaboration* (Routledge, 2003); Keith Sawyer, "Group creativity: Musical Performance and Collaboration", *Psychology of Music* 34, no. 2 (2006): 148-165; Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990); Stephanie Pitts, *Valuing Musical Participation* (Aldershot: Ashgate, 2005); Margaret Barrett, "Creative collaboration: An 'Eminence' Study of Teaching and Learning in Music Composition", *Psychology of Music* 34, no. 2 (2006): 195-218.

genius', every act of creative discovery nearly always involves the work of more than a single individual, whereby artistic innovation is catalysed by joint thinking, mutual appropriation of skills, emotional and intellectual rapport, and shared vision amongst the collaborators. This idea is echoed in Howard Becker's *Art Worlds* in which he argues that the production of any artefact is contingent on the long chain of interactions between multiple agencies.²¹

Other studies of importance to notions of artistic creativity in collaborative contexts include *Musical Imaginations: Multidisciplinary Perspectives on Creativity, Performance and Reception* edited by David Hargreaves, Dorothy Miell, and Raymond McDonald, which comprises several essays relevant to this thesis. Specifically, "Explaining Musical Imaginations: Creativity, Performance and Perception" by Hargreaves, MacDonald, and Miell; "Creativity in Performance" by Clarke, "Creativity as a Social Fact" by Simon Frith; "Communication, Collaboration and Creativity: How Musicians Negotiate a Collective 'Sound'" by Karen Littleton and Neil Mercer; and "Improvisation as a Creative Process within Contemporary Music" by Raymond MacDonald, Graeme Wilson, and Dorothy Miell provide insight into how the creative processes inherent in composition, performance, and listening can be understood from the perspective of psychology, neuroscience, musical analysis, and music education.²²

Furthermore, Keith Sawyer's paper, "Group creativity: Musical Performance and Collaboration" exploring improvisation, collaboration, and emergence as key aspects of performance creativity and Margaret Barrett's "Creative Collaboration: An 'Eminence' Study of Teaching and Learning in Music Composition" investigating the impact of cross-generational collaborative relationships on learning and the creative outcomes, provide models for research design and methods of analysis suitable for investigating collaborative creativity in a case study context. Additionally, both papers outline valuable theoretical perspectives on group creativity, supporting John-Steiner's

²¹ Howard Becker, *Art Worlds* (Berkeley: University of California Press, 1982).

²² David Hargreaves, Dorothy Miell, and Raymond McDonald, eds., *Musical Imaginations: Multidisciplinary Perspectives on Creativity, Performance and Reception* (New York: Oxford University Press, 2012).

propositions outlined above.²³ Lastly, of importance to understanding collaborative creativity in artistic work was Seana Moran and John-Steiner's study, "How Collaboration in Creative Work Impacts Identity and Motivation".²⁴ The authors posit that creativity is often a result of joint thinking, significant conversations, and shared struggles where "interactions among partners create new properties that build on each other toward creative outcomes, identities, and relational possibilities".²⁵ For Moran and John-Steiner, "collaboration keeps minds and hearts and identities supple, open to wider possibilities . . . [providing] emotional scaffolding as well as intellectual scaffolding for creative work".²⁶

1.3.2 Creativity and Creative Cognition Theories

The study of creativity in human endeavour, from the most mundane to the most extraordinary, has gained a prominent place in the discipline of psychology as evidenced in recent literature, such as Robert Sternberg's *Handbook of Creativity* (a collection of articles and essays by creativity theorists).²⁷ Of specific importance to my work is Thomas Ward, Steven Smith, and Ronald Finke's article, "Creative Cognition". Contending that the processes leading to creative accomplishments can be observed and studied, Ward et al. propose the Geneplore model, which explains creative activity as iterated cycles of generativity and exploration.²⁸ The authors hold that creative innovation and discovery are typically comprised of the initial generation of 'preinventive' structures (germs of ideas holding promise of successful creative

²³ Keith Sawyer, "Group Creativity: Musical Performance and Collaboration", *Psychology of Music* 34, no. 2 (2006): 148-65; Margaret Barrett, "'Creative Collaboration': An 'Eminence' Study of Teaching and Learning in Music Composition", *Psychology of Music* 34, no. 2 (2006): 195-218.

²⁴ Seana Moran and Vera John-Steiner, "How Collaboration in Creative Work Impacts Identity and Motivation", in *Collaborative Creativity: Contemporary Perspective*, eds. D. Miell and K. Littleton (London: Free Association Books, 2004).

²⁵ Moran and Steiner, "Collaboration in Creative Work", 21.

²⁶ Moran and Steiner, "Collaboration in Creative Work", 16.

²⁷ Robert Sternberg, ed., *Handbook of Creativity* (Cambridge: Cambridge University Press, 1999).

²⁸ Thomas Ward, Steven Smith, Ronald Finke, "Creative Cognition" in *Handbook of Creativity*, ed. Robert Sternberg (Cambridge: Cambridge University Press, 1999), 189-191.

outcomes) and the extensive cyclical exploration of these structures for their emerging properties, viability and usefulness.²⁹ The Geneptore model and its role within this research are further detailed in Chapter Two (Section 2.6.2).

1.3.3 Models of Practice: Composer–Performer Collaborations

Of most relevance to my research is literature pertaining to specific models of collaborative practice in contemporary composer–performer contexts and their documented outcomes. Whilst artistic partnerships between composers and performers are certainly not new in Western art music culture, such historically important composer–performer relationships as Johannes Brahms and Joseph Joachim, Benjamin Britten and Peter Pears, Karlheinz Stockhausen and Suzanne Stephens, Olivier Messiaen and Yvonne Loriod, and John Cage and David Tudor, have seldom been thoroughly documented and studied extensively from the perspective of distributed creativity and its impact on the resulting musical compositions. Currently, this situation is increasingly changing with numerous research projects investigating how composer–performer collaborations impact musical work-realisation and result in more cohesive and integrated artistic practice for contemporary musicians. The gradual re-orientation from the score/composer-oriented conceptualisation of music to a more dynamic, process-driven model (as adopted in this thesis), is aptly summarised by Clarke:

Creative practice in music, particularly the music of our own time, takes place in a distributed and interactive manner embracing the activities of composers, performers and improvisers, despite the sharp 'division of labour' between composers and performers that traditional concert culture presents. By concentrating very largely on music of the 'common practice' period, performance studies has neglected a proper consideration of music for which performance practices remain in flux, precluding direct study of the ways in which

²⁹ Ward, Smith, and Finke, "Creative Cognition", 189-191.

the two primary creative agents (composer and performer) interact and negotiate.³⁰

Extensive joint studies into composer–performer dyads have been done by Clarke and Cook, documented in their “Interpretation and Performance in Bryn Harrison’s *être-temps*”, and involved analysis of the collaboration between composer Bryn Harrison and pianist Phillip Thomas.³¹ Additionally, composer Fabrice Fitch and cellist Neil Heyde, composer Stephen Goss and guitarist Jonathan Leathwood, and composer Henrik Frisk and guitarist Stefan Östersjö, have carried out investigations into distributed creativity in composer–performer partnerships and are documented in a number of journal articles and conference papers.³²

Within Australia, of note is the work of mandolinist/researcher Michael Hooper and composer/researcher Robert Davidson, both of whom have contributed to the recent discourse on collaborative creativity amongst contemporary musicians. Of specific interest are Hooper’s articles, “Collaboration and Coordination in the Creation of New Music”, “The Start of Performance, or: Does Collaboration Matter?”, and “Reaching Higher: Finnissy’s Greatest Hits of All Time as the Impetus for Innovation”, addressing the impact of collaboration on the process of work-construction, and Davidson’s paper, “Collaborating Across Musical Style Boundaries”, engaging with the creative processes involved in collaboration between Brisbane’s Topology ensemble and a number of Australian composers.³³

³⁰ Eric Clarke, “Creative Practice in Contemporary Concert Music”, research project carried out by the Arts and Humanities Research Council’s Research Centre for Musical Performance as Creative Practice, England, 2011-2012, <http://www.cmpcp.ac.uk/cpiccm.html> (accessed 12 January 2013).

³¹ Nicholas Cook, Eric Clarke, Bryn Harrison, and Philip Thomas, “Interpretation and Performance in Bryn Harrison’s *être-temps*”, *Musicae Scientiae* 9 (2005): 31-74.

³² Fabrice Fitch and Neil Heyde, “‘Recercar’—The Collaborative Process as Invention”, *Twentieth-century Music* 4, no. 1 (2007): 71-95; Stephen Goss and Jonathan Leathwood, “Oxen of the Sun” (2003-4) – a Solo for Ten-string Guitar and Six-String Guitar: Collaboration, Experimentation and Improvisation in Notated Concert Music” (paper presented at the Fifth Biennial International Conference on Music since 1900, 2007); Henrik Frisk and Stefan Osterjo, “Negotiating the Musical Work: An Empirical Study” (paper presented at the International Computer Music Conference, ICMA, 2006).

³³ Michael Hooper, “Collaboration and Coordination in the Creation of New Music”, *Leonardo Music Journal*, 46, no.1 (2013): 78 – 79; Michael Hooper, “The Start of Performance, or: Does Collaboration Matter?”, *Tempo*, 66. No. 261 (2012): 26 – 36; Michael Hooper, “Reaching Higher: Finnissy’s Greatest Hits of All Time as the Impetus for Innovation”, *The Musical Times*, 152 (2011): pp. 43 – 57; Robert Davidson, “Collaborating Across Style Boundaries”

In Europe, as part of the project carried out by the British Arts and Humanities Research Council's Research Centre for Musical Performance as Creative Practice, Eric Clarke investigated the impact of 'distributed creativity' on work-construction and realisation through collaborations between composer Liza Lim and the Cologne-based contemporary ensemble *musikFabrik* (in the creation of Lim's piece, *Tongue of the Invisible* for chamber ensemble); composer Jeremy Thurlow and violinist Peter Sheppard Skaerved (*Ouija* for violin and laptop computer); composer David Gorton and guitarist Stefan Östersjö (*Forlorn Hope* for eleven-stringed alto guitar and optional live-electronics); and composer Martyn Harry and the early music group His Majesty's Sagbutts and Cornetts. The results from some of these projects have been published in numerous papers, specifically Sam Hayden and Mieko Kanno's "Live Performance, the Interactive Computer and the Violectra"; David Gorton and Stefan Östersjö's "'Forlorn Hope': Tracing the Dynamics of Composer–Performer Collaboration"; and Clarke's "Understanding Musical Creativity", "Distributed Creativity in Musical Performance", "Distributed Creativity in Liza Lim's *Tongue of the Invisible*", and "Investigating Distributed Creativity" (written in collaboration with Mark Doffman).³⁴ Hayden and Kanno's and Gorton and Östersjö's projects investigate the processes of work-construction and performance where electronic media (such as Max/MSP) and electronic instruments are used for content and sound-generation. They address how these processes relate to notions of 'score', 'text', and 'notation' – subjects central to this thesis.

in *Collaborative Creative Thought and Practice in Music*, ed. Margaret Barrett (Farnham, Surrey: Ashgate Publishing, 2014).

³⁴ Sam Hayden and Mieko Kanno, "Live Performance, the Interactive Computer and the Violectra" (paper presented at the CMPCP and Performance Studies Network International Conference, July 2011), http://www.cmpcp.ac.uk/online%20resource%20Thursday/PSN2011_Hayden_Kanno_text.pdf (accessed 16 November 2013); David Gorton and Stefan Östersjö, "'Forlorn Hope': Tracing the Dynamics of Composer–Performer Collaboration" (paper presented at the CMPCP and Performance Studies Network International Conference, July 2011), http://www.cmpcp.ac.uk/online%20resource%20Thursday/PSN2011_Östersjö.pdf (accessed 16 November 2013); Eric Clarke, "Understanding Musical Creativity" (paper presented as part of Humanities Research in Oxford, British High Commission, Delhi, India, 17 February 2011); Eric Clarke, "Distributed Creativity in Musical Performance" (paper presented at Symposium for Performance of Electronic and Experimental Music, Faculty of Music, University of Oxford, 6 January 2012); Eric Clarke, "Distributed creativity in Liza Lim's *Tongue of the Invisible*" (paper presented at the 3rd Reflective Conservatoire Conference, Guildhall School of Music and Drama, London, 20 March 2012); Eric Clarke and Mark Doffman, "Investigating Distributed Creativity" ('Research Rush' presented at SEMPLRE 40th anniversary conference, London, September 2012).

Additionally, Amanda Bayley's research project "From Composition to Performance: Innovations and Interactions in Contemporary String Quartet" documented a collaboration between composer Michael Finnissy and the Kreutzer Quartet, employing both critical and performative analysis, using videorecording, marked score parts of individual members of the quartet, and Max/MSP software for analysis and demonstration of findings. Bayley's paper, co-authored with Michael Clarke, "Analytical Representations of Creative Processes in Michael Finnissy's Second String Quartet", takes the composer–performer interactions during a rehearsal as a point of departure to analyse the complex parameters of musical structure, using multimedia and interdisciplinary interface. Whilst the analytical tools adopted were beyond the scope of this thesis, the conceptual parameters underpinning Bayley's project (namely the notion of music as sound and performance, rather than 'text'), related directly to the premise of this study.³⁵

The overarching argument extrapolated from the studies outlined above is that the complexity and innovation in contemporary music and the unorthodox notational and sound-production techniques employed, necessitates active experimentation and interaction between composers and performers. For instance, composer Fabrice Fitch writes about the arbitrary nature of notation and the ambivalent instructions it can at times communicate, such that symbol and sound do not necessarily match. He describes how in the collaborative process, the notation was often generated as a result of improvisation and discovery of the specific playing techniques and the instrumental sonorities they produced.³⁶ Similarly, Cook and Clarke propose that notation is best understood as 'prompt for action', rather than an exhaustive set of instructions, requiring an active creative involvement from the performer in the determining of work-identifying detail.³⁷

³⁵Amanda Bayley, "Multiple Takes: Using Recordings to Document Creative Process" in *Recorded Music: Performance, Culture and Technology*, ed. Amanda Bayley (Cambridge University Press, 2010), 206-224; Amanda Bayley and Michael Clarke, "Analytical Representations of Creative Processes in Michael Finnissy's Second String Quartet", *Journal of Interdisciplinary Music Studies* 3, no. 1-2 (2009): 139-157.

³⁶ Fitch and Hayde, "'Recercar' – the Collaborative Process", 19.

³⁷ Cook et. al., "Interpretation and Performance".

Whilst the present thesis builds on the current research into collaborations outlined above, it is unique in that it employs a phenomenological investigation into the music of contemporary Australian composers, working across a broad cross-section of musical genres.

1.4 PERFORMANCE AS CREATIVE PRACTICE

Given the centrality of interpretation and performance to the creative processes of work-realisation in this study, literature pertaining to performance creativity was of a particular significance. Notably, the Research Centre for the History and Analysis of Recorded Music (UK) has produced numerous publications on this subject, addressing issues of musical ontology, the function of musical notation, text/performance dichotomy, and the essential role of the performer in the co-creation of 'musical works' as they are known and experienced.³⁸ Of direct relevance are Clarke's article "Creativity in Performance", Cook's paper "Prompting Performance: Text, Script, and Analysis in Bryn Harrison's *être-temps*", Rink's paper, "The State of Play in Performance Studies" and his article "The Final Score?".³⁹

The Orpheus Institute for Advanced Studies and Research in Music (Belgium) has similarly championed research into musical performance and performance creativity. Publications of particular interest include *Theory into Practice: Composition, Performance and the Listening Experience* – a collection of academic papers by Nicholas Cook, Peter Johnson, and Hans Zender. In his paper, "Words about Music, or Analysis versus Performance", Cook challenges the traditional emphasis on the 'fidelity to authorial intent', which privileges analysis over performance, and instead suggests that musical meaning is best perceived from the analysis of the performative processes

³⁸ CHARM: The AHRC Research Centre for the History and Analysis of Recorded Music website, <http://www.charm.rhul.ac.uk/about/about.html> (accessed 23 March 2012).

³⁹ Eric Clarke, "Creativity in Performance", *Musicae Scientiae* 9 (2005): 157-82; Nicholas Cook, "Prompting Performance: Text, Script, and Analysis in Bryn Harrison's *être-temps*", *Music Theory Online* 11, no. 1 (2005), http://www.mtosmt.org/issues/mto.05.11.1/mto.05.11.1.cook_frames.html (accessed 12 January 2010); John Rink, "The State of Play in Performance Studies" in *The Music Practitioner*, ed. Jane Davidson (Aldershot: Ashgate), 37-51; John Rink, 'The final score?', *BBC Music Magazine*, 2004, 30-3.

that bring musical works into the listener's experience.⁴⁰ Another publication by the Orpheus Institute of significance to this thesis is "Dynamics of Constraints: Essays on Notation, Editing, and Performance" by violinist Mieko Kanno, composer-guitarist Juan Parra Cancino, and pianist Paulo de Assis, exploring the complex dialectic between musical notation and performance of contemporary music, whereby content- and sound-generation is contingent on the use of electronics and live processing. The authors suggest a substantial degree of interpenetration between notation, performance, and even the listening experience, challenging the notions of the 'authoritative text' and 'authentic performance'.⁴¹

Further pertinent literature on performance creativity includes Edward Cone's *Musical Form and Musical Performance* and John Rink's *Musical Performance: A Guide to Understanding*, comprising a number of analytical essays on musical interpretation viewed through both qualitative and quantitative enquiry.⁴² Specifically, Clarke's "Expression in Performance: Generativity, Perception, and Semiosis" reveals how the expressive qualities characterising musical performance, such as agogic emphasis, phrasing, articulation, and rhythmic organisation, can be analysed and studied using a variety of approaches and documented using text, diagrams, and score excerpts, as the present dissertation aims to do.⁴³

⁴⁰ Nicholas Cook, Peter Johnson, and Hans Zender, "Theory into Practice. Composition, Performance and the Listening Experience" in *Collected Writings of the Orpheus Institute* (Leuven: Leuven University Press, 1999), 9-52.

⁴¹ Juan Parra Cancino, Paulo de Assis, and Mieko Kanno, *Dynamics of Constraint: Essays on Notation, Editing, and Performance, Orpheus Research Centre in Music Series* (Leuven: Leuven University Press, 2010).

⁴² Edward Cone, *Musical Form and Musical Performance* (New York: Norton, 1968); John Rink ed., *The Practice of Performance*, (Cambridge: Cambridge University Press, 1995).

⁴³ Eric Clarke, "Expression in Performance: Generativity, Perception, and Semiosis" in *The Practice of Performance*, ed. J. Rink (1995): 21-54; Edward Cone, "The Pianist as Critic" in *The Practice of Performance*, ed. J. Rink (1995): 241-253. Also see Alf Gabrielsson, "The Performance of Music" *The Psychology of Music*, 2nd ed., ed. Diana Deutsch (San Diego: Academic Press, 1999): 501-602; Daniel Barolsky, "The Performer as Analyst", *Music Theory Online* 13, no. 1 (March 2007), <http://www.mtosmt.org/issues/mto.07.13.1/mto.07.13.1.barolsky.html> (accessed 23 March 2010); Jose Bowen, "Performance Practice versus Performance Analysis: Why Should Performers Study Performance?", *Performance Practice Review* 9, no. 1 (Spring 1996): 16-35; Eric Clarke, "Generativity, Mimesis, and the Human Body in Music Performance", *Contemporary Music Review* 9, no. 1 (1993): 207-219; Eric Clarke, "Generative Principles in Music Performance" in *Generative Processes in Music*, ed. John Sloboda (New York: Oxford University Press, 1989), 1-26; Daniel Leech-Wilkinson, "Portamento and Musical Meaning", *Journal of Musicological Research* 25 (2006), 233-61; Daniel Leech-Wilkinson, "The Changing Sound of Music: Approaches to Studying Recorded Musical Performance" (London: CHARM, 2009), <http://www.charm.kcl.ac.uk/studies/chapters/intro.html> (accessed 9 November 2011).

While ‘performance as research’ has only recently been recognised within music academia, several doctoral studies have emerged and been found of relevance, including percussionist Robert Esler’s thesis, “A Phenomenological Approach to Contemporary Musical Performance” (2007), pianist Rohan Murray’s thesis “Australian Piano Music 1980–2010 From a Pianist’s Perspective: a Presentation of Two Performance Events” (2011), and cellist Tanja Orning’s article “Pression – A Performance Study” (2012).⁴⁴ In his thesis, Esler argues that musical scores and the ideas embedded in them do not constitute the ‘form’ which is the object of music. He states that “the score, the idea and even feedback from the composer, though essential, are not a form. Scores are not displayed at concerts in lieu of music being heard. [. . .] the sound (music), our bodies, the performance space (environment), and lights/sound system (media) composite the object of music”.⁴⁵ Similarly, Orning’s research investigates notions of performativity and gesture in contemporary performance and how these aspects of musical dialectic can be notated, transmitted, and realised in performance.⁴⁶ Murray takes a different approach to conceptualising the role of musical notation and the performer’s engagement with score, positing that close familiarisation with the compositional practices and languages of two generations of Australian composers has enabled him, as a performer, to construct what could essentially be called ‘performance practice’ within a particular musical subculture.⁴⁷ The subject of ‘performance practice’ and the informed presuppositions it affords in interpreting musical notation within a given style, is of particular significance to my research and is explored in subsequent chapters.

Finally, the initiatives such as Orpheus Institute’s “Musician’s Act of Creation” (2009), “Co-Creative Practices in Music” (2009), and “Sound and Score” (2010), and The Yong

⁴⁴ Robert Esler, “A Phenomenological Approach to Contemporary Musical Performance” (PhD thesis University of California, San Diego, 2007); Rohan Murray, “Australian Piano Music 1980-2010 From a Pianist’s Perspective: a Presentation of Two Performance Events” (PhD thesis University of Melbourne, 2011); Tanja Orning, “Pression – a Performance Study”, *Music Performance Research*, 5 (2012): 2-31.

⁴⁵ Esler, “A Phenomenological Approach” 16-17.

⁴⁶ Orning, “Pression – A Performance Study”

⁴⁷ Murray, “Australian Piano Music 1980-2010”.

Siew Toh Conservatory of Music's "The Performer's Voice Symposium" (2012), signal the topicality of this research within the broader milieu of current musical scholarship. Presenting a series of scholarly discussions under the rubrics: "Towards Performance", "Beyond the Score", and "My Instrument – My Voice", "The Performer's Voice Symposium" in Singapore featured some of the leading practitioner-researchers and scholars in the field of performance creativity, such as Richard Taruskin, John Rink, Stephen Emmerson, and Huib Schippers amongst others.⁴⁸ The primary line of argument among the presenters at the symposium is that the performer's authentic voice, steeped in decades of practice and reflection, is an essential vehicle for understanding music as a vital and creative practice beyond the 'text' encoded in the score. This polemic drives the rationale for my own thesis and research.

The next section provides an overview of literature pertinent to qualitative and practice-led research methods, as employed in this thesis.

1.5 ARTISTIC-PRACTICE-AS-RESEARCH AND QUALITATIVE RESEARCH METHODS

Amongst the recent literature on creative research, two books have been of particular influence in positioning this study within the broader practice-led research context: Coessens's et al., *The Artistic Turn* and Smith and Dean's *Practice-led Research, Research-led Practice in the Creative Arts*.⁴⁹ Drawing on specific case studies, both sources reflect the post-modernist notion of the inherent instability of knowledge, arguing that artistic practice constitutes a different yet valuable way of 'knowing'. Acknowledging the subjective and idiosyncratic nature of the artistic process, both texts suggest valuable methodological approaches aimed at bringing rigour and robustness to reflective practice. The central argument presented by these authors and adopted in this thesis, is that successful artistic research will aim at synthesising theory and practice, whereby the practice is enhanced by theory and theory is developed and advanced through practice.

⁴⁸ The Yong Siew Toh Conservatory of Music, "The Performer's Voice Symposium", 2012, <http://theperformersvoice.org> (accessed 12 January 2013).

⁴⁹ Coessens, Crispin, and Douglas, *The Artistic Turn*; Smith and Dean, *Practice-led Research*.

1.5.1 Qualitative Research Methods

While the research design and methods employed in this study are discussed at length in Chapter Three (Research Design and Methodology), the relevant sources which guided the choice of appropriate epistemology, methodology, and analytic tools were Michael Crotty's *The Foundations of Social Research – Meaning and Perspective in the Research Process*, Joseph Maxwell's *Qualitative Research Design: An Interactive Approach (Applied Social Research Methods)*, and Clark Moustakas's *Phenomenological Research Methods*.⁵⁰ Norman Denzin and Yvonna Lincoln's books, *Collecting and Interpreting Qualitative Materials*, *Handbook of Qualitative Research*, and *Strategies for Qualitative Inquiry* were an important resource for demonstrating the application of methods and procedures of qualitative enquiry, particularly the method of Thematic Analysis employed in this research.⁵¹ Further sources consulted for explanation of Thematic Analysis techniques were Johnny Saldana's *The Coding Manual for Qualitative Researchers*, Strauss and Corbin's *Basics of Qualitative Research*, Richard Boyatzis's *Thematic Analysis: Coding as a Process for Transforming Qualitative Information*, Braun and Clarke's "Using Thematic Analysis in Psychology", David Silverman's *Interpreting Qualitative Data: Methods for Analyzing Talk, Text and Interaction*, and Graham Gibbs's *Analyzing Qualitative Data* amongst others.⁵²

Stefan Östersjö and Paul Roe's doctoral theses serve as valuable precedents for employing principles of Thematic Analysis for coding and interpreting audio and video documentation of composer–performer collaborations. Additionally, Catherine Cassell, Anna Buehring, Gillian Symon, Phil Johnson, and Vicky Bishop's study "Management Research: A Thematic Analysis of Interviews with Stakeholders in the Field" and L.

⁵⁰ Michael Crotty, *The Foundations of Social Research – Meaning and Perspective in the Research Process* (London: Sage, 1998); Joseph Maxwell, *Qualitative Research Design: An Interactive Approach (Applied Social Research Methods)* (London: Sage, 2005); Clark Moustakas, *Phenomenological Research Methods* (London: Sage, 1994).

⁵¹ Norman Denzin and Yvonna Lincoln, *Collecting and Interpreting Qualitative Materials* (Thousand Oaks, Ca.: Sage Publications, 2008); Norman Denzin and Yvonna Lincoln eds., *Handbook of Qualitative Research* 2nd ed. (Thousand Oaks, CA: Sage Publications, 2000).

⁵² Saldana, *The Coding Manual*; Strauss and Corbin, *Basics of Qualitative Research*; Braun and Clarke, "Using Thematic Analysis"; David Silverman, *Interpreting Qualitative Data: Methods for Analyzing Talk, Text and Interaction*, 3rd ed. (London: Sage, 2006); Graham Gibbs, *Analyzing Qualitative Data* (London: Sage, 2007); Richard Boyatzis, *Thematic Analysis: Coding as a Process for Transforming Qualitative Information* (Thousand Oaks, Ca: Sage, 1998).

Yardley, M. Donovan-Hall, K. Francis, and C. Todd's "Older People's Views of Advice About Falls Prevention: a Qualitative Study", provide detailed examples of coding procedures and how the results probed through Thematic Analysis might be reported using narrative substantiated by raw data extracts.⁵³

Lastly, considering the practice-led nature of this research, the notion of reflexivity has been of a particular importance. To this end, sources relating to the subjects of auto-ethnography, reflective writing, and reflexivity in practice were consulted. Of most influence and relevance to this study are Charlotte Davies's *Reflexive Ethnography: A Guide to Researching Selves and Others*, Carolyn Ellis's *Composing Ethnography: Alternative Forms of Qualitative Writing*, and Donald Schön's *The Reflective Practitioner: How Professionals Think in Action*.⁵⁴ These studies provide various perspectives on the reflexivity central to the practitioner research and offer valuable guidance on the reflective writing process.

Having broadly outlined the literature that has informed and contextualised this research, the following chapter will detail the conceptual and theoretical perspectives framing the three collaborations at the centre of this study.

⁵³ Catherine Cassell, A. Buehring, G. Symon, P. Johnson, and V. Bishop, "Qualitative Management Research: a Thematic Analysis of Interviews with Stakeholders in the Field", *Report to ESRC*, (2005), http://bginqmr.group.shef.ac.uk/pdf/final_research_report.pdf (accessed 15 October 2012); Lucy Yardley, Margaret Donovan-Hall, K. Francis, and C. Todd, "Older People's Views of Advice About Falls Prevention: a Qualitative Study", *Health Education Research*, 21 (2006): 508-517, <http://her.oxfordjournals.org/content/21/4/508.full.pdf+html> (accessed 15 October 2012).

⁵⁴ Charlotte Davies, *Reflexive Ethnography: A Guide to Researching Selves and Others* (London: Routledge, 2008); Carolyn Ellis, *Composing Ethnography: Alternative Forms of Qualitative Writing* (Walnut Creek, CA: Altamira Press, 1996); Kim Etherington, *Becoming a Reflexive Researcher: Using Our Selves in Research* (London: Jessica Kingsley Publishers, 2004); Donald Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983).

CHAPTER TWO

CONCEPTUAL FRAMEWORK

[If we could put] less emphasis on the notion of individual and separate identity, as well as on the hierarchical subdivisions that art seems to imply, composer, interpreter and listener should be in a state to reclaim the unity shattered by the artistic concepts of the Romantic age.⁵⁵

2.1 INTRODUCTION

This chapter begins with an overview of musical discourse framing this research (Section 2.2). Section 2.3 examines the changing relationship between composers and performers in different periods of Western art music history and traces the development of the division between the creative and the reproductive phases in musical work-construction. This is followed by the discussion in Section 2.4 on indeterminacy of musical notation (scores), and the related subject of musical interpretation central to this thesis. The traditional model of musical work-production in the Western art music context is challenged and re-conceptualised, and an alternative model of collaborative co-construction of musical works is proposed (Section 2.5). Finally, Section 2.6 presents a detailed discussion of creative collaboration and creative cognition theories.

2.2 CONCEPTUAL PERSPECTIVES: THE MUSICAL DISCOURSE

To discuss composer–performer collaboration effectively, it is important to understand the broader musico-academic tradition (or discourse) scaffolding this research. As outlined in Chapter One, prior to the pioneering work of Lydia Goehr, Nicholas Cook, Bruce Benson, Richard Taruskin, Eric Clarke, John Rink, Christopher Small and others, who began to challenge the traditionally established hierarchies in Western art music culture regarding the supremacy of the composer and the autonomy of musical works,

⁵⁵ Glenn Gould, *Glenn Gould Plays Bach*, directed by Bruno Monsaingeon (1979–1981), DVD (SONY CLASSICAL, 2012).

research has largely engaged with the theoretical, structural, semiotic, and hermeneutic analysis of music as autonomous 'ideal object', existing as musical 'text' (score) independent and separate from its performance. According to Cook,

That such a paradigm [composer/text-oriented] should be deeply built into musicology is not surprising: the nineteenth-century origins of the discipline lie in an emulation of the status and methods of philology and literary scholarship, as a result of which the study of musical texts came to be modelled on the study of literary ones. In effect, and however implausibly, we are led to think of music as we might think of poetry, as a cultural practice centred on the silent contemplation of the written text, with performance (like public poetry reading) acting as a kind of supplement.⁵⁶

Within this tradition, interpretation and performance have not generally been regarded as integral to the creative agency in musical work-production or perceived as a constituent of the musical work's identity and 'meaning'.⁵⁷ As Small argues:

It is rare indeed to find the act of musical performance thought of as possessing, much less creating, meaning in its own right . . . what is valued is not the action of art, not the act of creating, and even less that of perceiving and responding, but the created art object itself.⁵⁸

Goehr's critique of this text-centred paradigm, whereby she claimed that the concept of 'musical work' is not inherent to music as a cultural practice, but is a historical construct coming into Western art music discourse around 1800, set in motion a gradual turn in music academia towards considering interpretation and performance (and even collaboration), as a locus for musical meaning. Cook contends:

⁵⁶ Cook, "Between Process and Product".

⁵⁷ The tendency to conceptualise music as 'musical works' and not performance is discussed in great detail by Cook in his numerous journal articles and book chapters referred to in the Literature Review. This focus on music as 'things' or 'objects' as opposed to 'acts' has also been addressed by Small in *Musicking: The Meaning of Performing*.

⁵⁸ Small, *Musicking: The Meaning of Performing*, 4.

If the transcendence and permanence of musical works was not some kind of inherent quality but an effect of social or ideological construction, it followed that music was to be understood as in essence less a product than a process, an intrinsically meaningful cultural practice.⁵⁹

This recent shift towards conceptualising music as 'performance', embedded within a socio-cultural 'practice' is evident in the developing disciplines of New (Critical) Musicology and Performance Studies (originating from theatre studies). Writers such as Small, Cook, Clarke, Benson, Daniel Leech-Wilkinson, and Philip Auslander amongst others, are re-orienting the discourse on music away from the 'composer and score' model towards 'score and performance' paradigm.⁶⁰ Cook quotes Nick Kaye in characterising performance as "a primary postmodern mode".⁶¹ Kaye draws on the creative practices of such performance-oriented artists as Foreman, Cunningham, and Cage to trace the gradual dissolution of the modernist supremacy of the 'work of art' into the post-modernist "contingencies and instabilities of the 'event' . . . penetrated by unstable and unpredictable exchanges and processes". Similarly, Small suggests that "performance does not exist in order to present musical works, but rather, musical works exist in order to give performers something to perform".⁶² While Small's proposition may sound radical within the context of a scholarly tradition that privileges texts over acts (or processes), it reflects the new turn in the ways in which Western art music is being studied. However, Cook argues that reversing the text (score)/performance dichotomy and favouring performance as the primary vehicle for understanding musical meaning does not in itself sufficiently explain the *relationship* between the 'performance' and the 'musical work'. Instead, he suggests that "music

⁵⁹ Cook, "Between Process and Product".

⁶⁰ Philip Auslander, "Musical Personae", *The Drama Review* 50, no. 1 (2006): 100-119. (Other authors mentioned here have been cited in Chapter One, footnotes 10 and 43).

⁶¹ Cook, "Between Process and Product".

⁶² Small, *Musicking: The Meaning of Performing*, 8.

can be understood as both process and product, but it is the relationship between the two that defines 'performance' in the Western 'art' tradition".⁶³

2.3 THE 'SPLIT': THE COMPOSITION/PERFORMANCE DICHOTOMY

In order to further examine the text/performance dichotomy central to art music tradition since the nineteenth century, this section traces the ongoing changes in the composer–performer relationship throughout Western art music history and examines the split and the developing hierarchy between the 'creative' and the 'reproductive' phases of musical work-production. The discussion below explores the 'work-concept' as proposed by Goehr and the regulative function it has increasingly exercised in the practice of musicians since the nineteenth century and, largely, to the present day.

2.3.1 The 'Work-Concept'

The notion of the 'work-concept', as coined and developed by Goehr, is central to the following discussion. Goehr claimed that the 'work-concept' (which she explains as the normative function of musical works (scores) in the classical music tradition),⁶⁴ has exercised its regulative function only at certain periods in Western art music history. Considering the 'work-concept' as relative to the historic context is important to understanding its impact on the discourse framing this study. According to Goehr, the 'work-concept' began to develop around the 1800s and by the first half of the twentieth century had established itself as the dominant paradigm for conceptualising Western art music. While many of the late twentieth and twenty-first-century composers are working outside the 'work-concept' tradition in adopting open score structures and 'prescriptive' (contrasted to the 'descriptive'/traditional) notation, the 'work-concept' remains the predominant conceptual model within 'concert' music culture.

⁶³ Cook, "Between Process and Product".

⁶⁴ Goehr, *The Imaginary Museum*.

According to Benson, prior to the nineteenth century (when the musical canon began to form and the ‘work-concept’ acquired a regulative role), music was thought of as a markedly different *activity*, whereby pieces of music served to facilitate performances for specific occasions and were not intended to live and be preserved for eternity. This notion of music as *activity*, rather than an *object*, had significant implications for the thinking and practice of music in the Renaissance, Baroque and Classical eras. As Benson explains, it was the ‘performance’, rather than the ‘works’, that was at the heart of musical practice before the 1800s.⁶⁵ He argues,

The idea of a musical work as an entity that was distinct and autonomous from the performance simply didn’t exist. Rather, pieces of music were things that facilitated the activity of music-making, not ends in themselves. As a result, performers and composers were united in a common task, which meant that there was no clear line of separation between composing and performing.⁶⁶

Thus, the question arises as to how the closely-related activities of composition and performance in the music practices of the Renaissance, Baroque and Classical periods gave way to what Benson terms the ‘binary opposition’ between them.⁶⁷ In his book, *On Sonic Art*, Trevor Wishart argues that the rise of musical notation irreversibly re-defined the practice of the ‘musician’. He posits that the implications of musical notation on Western art music practice are two-fold: first, the use of notation precipitated the split of what had hitherto been simply known as a ‘musician’, into two distinct agencies: the composer and the performer; second, it brought into existence the concept of ‘musical works’ and the subsequent possibility of their ‘reproduction’.⁶⁸ By the first half of the nineteenth century, pieces of music in the Western art tradition were no longer being produced for a particular performance at a particular event; rather, they were thought of as end-goals in themselves, existing as autonomous works of art. Thus, the constructionist (creative) phase of musical work-realisation was

⁶⁵ Benson, *Improvisation of Musical Dialogue*, 12.

⁶⁶ Benson, *Improvisation of Musical Dialogue*, 22.

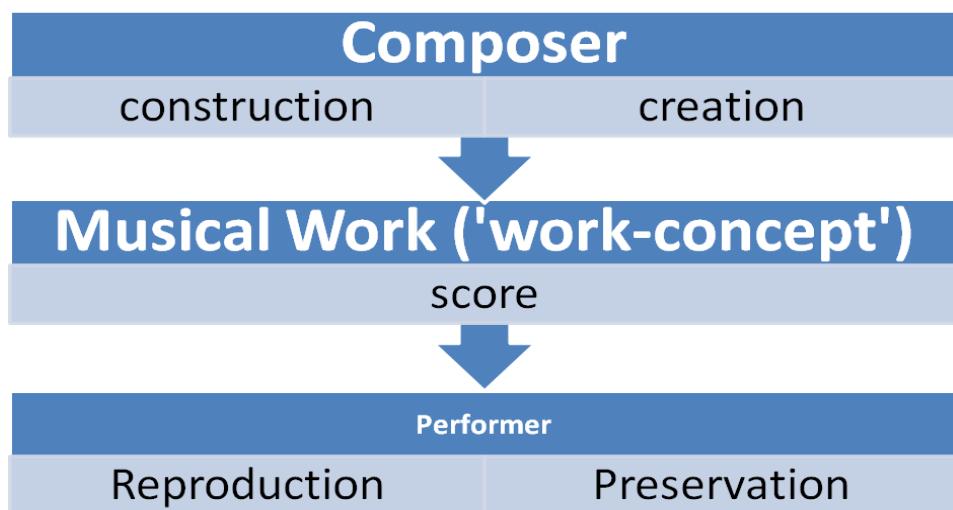
⁶⁷ Benson, *Improvisation of Musical Dialogue*, 23-24.

⁶⁸ Trevor Wishart, *On Sonic Art* (York: Imagineering Press, 1985), 21.

considered to have been completed through the production of the score, which could then be ‘reproduced’ and ‘preserved’ through performance. Rather than closely related activities on the same continuum, composition and performance gradually ‘split’ into two distinct phases of musical practice: that of creation and reproduction. While the phenomenon of the performer-composer-improviser as one entity still existed throughout the nineteenth century, the separation of roles and of the creative agency between composers and performers grew as musical scores became increasingly regarded as ‘authoritative texts’. This ‘separatist’ model of practice was further reinforced in the twentieth century, wherein the phenomenon of the composer who no longer performed, and the performer who no longer improvised or composed, became commonplace. In this model, the composer worked in the constructive domain and the performer in the reproductive domain exclusively. Such a model of work-production is best described as a top-down, unidirectional structure in which the score (equated to the ‘musical work’) is regarded as the primary source of information, transmitted through musical notation, which reflects the composer’s intentions and thus, supposedly, the ‘meaning’ of the work. The following figure, adapted from Östersjö, reflects the demarcation and hierarchy of roles within this model.⁶⁹

⁶⁹ However, while in Östersjö’s model the performer’s reproductive agency is also shown to constitute the totality of the musical work, the model presented here demonstrates the view I believe more aptly represents the nineteenth, but more importantly, the twentieth-century’s art-music discourse.

Figure 1. Traditional model of work-production in Western art music since the 1800s, adapted from Östersjö.⁷⁰



The apparent schism and disjuncture in this model between the process of construction and reproduction, is aptly summarised by Cook:

The traditional orientation of musicology towards the reconstruction and dissemination of authoritative texts reflected a primary concern with musical works as the works of their composers, understanding them as messages to be transmitted as faithfully as possible from composer to audience. It follows then from what Peter Kivy calls "composer worship" that the performer becomes at best an intermediary . . . and at worst a "middleman": someone who puts a markup on the product without contributing anything to it, and who should accordingly be cut out wherever possible.⁷¹

Thus, from the 1800s onwards, the performance and performer-oriented culture of the pre-1800s becomes an 'art-object'-oriented paradigm, privileging texts over acts of performance.

⁷⁰ Östersjö, "Shut Up and Play", 55.

⁷¹ Cook, "Between Process and Product".

2.3.2 Text and Performance: The Composer's Perspective

The text/performance dichotomy is witnessed in the attitudes of some of the seminal composers of the twentieth century. Dika Newlin, in *Schoenberg Remembered: Diaries and Recollections*, quotes Schoenberg in saying that “the performer, for all his intolerable arrogance, is totally unnecessary except as his interpretations make the music understandable to an audience unfortunate enough not to be able to read it in print”.⁷² Similarly, in his *Poetics of Music in the Form of Six Lessons*, Stravinsky argues that “the secret of perfection lies above all in [the performer's] consciousness of the law imposed on him by the work he is performing”.⁷³ Thus, for both Schoenberg and Stravinsky, the performer must act not as an interpreter but a mere ‘executor’ of the ‘text’. Stravinsky further adds, “the sin against the spirit of the work always begins with a sin against its letter and leads to the endless follies which an ever-flourishing literature in the worst taste does its best to sanction”.⁷⁴

This idea of performance as subordinate to text is reflected in the semantic structures of the language itself. Both Goehr and Cook suggest that while it is possible to speak of ‘just playing’, the idea of ‘just performing’ seems implausible. Cook argues:

Language leads us to construct the process of performance as supplementary to the product that occasions it or in which it results; it is this that leads us to talk quite naturally about music “and” its performance . . . as if performance were not already integral to music . . . Language, in short, marginalizes performance.⁷⁵

This tendency to frame music as a ‘product’ may well have stemmed from a broader political-cultural discourse. In 1985, Jacques Attali, in his provocative book *Noise: The Political Economy of Music*, theorised that the notion of music as ‘commodified’ object

⁷² Dika Newlin, *Schoenberg Remembered: Diaries and Recollections (1938–76)* (New York: Pendragon Press, 1980), 164.

⁷³ Igor Stravinsky, *Poetics of Music in the Form of Six Lessons* (London: Oxford University Press, 1947), 127.

⁷⁴ Stravinsky, *Poetics of Music*, 165.

⁷⁵ Cook, “Between Process and Product”.

emerged as a consequence of the capitalist ideology, whereby art music was seen as constituting part of an ‘aesthetic economy’ characterised by passive consumption, consumerism, and commercialism, rather than an active participatory model of music production.⁷⁶

2.3.3 The Preservation of Musical Works and Indeterminacy of Musical Notation

The pervasive focus on work-reproduction and work-preservation in Western art music scholarship is documented in the writings of the American philosopher/aesthetician Nelson Goodman. In his *Languages of Art: An Approach to a Theory of Symbols*, he argues that “work-preservation is paramount . . . If we allow the least deviation [from the score], all assurance of work-preservation and score-preservation is lost”. He adds, however, that “while a score may leave unspecified many features of a performance and allow for considerable variation in others within certain prescribed limits, full compliance with the specifications given is categorically required”.⁷⁷ This brings us to a crucial point for discussion and, indeed, the main line of questioning throughout this thesis, namely: what do the musical scores communicate and what do they leave ‘unspecified’? Are scores equivalent to the ‘musical works’ which they embody? How are the composer’s intentions encoded in the scores? Does musical notation equal the ‘meaning’ of the work and how can that be ascertained? And what of musical interpretations: do they too constitute the musical work and its identity? If so, what is being interpreted, by whom, and how? While this thesis does not attempt to answer these questions definitively, reflecting on these notions forms the core of the discussion within the context of the three collaborations undertaken in this study.

In his book, *The Work of Music and the Problem of its Identity*, Roman Ingarden proposed that the score can be viewed as a “system of instructions given implicitly in a kind of shorthand”.⁷⁸ Thus, both Goodman and Ingarden agree that what the listener

⁷⁶ Jacques Attali, “Noise: The Political Economy of Music,” in Vol. 16 of *Theory and History of Literature* (Minneapolis: University of Minnesota Press, 1996).

⁷⁷ Goodman, *Languages of Art: An Approach to a Theory of Symbol*, 186-7.

⁷⁸ Ingarden, *The Work of Music*, quoted in Benson, *Improvisation of Musical Dialogue*, 80.

hears in performance is always much more than what the score is able to communicate.⁷⁹ Benson quotes Ingarden in stating that the “imperfection [of musical notation] makes the instructions for performing the work given in this notation incomplete [so that] the work is defined only in a schematic way by the specifications of only some determinations”.⁸⁰ Even Stravinsky, for whom the musical work existed as an ‘ideal object’ and who defined the performer’s role as that of mere executant responsible for transmitting the work with the least deviation from the ‘letter’, acknowledges that the totality of the ‘musical dialectic’ is much greater than what the notation-based score can represent:

It is taken for granted that I place before the performer written music wherein the composer’s will is explicit and easily discernible from a correctly established text. But no matter how scrupulously a piece of music may be notated, no matter how carefully it may be insured against every possible ambiguity through the indications of tempo, shading, phrasing, accentuation, and so on, it always contains hidden elements that defy definition, because verbal dialectic is powerless to define musical dialectic in its totality.⁸¹

It can therefore be postulated that the incomplete specification of work-identifying detail in musical scores is a normative feature of musical works. It follows then that the performer, through interpretation and performance, adds (to a greater or lesser degree) the detail not specified by the composer in the score. These unspecified (and thus, underdetermined) aspects of the work that are realised through the act of interpretation and performance, become integral to the identity of the musical work and the way it is perceived and experienced by the listener. In fact, in as early as 1938, the philosopher Robin George Collingwood argued that “every performer is the co-author of the work he performs”.⁸² Hence, we arrive at a modified model of musical

⁷⁹ Benson, *Improvisation of Musical Dialogue*, 80.

⁸⁰ Ingarden, *The Work of Music*, quoted in Benson, 80.

⁸¹ Stravinsky, *Poetics of Music*, 163.

⁸² Robin George Collingwood, *Principles of Art* (Oxford: Clarendon, 1938), 321.

work-production, whereby the performer and the performance act as co-creative agencies in the work-realisation process.

Since the performing instructions encoded in a score always under-determine the full detail of a given musical work, the performer, invariably, must make many interpretative, creative decisions in respect of how the work is to be realised and sounded in performance. This decision-making process concerns not only interpretation of the micro level detail such as attack, phrasing, inflection, dynamics, note-lengths, tempo modulation, etc., but also the macro level aspects of the work such as articulation of form and structure, projection of its expressive, poetic content as well as approach to issues of stylistic congruity and musical affect.⁸³ It is these choices that can be said to constitute the performer's musical interpretation. If, as philosopher Robert Martin argues, the musical works as they exist in the world of listeners through an encounter of performance are not exclusively created by the composers but by the performers as well, then the question of what shapes and feeds into the performer's realisation and interpretation of a musical composition becomes paramount.⁸⁴ On what basis are the interpretative choices made and what gives them validity in performance? In answering this question, it is necessary to first establish a distinction between the notions of 'interpretation' and 'performance' and identify the types of interpretations relevant to the Western art music discourse.

2.4 INTERPRETATION AND MUSICAL PERFORMANCE

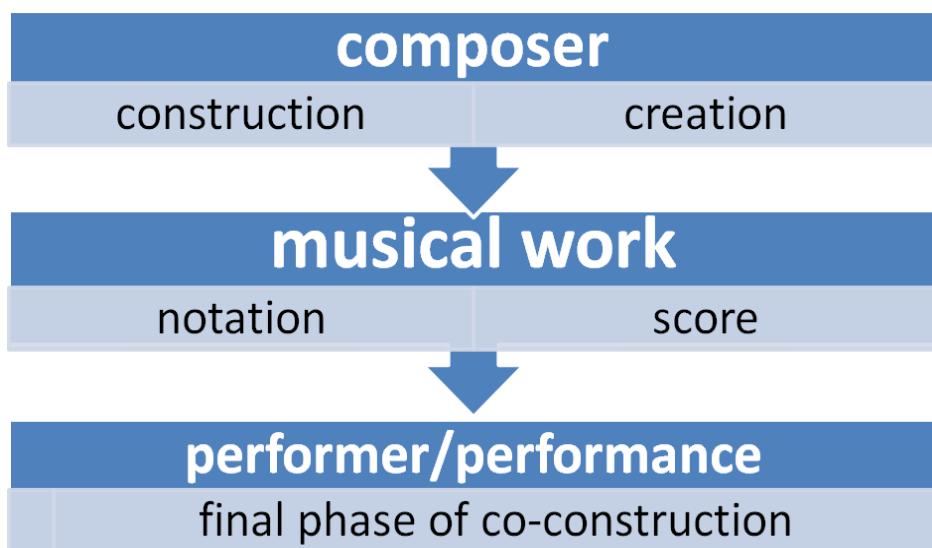
While interpretation and performance can be seen as essentially interrelated activities on the same continuum of the performer's practice, whereby the interpretative choices inform the performance outcome, they function differently in the context of the musical work. As Hans-Georg Gadamer argues in his book *Truth and Method*,

⁸³ The notion of micro and macro levels of interpretation is adopted from *Grove music Online*, http://www.oxfordmusiconline.com.ezp.lib.unimelb.edu.au/subscriber/article/grove/music/13863?q=interpretation&search=quick&source=omo_gmo&pos=1&_start=1#firsthit (accessed 23 March 2011).

⁸⁴ Robert L. Martin, "Musical Works in the Worlds of Performers and Listeners", *The Interpretation of Music. Philosophical Essays*, ed. Michael Krausz (London: Clarendon Press, 1993), 119–127.

“every performance is an event, but not one in any way separate from the work – the work itself is what ‘takes place’ in the event of performance”.⁸⁵ It follows that performances are not just interpretations of the works (a kind of analytical or sonic commentary on the works and their meaning) but, as Gadamer suggests, and as Östersjö also notes, they become inseparable from the very identity of the works and serve as the final co-constructive phase in the musical work production.⁸⁶ Hence, the model presented in Figure 1 above might be better re-conceptualised as follows:

Figure 2. The modified model of musical work-production in the Western art music tradition.



Interpretations, on the other hand, are not intrinsic to the work and its identity. Just as the scores under-determine the totality of the musical work, the interpretations (no matter how carefully constructed) do not determine the full sonic detail of the performance, which is always subject to unpredictability and spontaneity. This is especially true in the case of the three collaborations carried out in this project, where each of the resulting performances involved either the use of electronics and live processing or other performers. While an interpretative process will result (directly or

⁸⁵ Hans-Georg Gadamer, *Truth and Method* (New York: Continuum, 2004), 141.

⁸⁶ Östersjö, “Shut Up and Play”, 71.

indirectly) in a particular approach to performing a given work, it functions primarily as a basis for an extended analytical (critical) and embodied (aural, kinaesthetic, intuitive) engagement with the musical material, which shapes the performance outcome and, as in the case of creative collaboration, the material and its notational representation as well.

Consequently, the act of interpretation can be seen as not exclusively confined to the domain of the performer. The interpretative process is similarly at play in the composer's work, particularly where a collaborative feedback loop exists between the composer and the performer. In such a context, the composer, just like the performer, inevitably makes many choices pertinent to both the macro and micro levels of the determinative features of the music based on both the analytical discussion and the concrete hearing of the material in sound produced by the performer. Therefore, it can be said that in the collaborative context, the composer *completes* many of the undetermined features of the score through the act of embodied interpretation facilitated – in this context – by the performer. This notion of the co-interpretative development and realisation of musical ideas in notation and sound will be explored in detail through the three collaborations undertaken as part of the research.

2.4.1 Critical and Performative Interpretations

As suggested by philosophers Jerrold Levinson and Göran Hermerén, musical interpretation broadly falls into two distinct categories, identified as critical and performative interpretations.⁸⁷ While the nomenclature to denote the two interpretation types slightly varies between these authors – Levinson uses 'CI' (critical interpretation) and 'PI' (performative interpretation) while Hermerén adopts T-Interpretation (text-based, or analytical) and P-Interpretation (performative) – the following discussion adopts Levinson's distinction of CI and PI. It must be noted that the term 'performative', as used by Levinson and Hermerén in respect to musical

⁸⁷ Jerrold Levinson, *The Pleasure of Aesthetics: Philosophical Essays* (Cornell University Press, 1996); Goran Hermerén, "The Full Voic'd Quire - Types of Interpretations of Music" in *The Interpretation of Music: Philosophical Essays*, ed. Michael Krausz (London: Clarendon Press, 1993), 21.

interpretation, does not reflect the broader concept of ‘performativity’ as used within performance and theatre studies disciplines. While a performance studies approach to performativity is embedded in studying and understanding music as a cultural process within a broader social context and asks what music *does* within this context, ‘performative’, as used by Levinson and Hermerén in regard to musical interpretation, is used in a narrower sense and asks what music *is* and how musical texts and performances are to be understood on their own terms according to a specific cultural tradition (i.e. Western art music).

Drawing on both Levinson and Hermerén, critical interpretation can best be explained as a verbal elucidation of the musical work in regard to its perceived meaning (hermeneutics), its structural-harmonic function (musical analysis), and its socio-historic context (criticism). As such, critical interpretation is, using Östersjö’s term, a ‘discourse-on-music’ which deals with the art object (a musical score), independent of its representation in performance.⁸⁸ According to Levinson, the critical interpretation is paradigmatic in nature: in essence, it is a text about a text.⁸⁹ The performative, or what Levinson terms ‘realisational’ interpretation is, on the other hand, essentially focused and encapsulated in sound (a ‘discourse-in-music’).⁹⁰ For Hermerén, this type of interpretation engenders a series of actions driven by the instructions in the score which lead, directly or indirectly, to the performance of the piece. Similarly, Levinson suggests that realisational interpretation is an activity directly related to sculpting a conception of the musical material in sound:

⁸⁸ Östersjö, “Shut Up and Play”, 82.

⁸⁹ Levinson, *The Pleasure of Aesthetics*, 64.

⁹⁰ Östersjö, “Shut Up and Play”, 82.

What a PI [performative interpretation] is, I claim, is just a considered way of playing a piece of music, involving highly specific determination of all the defining features of the piece, as given by the score and its associated conventions of reading.⁹¹

Both Hermerén and Levinson agree that while the critical and performative interpretations are separate activities aimed at different outcomes, the conceptual/paradigmatic nature of the CI which engenders a close familiarity with the hermeneutic, structural, and historical detail of the musical composition may often precede and inform the more embodied, practice/action-oriented PI. Similarly, Rink identifies musical interpretation as a continuous process of analysis and consideration of the score in respect to its “contextual functions and means of projecting them”, guided by the familiarity with the performance style and tradition of the time, instrumental technique, and ‘informed intuition’.⁹² It is this dialectic relationship of the analytical and the performative (or what Östersjö calls ‘thinking-through-practice’) modes of interpreting and realising the musical material in a collaborative context that frames much of the discussion in the subsequent chapters.

2.4.2 Interpretation and Performance Tradition

As evident in both Levinson’s and Rink’s propositions, informed interpretation and performance of Western art music is largely contingent on the familiarity with the performance traditions and ‘conventions of reading’ of a given epoch. In essence, it is a ‘tacit’ code of agreements that exist between the composers and the performers working in a particular musical era. These tacit agreements and understandings enable the performers to ‘translate’ the notational instructions in the score into the sound structures congruent with the compositional and stylistic language of the time. Benson suggests that “without being steeped in that practice, the notes would communicate little. And these decisions cannot be simply dismissed as unimportant: for it is precisely

⁹¹ Levinson, *The Pleasure of Aesthetics*, 62.

⁹² John Rink, *Musical Performance: A Guide to Understanding*, (Cambridge University Press, 2002), 37–39.

what is not found in the score that we often most value".⁹³ Wolterstoffs (contrary to Goodman, who claims that "complete compliance with the score is the only requirement for a genuine instance of the work"),⁹⁴ argues that if we simply follow the score and what we perceive to be its 'determinative' instructions without considering the performance tradition of the time, the performance may not reflect and represent the 'correct' or 'faithful' version of the 'work':

One might in every detail follow the specifications for correct occurrence found in the score for a work and yet not perform the work. For often the specifications for correct occurrence that composers give in scores are incomplete for ensuring that those who follow them will produce occurrences, let alone correct occurrences, of the work.⁹⁵

Philosopher Stephen Davies goes even further in saying that "scores implicate the historical and social contexts in which they are generated, for the instructions they encode can be understood only by the person aware of the conventions by which they are to be read".⁹⁶

Thus, it becomes apparent that interpreting 'concert' music of the Common Practice period involves interpreting not only the instructions encapsulated in the score, which always under-determine the work's identity and its expressive properties, but also the performance traditions and practices which give them meaning. Furthermore, with the arrival of the recording technology in the twentieth century, the 'interpreting' musician was then able to accumulate an extensive 'aural library' through listening to the performances ('interpretations') of others, especially those considered 'authoritative' within the domain. Subsequently, when interpreting the art music canon, the modern performer engages not only with the score and the performing

⁹³ Benson, *Improvisation of Musical Dialogue*, 84.

⁹⁴ Goodman, *Languages of Art*, 186.

⁹⁵ Quoted in Benson, *Improvisation of Musical Dialogue*, 87.

⁹⁶ Davies, *Musical Works and Performances*, 159.

tradition surrounding a given work but also with other interpretations available through recordings.

2.4.3 The Problem of Interpretation in Contemporary Music

Examining and understanding the conditions necessary for an informed and 'valid' interpretation and performance of Western art music poses an important question in relation to the present study: if we establish that familiarity with the performance tradition and the existing 'authoritative' performances are crucial to a successful realisation of musical compositions, what informs this process of realisation in the context of New Music, which does not fall into traditional stylistic categories and for which no previous performances/recordings exist (as is the case in the present study)? The fragmentation and hybridisation of multiple musical languages, genres, and idioms, and the inherent absence of a single over-arching performance tradition characteristic of new music, pose considerable notational and interpretative challenges to contemporary musicians. The complexity and multiplicity of stylistic and notational practices in new music today, challenge composers and performers to reconsider the construction/reproduction model and move towards a more integrated, dialogic practice. In an interview with Philippe Albèra, composer Brian Ferneyhough (quoted in Österjsö) addresses the interpretation/tradition dialectic in the context of contemporary music:

What is interpretation? If you 'interpret' a Beethoven sonata you don't play exactly what is notated on the page in front of your nose. In a certain sense you are interpreting an entire tradition of interpretation already several generations removed from the original, and any innovation you introduce is counterpointed against this background. The perfect case in point would be the Webern variations. One tradition has it that you play what's on the page, that is, without pedal. Another tradition has it that the composer himself reinterpreted the written page liberally, adding pedal and rubato according to what he felt was the sense of the music – that is, making clear the position occupied by the piece against a silently assumed aesthetic background. This sort of background is today either lacking completely or is present in the negative sense of a performer undifferentiatedly applying his conservatoire technique, learned via Viotti, Tchaikovsky etc., to whatever contemporary pieces happen to cross his path. Although some composers may, I suppose, actually compose their pieces with that contingency in mind, I cannot say that

I find it a very attractive state of affairs. The fractured, disassociated stylistic panorama facing a performer today simply does not allow the performer a great deal of opportunity to plunge into the interpretational implications and subtleties of nuance of each and every composer's native dialect.⁹⁷

Ferneyhough's polemic echoes the earlier discussion of Schoenberg's and Stravinsky's attitudes towards the interpreter-performer. Considered in this context, the opinions expressed by these composers were not essentially directed against the performer per se, but rather against the performance approach carried over from the previous century's 'virtuoso' tradition and indiscriminately and inappropriately applied by the performers to their music. Closer reading of Stravinsky's *Poetics of Music* betrays his emphasis on the crucial role the understanding and 'submission' to musical tradition plays in the interpretative act:

This submission demands a flexibility that itself requires, along with technical mastery, a sense of tradition and . . . culture that is not merely a question of acquired learning. This submissiveness and culture that we require of the creator, we should quite justly require of the interpreter as well.⁹⁸

Similarly, it would be unfair to leave Schoenberg's notion that the performer is "totally unnecessary except as his interpretations make the music understandable to an audience unfortunate enough not to be able to read it in print", without further reflection. Schoenberg's own flexibility of interpretation as a conductor is well documented in the article by Avior Byron, "The Test Pressings of Schoenberg Conducting *Pierrot Lunaire*: Sprechstimme Reconsidered".⁹⁹ Like Stravinsky, Schoenberg was not reacting against the act of interpretation as such, but rather against the outmoded performance tradition that misinterpreted the implicated instructions in his scores. Hence, by the early twentieth century, this disjuncture

⁹⁷ Brian Ferneyhough, *Brian Ferneyhough: Collected Writings*, ed. James Boros, and Richard Toop (Amsterdam: Harwood, 1995), 318-319, quoted in Östersjö, "Shut Up and Play", 2.

⁹⁸ Stravinsky, *Poetics of Music*, 171.

⁹⁹ Avior Byron, "The Test Pressings of Schoenberg Conducting *Pierrot Lunaire*: Sprechstimme Reconsidered", *Music Theory Online* 12, no. 1 (February 2006), http://www.mtosmt.org/issues/mto.06.12.1/mto.06.12.1.byron_frames.html (accessed 11 December 2011).

between the tacit implications in musical notation specific to the composer's style and the performance tradition (inherited by the performers from the previous century), employed to 'interpret' this notation, was already distinctly present. Subsequently, in light of the inherent absence of the overarching performing tradition in the contemporary music context, this disjunction is further pronounced. The lack of the 'tacit agreements' traditionally informed by 'performance practice' poses significant challenges to performers interpreting new, contemporary works. While many musicians continue to work within the separationist, top-down schema of musical production, despite the increasing fragmentation and hybridisation of compositional and performance styles, others are moving towards more integrated, collaboratively conceived modes of work-construction. According to Small, while "Western classical music embodies a kind of society that does not allow for mutual participation of all peoples because it is based upon works, not interactions", in a participation-oriented culture where creativity is foremost, there will be "no such thing as a musical work, [but] only the activities of singing, playing, listening [and] dancing".¹⁰⁰

Drawing on Cook, Goehr, Small, Benson and others, it seems appropriate to conclude that a gradual paradigm shift is taking place within the contemporary art music culture in which 'acts' take precedence over 'things', and 'process' over 'product' – a paradigm in which mutuality and engagement become paramount. As Cook suggests, "the extraordinary illusion – for that it what it is – that there is such a thing as music, rather than simply acts of making and receiving it, might well be considered the basic premise of the Western 'art' tradition".¹⁰¹

2.5 THE 'WORLD OF ACTIVITY' — A MODEL OF MUSICAL CO-CONSTRUCTION

In order to consider ways in which the agencies of the composer and performer interact in the process of co-construction and realisation of new works, it is necessary

¹⁰⁰ Small, *Musicking: The Meanings of Performing*, 11, quoted in Cook, "Between Process and Product".

¹⁰¹ Nicholas Cook, 'Music as Performance', *The Cultural Study of Music: A Critical Introduction*, ed. Martin Clayton, Trevor Herbert and Richard Middleton (London: Routledge, 2003), 208.

to reflect on the creative ‘space’ or ‘field’ that the composer and the performer collaboratively inhabit. As Benson’s explains:

If we say (modifying Heidegger) that a piece of music opens up a world, it should be clear that this ‘world’ of the piece of music is one that is not self-contained. Rather, it is a world within a world, a musical space that is created within and out of a larger musical practice. Moreover, just as the world of Dasein is not a physical world but a world of activity, so the piece of music is likewise a world of activity. It is a “space” that is both created by and allows for musical activity.¹⁰²

The question arises as to what constitutes this ‘world of activity’ in which the composer and the performer partake collaboratively in the co-construction of new music. And how do the composer and the performer interact in this collaborative space, leading to specific compositional, notational, interpretative, and performative decisions? While the composer and the performer were the primary agencies interacting via the bi-directional feedback loop in the three collaborations reported, the overall identity of the resulting musical compositions was dependant on multiple other agencies such as:

- The score: notational representation of intended sonic structures
- The instrument:
 - the totality of its sonic possibilities (including extended piano techniques)
 - the resistance it creates when physically realising the notated structures into acoustic sound through performance
- The computer: live electronic processing and sampling techniques
- The recording environment:
 - the experimentation enabled by recording technology
 - the playback facility for critical assessment of the developing musical content and interpretation

¹⁰² Benson, *Improvisation of Musical Dialogue*, 148.

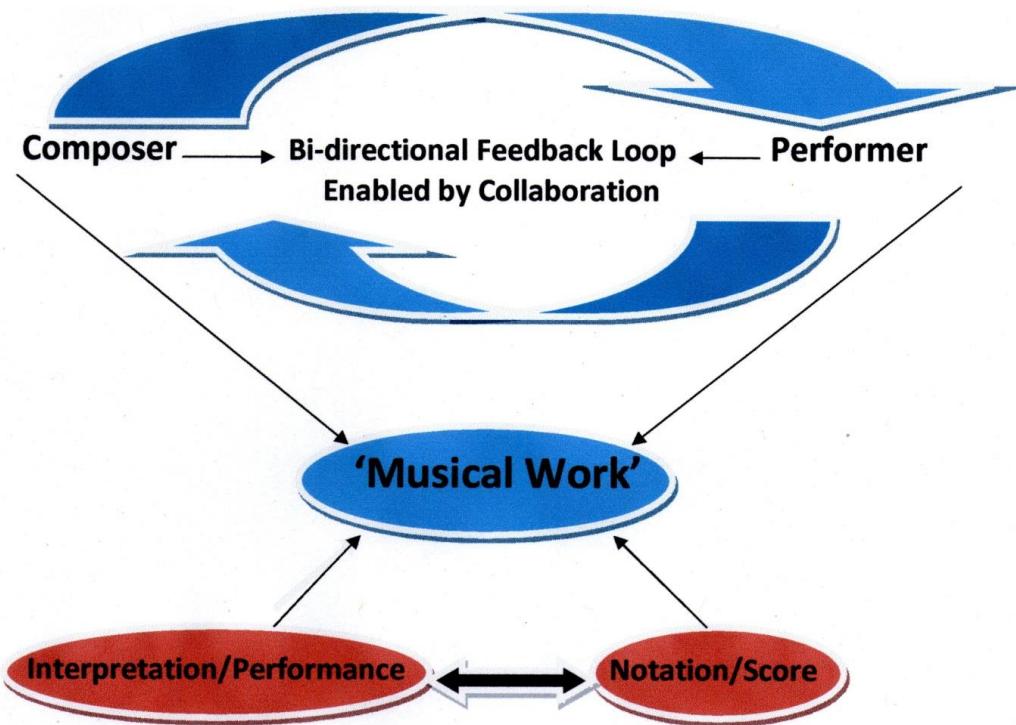
Both the score and the instrument were treated quite differently within the three collaborations. In the case of my work with Lyons, the score was not produced until the very final stages of collaboration, instead working with continuously developing musical sketches that were generated through the collaborative process. In contrast, Neal and Barbeler 'completed' their scores prior to the collaborative workshops, enabling time for me to learn the music before the joint work began. Similarly, while Lyons was interested in exploring the combination of acoustic sound, extended piano techniques, and live electronic processing intended to expand the sonic possibilities of the instrument, Neal and Barbeler approached their compositions in a more traditional way, treating the piano as an exclusively acoustic instrument. For them, the inherent tension that exists between the notation and the possibility of its physical execution in sound creates a 'resistance' between the performer and the instrument, which results in a 'virtuosic', expressive intensity of the music. This 'resistance' and the resulting effect of intensity become, in turn, inseparable from the identity of the pieces and the way they are experienced and perceived. As Aden Evans suggests:

Defined by its resistance, the instrument does not just yield passively to the desire of the musician. It is not a blank slate waiting for an inscription. Likewise, the musician does not just turn the instrument to his own ends, bending it to his will against whatever resistance it offers. Rather musician and instrument meet, each drawing the other out of its native territory.¹⁰³

In light of the discussion above, I propose an alternative model of music work-construction. In this model (Figure 3), work-realisation is achieved through the bi-directional creative input from both the composer and the performer and mediated through musical notation, the instrument, and the computer and recording technologies.

¹⁰³ Aden Evans, *Sound Ideas: Music, Machines, and Experience* (Minneapolis: University of Minnesota Press, 2005), 160–1.

Figure 3. The model of musical work-co-construction in contemporary practice.



As seen in this model, the interdependence between the multiple agencies involved in musical work-production and the bi-directional feedback loop between the composer and the performer established through collaboration enable the notation and interpretation to be realised and distilled into what we call 'a musical work'.

Having outlined the conceptual framework underpinning this research, the following section examines relevant theoretical models.

2.6 THEORETICAL PERSPECTIVES

As mentioned in the Introduction and in Chapter One, Vera John-Steiner's models of creative collaboration in artistic partnerships and the Geneplore model of creative cognition developed by psychologists Thomas Ward, Steven Smith, and Ronald Finke form the theoretical framework for this study and are detailed in Sections 2.6.1 and 2.6.2.

2.6.1 Creative Collaboration

Building on the historical-cultural theories of the Russian psychologist Lev Vygotsky, John-Steiner proposes a paradigmatic shift from the individualism prevalent in the twentieth-century thought towards essentially collaborative, socially conceived modes of knowledge-construction. She argues that artistic discovery, success, and innovation are substantially enhanced by collaborative practices and are most likely to occur within creative partnerships characterised by joint thinking, mutual appropriation of skills, emotional and intellectual interdependence, and shared creative vision.

John-Steiner identifies four models of artistic partnerships: Distributed, Complementarity, Family, and Integrative, suggesting that a degree of overlap will inevitably exist between these four collaborative patterns throughout the course of joint creative work: “collaboration often starts as one pattern and over time changes into another pattern”.¹⁰⁴

The most widespread and informal pattern of collaboration is the Distributed model. This model is characterised by exchange of information and joint exploration of ideas and shared interests between creative groups or individuals. Distributed collaboration may result in deeper understanding of relevant topics, personal insights, and in time, may lead to forming closer collaborative partnerships such as Complementarity, Family, or Integrative. Distributed collaboration is typically found in online communities and forums, shared studio spaces, as well as conferences, artist residencies, such as chamber music festivals where short-term collaborations are formed.

Complementarity, as a pattern of collaboration, is identified by John-Steiner as the most common mode of joint work artists tend to engage in. In this dynamic, the diversity in skills, temperaments, personalities, working styles, and thinking patterns lead to new discoveries, successful realisation of vision, and deepened self-knowledge as well as knowledge within the discipline. The division of labour is clearly established,

¹⁰⁴ John-Steiner, *Creative Collaboration*, 197.

yet the complementarity of expertise, disciplinary knowledge, and shared experience enrich each practitioner's practice. Within the Complementarity model, the roles and responsibilities of the creative partners are often based on temperaments, individual strength, and prior experience.¹⁰⁵ Complementarity is described by John-Steiner as "a consequence of a basic and often ignored reality: each individual realises only a subset of the human potential that can be achieved at a particular historical period".¹⁰⁶ Thus, joint partnerships are not merely a sum of individual skills but a creative outcome that far surpasses the 'additive power' of the individuals.¹⁰⁷ For John-Steiner, the outcomes of Complementarity collaborative partnerships are typically marked by an increased ability to take artistic risks, a heightened confidence in one's skills and technical abilities, increased capacity for creative problem-solving, expansion of creative possibilities, and often a greater artistic, professional fulfilment. 'Mutual appropriation' is identified by John-Steiner as the primary tenet behind the personal and disciplinary benefits afforded by Complementarity model. Furthermore, she argues that "mutual appropriation is a result of sustained engagement during which partners hear, struggle with, and reach for each other's thoughts and ideas. This is not only a cognitive process. It is a good example of both intellectual and emotional appropriation".¹⁰⁸ For both John-Steiner and Vygotsky, such interdependence lies at the core of the human development and maturation, creativity, and knowledge-construction. In her practical illustrations of the Complementarity model, John-Steiner provides examples of such notable creative partnerships as choreographer George Balanchine and composer Igor Stravinsky, writers Henry Miller and Anaïs Nin, and dancers/choreographers Martha Graham and Erick Hawkins.

The model of Family collaboration is best characterised by long-term creative relationships between individuals or, most commonly, groups whereby the roles of

¹⁰⁵ John-Steiner, *Creative Collaboration*, 198.

¹⁰⁶ John-Steiner, *Creative Collaboration*, 40.

¹⁰⁷ Moran and John-Steiner, "How Collaboration in Creative Work", 12.

¹⁰⁸ John-Steiner, *Creative Collaboration*, 199.

participants are flexible and tend to change over time.¹⁰⁹ Typically, these relationships begin as mentor–mentee dynamics across generations which, over time, evolve into more equal, collegial creative partnerships or, at times, husband and wife partnerships. In the field of music, John-Steiner draws on the relationship between composer-pedagogue Nadia Boulanger and composer Aaron Copland (and, subsequently, Copland’s fruitful artistic relationship with composer-conductor Leonard Bernstein) to illustrate patterns typical of Family collaborations. She points to the way Boulanger nurtured and stimulated Copland’s development as a composer and opened doors to professional opportunities which led to his artistic maturation. Later, Copland, as an established composer, met a young Bernstein and their relationship evolved from that of a highly hierarchical mentor–mentee model to what John-Steiner describes as “one of the most important artistic relationships of [Copland’s] life”.¹¹⁰ This relationship enabled both these musicians to evolve their artistry and careers beyond what might have been possible for them individually. Copland’s faith in Bernstein’s ability and his compositional and aesthetic mentorship and career support gave Bernstein a solid foundation in his formative years. Later, Bernstein conducted many of Copland’s works with great success.

According to John-Steiner, Integrative collaboration is a pattern of joint creative work which best enables transformative change and the creation of new artistic forms. Integrative collaborations are developed over prolonged periods of joint activity in which commitment and shared ideology is paramount. As John-Steiner suggests, these partnerships flourish through long-term intellectual, artistic dialogue, merging of beliefs, and, as she claims, through “the desire to transform existing knowledge, thought styles, or artistic approaches into new visions”.¹¹¹ The close collaboration between painters Picasso and Braque illustrates this mode of collaboration. John-Steiner points to their joint development of Cubism to exemplify the way in which

¹⁰⁹ John-Steiner, *Creative Collaboration*, 200–201.

¹¹⁰ John-Steiner, *Creative Collaboration*, 159–162.

¹¹¹ John-Steiner, *Creative Collaboration*, 203.

Integrative collaboration can transform both the participants and the very field/discipline in which they work. For Picasso and Braque, the integrative partnership provided an opportunity to perceive visual possibilities through each other's eyes and sensibilities. As John-Steiner points out, the continual verbal and visual dialogue between the two artists at times afforded a complete merging of styles, in which individual personalities were subsumed in the greater search for originality and transformation. John-Steiner suggests that a sense of profound artistic bonding and fusion is typical of this mode of collaboration.¹¹²

Whilst the Complementarity model was prevalent in all three projects undertaken in this study, my collaboration with Anthony Lyons, due to its length and scope, increasingly progressed towards a more Integrative model of work, as will be discussed in Chapter Six. In the following chapters, I will aim to highlight the way Complementarity and Integrative models evolved and influenced the three collaborations in the research and impacted on creative outcomes.

2.6.2 Creative Cognition – the Geneplore Model

To further enable and systematise the investigation into the creative processes within the three collaborations this thesis also draws on the body of creative cognition theories as presented in the *Handbook of Creativity* edited by Robert J. Sternberg.¹¹³ In particular, the approach to creative cognition by Ward, Smith and Finke (as outlined in their article “Creative Cognition”), builds on the premise that creativity is essentially a sequence of generative and exploratory phases of cognitive functioning informed by the constraints of a particular field of practice. Central to this approach is the ‘Geneplore’ model, which describes creative activity as a continuous iteration of generative and exploratory steps until the final creative outcome is achieved. As Ward et al. explain, the generative phase of the Geneplore model is characterised by an emergence of ‘preinventive’ mental structures that may initially take the form of an

¹¹² John-Steiner, *Creative Collaboration*, 68-70.

¹¹³ Ward, Smith and Finke, “Creative Cognition”, 189-212.

“untested proposal or even a mere germ of an idea [which] hold some promise of yielding outcomes bearing the crucial birthmarks of creativity: originality and appropriateness”.¹¹⁴ The exploratory phase in this model is characterised by interpreting, appropriating, distilling, and utilising these preinventive structures to find new and innovative solutions and expressive forms. The Geneplore model posits that “in most cases, one would alternate between generative and exploratory processes, refining the structures according to the demands or constraints of the particular task”.¹¹⁵

As Figure 4 demonstrates, the preinventive structures developed in the initial generative phase are subsequently interpreted for their emerging properties and implications for the desired outcome during the exploratory phase. The resulting creative solutions or insights are then focused and/or expanded conceptually by refining and re-conceptualising the initial preinventive ideas, then repeating the cycle as necessary.¹¹⁶ As Figure 4 illustrates, the bi-directional relationship between the generative and explorative processes in the creative cycle are informed by the product constraints which, according to Ward et al., can be imposed at any time throughout the generative or explorative phase of the cycle.¹¹⁷

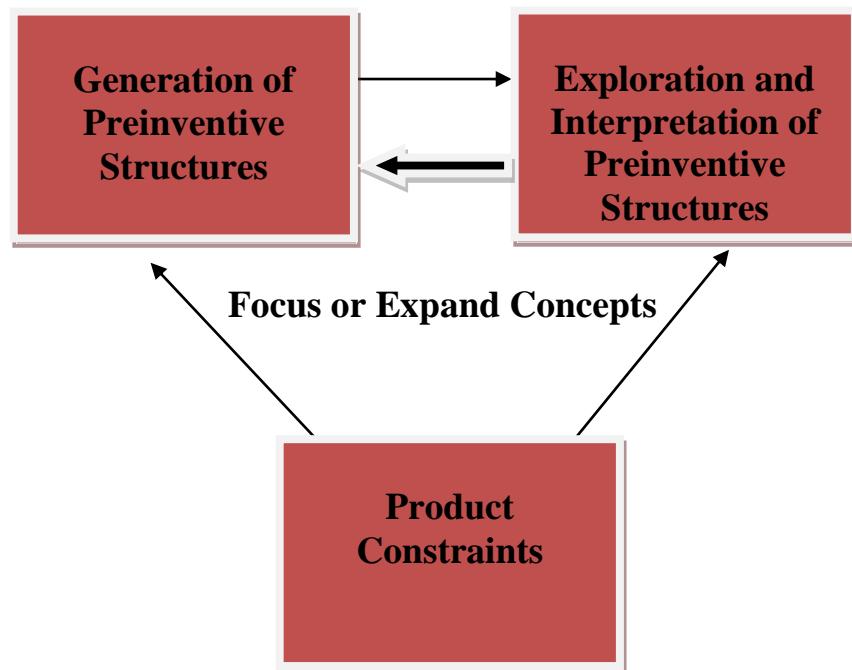
¹¹⁴ Ward, Smith and Finke, “Creative Cognition”, 191.

¹¹⁵ Ward, Smith and Finke, “Creative Cognition”, 191.

¹¹⁶ Ward, Smith and Finke, “Creative Cognition”, 193.

¹¹⁷ Ward, Smith and Finke, “Creative Cognition”, 193.

Figure 4. The Geneplore Model of creative cognition proposed by Ward, Smith and Finke.¹¹⁸



I draw on the creative cognition theory and the Geneplore model in reporting my collaboration with Anthony Lyons (Chapter Six). Due to its Integrative nature, whereby both the content and the interpretation were co-devised collaboratively, this project afforded the opportunity to examine the generative and the explorative processes typical of creative cognition most closely.

The following chapter details the epistemology and the methodological approaches employed in this research.

¹¹⁸ Ward, Smith and Finke, "Creative Cognition", 193.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Since it is clear that a sonic or visual artwork can sometimes transmit knowledge in non-verbal and non-numerical terms, we believe that any definition of knowledge needs to acknowledge these non-verbal forms of transmission. It also must include the idea that knowledge is itself often unstable, ambiguous and multidimensional . . . and cannot necessarily be conveyed with the precision of a mathematical proof. This concept of knowledge as unstable is fundamental to a postmodernist view of the world.¹¹⁹

3.1 OVERVIEW

This chapter details the methodological approaches employed in this thesis. Section 3.2 positions the study within the broader research context, examining contemporary perspectives on knowledge-construction. Section 3.3 explains the rationale for the research design chosen, detailing its epistemology, research modalities, and the specific methods used. Section 3.4 expands on this discussion, examining the specific data collection and analysis procedures and justifies their use within the project. Finally, Section 3.5 provides detailed examples of how data was analysed and interpreted using Thematic Analysis approach to generate a meaningful and systematic interpretation of the researched phenomena.

3.2 CONTEMPORARY PERSPECTIVES ON KNOWLEDGE

In seeking to understand the concept of 'knowledge', there has been much emphasis in twentieth century scholarship upon the dichotomy between theory and practice. However, more recently, there have been significant shifts in conceptualising 'knowledge' as a dialectic synthesis of the two. Coessens et al. posit that the notion of knowledge as abstract, objective, and deductive is gradually giving way to the

¹¹⁹ Smith and Dean, *Practice-led Research*, 3.

conception of knowledge as emergent, contingent, and inductive.¹²⁰ Similarly, the French sociologist Pierre Bourdieu argues that socially-acquired knowledge offers a schema and a structure in which the meaning of a particular situation, action, or behavior can be discerned within a particular socio-cultural context.¹²¹ The value and importance of tacit, embodied knowledge (embedded in and derived from the act of '*making*'), is emphasised by such writers as Maxine Sheets-Johnstone, Eleanor Stuble, Donald Schön, Gilbert Ryle, and Michael Polanyi.¹²² Reformulating Hannah Arendt's notion of *techne*, the 'know-how' behind the creation of artifacts that materialise human thought and activity, Coessens et al. propose that the relationship between 'working' and 'thinking' (in other words, practice and theory, or 'making' and 'knowing'), can be conceptualised as "tangible object and virtual knowledge: a 'know-how' which meets a 'know-that'".¹²³ The authors further suggest that knowledge is not only an unstable but an evolving concept, contingent on social and cultural conceptualisation and value. Thus, when considered within a contingent, temporal and subjective context (as is certainly the case with this research project), knowledge necessitates a continuous process of re-negotiation.¹²⁴ Coessens et al. conclude that:

It is clear that the knowledge contained in different acts of artistic practice require attention through these multiple points of view, acknowledging the tacit, as well as the explicit, the embodied as well as the cognitive, the *techne* as well as the *episteme* and *praxis*.¹²⁵

¹²⁰ Coessens, Crispin, and Douglas, *The Artistic Turn*, 80-82.

¹²¹ Pierre Bourdieu, *Logic of Practice* (Stanford: Stanford University Press, 1990).

¹²² Maxine Sheets-Johnstone, "Thinking in Movement", *The Journal of Aesthetics and Art Criticism* 39, no. 4 (1981): 399-407; Eleanor Victoria Stuble, "Being in the Body, Being in the Sound: A Tale of Modulating Identities and Lost Potential", *Journal of Aesthetic Education* 32, no. 4 (1998): 93-105; Donald Alan Schön, *The Reflective Practitioner: How Professionals Think in Action*, repr. ed. (Aldershot: Ashgate, 2003); Michael Polanyi, *Personal knowledge: towards a post-critical philosophy*, Repr. (with corr.) ed. (London: Routledge, 1998); Gilbert Ryle, *The Concept of the Mind* (London: Penguin Books, 1990/1949).

¹²³ Coessens, Crispin, and Douglas, *The Artistic Turn*, 81.

¹²⁴ Coessens, Crispin, and Douglas, *The Artistic Turn*, 82.

¹²⁵ Coessens, Crispin, and Douglas, *The Artistic Turn*, 82. The Greek terms *techne*, *episteme* and *praxis* were used by Aristotle, who distinguished three types of knowledge: *episteme* – the theoretical/'universal' knowledge; *praxis* – knowledge embodied in ethical and political actions; *techne* – the craft or art; knowledge through making or creating. It is interesting to note that even Aristotle considered *technē* to be a form of *epistêmē* as he saw the

Conceptualising ‘knowledge’ in this way informed the epistemological and methodological approaches chosen for this study, consistent with the inductive, emergent nature of the research.

3.3 APPROACHES TO RESEARCH DESIGN AND METHODS

As both Joseph Maxwell and Michael Crotty suggest, any research design must consider methodologies that best accommodate the nature of the research and provide justification for the choice of data collection methods.¹²⁶ Furthermore, Crotty argues that each research project will necessitate its own, unique set of methodological approaches developed to address the specific aims of the research. The methodological framework for this study was developed in accordance with Crotty’s research-design model comprising the following four components:

1. Identifying the methods to be used
2. Identifying the methodology governing the choice of methods
3. Identifying the theoretical paradigm governing the chosen methodology
4. Identifying the epistemology informing this theoretical paradigm¹²⁷

Table 1 details the specific approaches taken in relation to the four components outlined above (second row) and provides a brief description/explanation for each of the concepts (third row).

practice of art or craft as grounded in a theoretical understanding. Coessens et al. further suggest that this ‘tricotomy’ of knowledge – theoretical, practical, and creative – was embedded in the social structure of the ancient Greeks, where no clear demarcations existed between the subject and the object.

¹²⁶ Joseph Maxwell, *Qualitative Research Design. An Interactive Approach* (Thousand Oaks, CA: SAGE, 2005); Michael Crotty, *The Foundations of Social Research: Meaning and Perspective in the Research Process* (Thousand Oaks, CA: SAGE), 2003.

¹²⁷ Crotty, *Foundations of Social Research*, 214.

Table 1. Research design model adapted from Crotty for this study.

Crotty's Proposed Model	<i>Epistemology</i>	<i>Theoretical Paradigm</i>	<i>Methodological Approaches</i>	<i>Methods for Data Collection</i>	<i>Methods for Data Analysis</i>
Specific Approaches Chosen for this Thesis	Social Constructionism	Interpretivism	Action-Research; Practice-Led /Artistic Research; Performative Research	Audio-Visual Documentation; Reflective Journals; Email correspondence; score sketches	Thematic Analysis
Brief Description of Concepts and Procedures	Knowledge is constructed through social and cultural conceptualisation and value. Understanding the phenomena is embedded in lived experience where meanings ascribed to objects, events and behaviours are derived from the social context and cultural discourse.	Meaning and knowledge are not static – they are negotiated, developed and modified through social interactions and socially-acquired experiences. Theory is not separate from practice; rather episteme and techne exist in symbiotic relationship to each other.	Continuous cycles of practice and reflection. Practice informs theory – theory informs practice. Tacit knowledge underpins explicit knowledge. Rigorous self-reflexivity is paramount. Relies on natural settings to study phenomena. Bi-directional relationship between individual practice and broader socio-cultural context.	All collaborative sessions are video or audio recorded, with important sections transcribed verbatim. Reflective journals, email exchanges pertinent to collaborations and score drafts/sketches used for analysis through coding.	Employed in qualitative research methodologies. Relies on cycles of coding to distil central themes. Narrative relies on 'rich' description of data and is built on themes and conceptual categories derived from the codes. Linkage of codes/themes to the aims and questions of investigation is central to interpretation of findings from the data.

3.3.1 Epistemology and Theoretical Paradigm Rationale

According to Crotty, ‘constructionism’ takes the view that “all knowledge, and therefore all meaningful reality as such, is contingent upon human practices being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context”.¹²⁸ In essence, social constructionism maintains that all social phenomena and objects of consciousness (ideas, concepts, practices) are constructed by particular groups within society. Thus, Crotty explains, constructionism rejects the objectivist/positivist stance that meaning and reality exist as ‘absolutes’ and are therefore not contingent upon the consciousness of the perceiver. Rather, constructionism proposes that truth and meaning emerge out of our conscious engagement with the realities of our world, whereby meaning is “not discovered, but constructed”.¹²⁹

Falling under the broader umbrella of social constructionism, the interpretivist view holds that meaning is inherently subjective and contingent upon social context and cultural-historical conditioning. As Crotty suggests, interpretivism denies the objectivity of the positivist approach to knowledge and reality. Rather, it seeks to identify emergent patterns of meaning through reflective engagement with practice and experience.¹³⁰ This notion of the construction of knowledge and reality through the experiential engagement with the world within a specific socio-cultural context provides an appropriate framework in which to examine the artistic process of collaboration between the performer and the composer and identify ways in which it impacts on the realisation and interpretation of musical content both in notation and in performance. The nature and content of the present study are readily accommodated within the interpretivist paradigm with outcomes being suggestive and emergent, rather than objective and prescriptive. In this context, artistic practice as research can be viewed as an active process of ‘fact construction’ in which meaning is

¹²⁸ Crotty, *Foundations of Social Research*, 42.

¹²⁹ Crotty, *Foundations of Social Research*, 8-9.

¹³⁰ Crotty, *Foundations of Social Research*, 9.

derived through reflecting on the social interactions and collaborative practices of the composer and the performer and the rigorous analysis and interpretation of the resulting data.

3.3.2 Methodological Approaches

As indicated in Table 1, the research design developed for this study is underpinned by several methodological approaches: action research, practice-led (artistic) research, and performative research models. The function and relevance of these models within the context of the present study are explained in the following sections.

3.3.2.1 Action Research

In the 1940s, the American psychologist Kurt Lewin constructed a theory of action research that consisted of "proceeding in a spiral of steps, each of which is composed of planning, action and the evaluation of the result of action".¹³¹ Lewin proposed that real understanding of and positive change within social practices requires that the researcher-practitioner engages with the "real social world in all phases of inquiry".¹³² As Janet Masters suggests in her article, "The History of Action Research", the primary tenets of action research model are empowerment of participants, collaboration through participation, acquisition of knowledge, and positive change in the practice itself that are achieved through cyclic iterations of planning, acting, observing and reflecting.¹³³ Since the present study engages with an essentially social practice involving interactions between a composer and a performer in a shared goal of constructing and realising new musical works, action research was chosen as an appropriate umbrella model. As a result, the research process alternated between

¹³¹ Janet Masters, "The History of Action Research" in *Action Research Electronic Reader*, ed. I. Hughes, <http://www.behs.cchs.usyd.edu.au/arow/Reader/rmasters.htm> (accessed 12 March 2010).

¹³² Janet Masters, "Action Research and Action Learning for Community and Organisational Change", <http://www.scu.edu.au/schools/gcm/ar/arr/arow/rmasters.html> (accessed 12 March 2010).

¹³³ Masters, "Action Research".

periods of practice and reflection, allowing for continual re-evaluation and refinement of both the data collection and analysis techniques and the artistic practice itself.

As proposed by Linda Candy, practice-led research (often termed ‘artistic research’ in the creative arts), falls under the broader category of ‘action research’ and is “concerned with the nature of practice and leads to new knowledge that has operational significance for that practice”. Candy defines this widely-practiced form of research in the creative arts as an “original investigation undertaken in order to gain new knowledge partly by means of practice and the outcomes of that practice”.¹³⁴ According to Donald Schön, practice-led/practice-based enquiry enables practitioners to gain a better understanding about their practice, which can then be used intentionally for the advancement of the discipline as a whole.¹³⁵

Engaging in practice-led research and its methodological strategies has provided researchers with an invaluable tool to bridge the schism between practice and research in academia that has (until recently) significantly limited the body of knowledge available in the fields of music performance and collaborative creativity. In the case of the present project, the practice-led research model enabled positioning the composers and myself as both the subject and the object of the study in order to examine and evaluate the creative processes in composer–performer interactions and re-appraise the ‘text’/performance dichotomy within contemporary art music practice. Subsequently, through practical experimentation, exploration, and reflection on the collaborative processes in this research, it was possible to generate and, moreover, articulate new insights into how the practices of composition and performance can be re-integrated to achieve a more coherent, congruent realisation and transmission of new musical material. As Coessens et al. suggest:

[Engaging in artistic research] means not only wrestling tangible insights from the wandering, searching viewpoint of the artist in his

¹³⁴ Linda Candy, “Practice-Based Research -A Guide”, Vol. 1, *CCS Report* (2006): 1, <http://www.creativityandcognition.com/resources/PBR%20Guide-1.1-2006.pdf> (accessed 25 May 2011).

¹³⁵ Donald A. Schön, *The Reflective Practitioner: How Professionals Think in Action* (Basic Books, New York, 1983), quoted in Candy, “Practice-Based Research”, 19.

or her creative process, but also a movement of re-‘search’, of re-immersing oneself in the processes of searching and finding, trying and experimenting, rather than being content, once the artwork is achieved and declared ‘complete’, to move on and jettison the processes that brought it into being and the consequences of its existence.¹³⁶

3.3.2.2 Performative Research

The term ‘performative research’ was first proposed by Brad Haseman in 2006 in response to an increasing awareness that research in the performing arts calls for a consideration of a new research paradigm able to accommodate and validate the forms of knowledge likely to emerge from creative practice.¹³⁷ As such, performative research can be seen as a sub-category of the artistic research model. Haseman argues for “privileging practice in the research process”, where the practice is the primary vehicle of research and constitutes a significant part of its outcomes. In this research paradigm, the ‘scholarship’, or ‘claims to knowledge’ are offered through the ‘symbolic language and form’ embedded in the practice.¹³⁸ Shirley McKechnie’s work in the field of contemporary dance provides an example of this. McKechnie states that creativity in the context of contemporary dance “epitomises the challenges for the temporal arts in documenting, describing, quantifying, and explaining unspoken knowledges”.¹³⁹ Similarly, within the context of this thesis, the folio of the recorded new works is inseparable from the discussion that elucidates the processes that led to their realisation, interpretation, and transmission. Thus, the thesis as a whole (the dissertation and the recordings contained in the folio) attempts to articulate the ‘unspoken knowledges’ (McKechnie’s term) probed through cycles of creative action and critical reflection.

¹³⁶ Coessens, Crispin, and Douglas, *The Artistic Turn*, 92.

¹³⁷ Smith and Dean, *Practice-led Research*, 6.

¹³⁸ Anne Brewster, “Beachcombing: A Fossickers’ Guide to Whiteness and Indigenous Sovereignty”, quoted in Smith and Dean, *Practice-led Research*, 126-7.

¹³⁹ Shirley McKechnie and Catherine Stevens, “Knowledge Unspoken: Contemporary Dance and the Cycle of Practice-Led Research, Basic and Applied Research, and Research-led Practice”, quoted in Smith and Dean, *Practice-led Research*, 85.

3.4 DATA COLLECTION AND ANALYSIS

As outlined in Table 1, the data set in this study is comprised of audio and video recordings of all collaborative sessions, reflective journals, email correspondence, annotated scores, and musical sketches.¹⁴⁰ The audio and video documentation of the collaborative sessions captured the unfolding processes in which the musical material was workshopped and discussed from the notational, structural, and performative perspectives (detailed in Chapters Four, Five, and Six). Furthermore, the audio and video recordings enabled a full reconstruction of events as they occurred, and, most importantly, afforded an opportunity to review, transcribe (where necessary), code, and analyse these events retrospectively from a more neutral and objective emotional stance. Reflecting in this way afforded some distance from the experience necessary to make clear and valid assessment of the findings. The use of reflective journals further assisted in capturing the collaborative processes as they unfolded and in recording my thoughts, emotions, and reflections in response to the collaborative interactions and experiences.

The use of score excerpts and musical sketches throughout the discussion requires a special mention. Specifically, in the Neal–Lifschitz and Barbeler–Emmerson–Lifschitz case studies, the original scores were heavily ‘marked-up’ in the course of the collaborative sessions, reflecting the changes made to the musical material and its notational representation. As neither Neal nor Barbeler amended their scores post-collaboration to incorporate the modifications made, the original scores with handwritten markings remained the only evidence of these modifications and hence were used to illustrate the discussion in Chapters Four, Five, and Six.¹⁴¹ This approach to score-realisation (or work-realisation) suggests that performer-composer collaboration is in its essence a fluid and dynamic process, with each collaboration yielding a different experience and outcome, which can never be fixed through notation alone.

¹⁴⁰ Collaborative sessions with Kate Neal were captured on audio recording only as no access to video recording equipment was available at the time.

¹⁴¹ Red circles and boxes around particular passages in the musical examples as well as red symbols, markings and text were later added as a convenient way to indicate/identify sections of the music discussed and to highlight the notational and interpretative changes that occurred through collaboration.

In the case of Neal (and, to a smaller extent, Barbeler), email correspondence formed an important source of data and was used to substantiate the discussion in Chapters Four and Five, reflecting the nature of these artistic relationships. Finally, as is characteristic of artistic research, the ‘story’ of each collaboration, constructed through the rich lived experience of interacting with the musicians involved in this study, played a significant role in the final narrative presented in the dissertation.

3.4.1 Data Analysis

The method of Thematic Analysis was chosen to analyse and interpret the extensive data set collected. According to Virginia Braun and Victoria Clarke, Thematic Analysis is employed in qualitative research for “identifying, analysing, and reporting patterns (themes) within data”.¹⁴² Thematic Analysis facilitates the organisation and ‘rich’, detailed description of the data set and, as proposed by Pat Bazeley, enables the researcher to interpret and connect the patterns and themes within the data to arrive at a meaningful and coherent model for explaining the various aspects of the research.¹⁴³ As Anselm Strauss and Julie Corbin explain, Thematic Analysis is carried out by reducing the entire data set to a series of *concepts* (codes), which are then combined into more abstract, overarching *categories*. Through a series of propositional statements, these categories are laid open, compared, and related to the original questions and aims of the research to arrive at an integrated, comprehensive thematic map of the findings.¹⁴⁴

According to Braun and Clarke, Thematic Analysis falls into two broad categories: essentialist/realist and constructionist. The essentialist method of analysis “reports experiences, meanings and the reality of participants” while the constructionist method “examines ways in which events, realities, meanings, experiences and so on

¹⁴² Braun and Clarke, “Using Thematic Analysis in Psychology”, 77–101.

¹⁴³ Pat Bazeley, “Analysing Qualitative Data: More than ‘Identifying Themes’”, *Malaysian Journal of Qualitative Research*, 2 (2009): 6–22, http://www.researchsupport.com.au/More_themes.pdf (accessed 17 January 2012).

¹⁴⁴ Strauss and Corbin, *Basics of Qualitative Research*, 12.

are the effects of a range of discourses operating within society".¹⁴⁵ For this study, both the essentialist and the constructionist methods were employed as they seemed of equal importance to the nature of the project and the conceptual/theoretical framework that underpins it.

In addition, Braun and Clarke articulate two approaches, the inductive and the theoretical, through which the themes and patterns within the data set can be identified. In the inductive approach, the themes and patterns are linked directly to the data set and are not driven by the pre-existing "coding frame" or theoretical perspectives. The theoretical approach is oriented towards a more specific research question and theoretical/analytic interest of the researcher.¹⁴⁶ In the context of this study, both the inductive and the theoretical approaches were employed. Specifically, the initial coding of the data was undertaken with an inductive approach without a particular "coding frame" in mind. This process generated an extensive list of codes covering a broad range of topics, including the social interactions between collaborators; funding in the performing arts sector; professional opportunities through collaboration; multi-faceted roles of the musicians in the contemporary music milieu; establishing roles and responsibilities and managing funds and administrative tasks amongst collaborators; negotiating friction and conflict in collaborations; as well as topics more specifically related to the collaborative generation, realisation, and interpretation of new musical material. Upon subsequent cycles of coding and reflection, many of these topics, while important to the broader discussion of collaborative relationships between composers and performers, seemed to fall outside the essential enquiry of this thesis. Accordingly, subsequent cycles of coding and analysis employed a more theoretically oriented approach with a specific focus on identifying the collaborative processes leading to the realisation of the three new works.

¹⁴⁵ Braun and Clarke, "Using Thematic Analysis in Psychology", 84.

¹⁴⁶ Braun and Clarke, "Using Thematic Analysis in Psychology", 87–88.

It is important to note that, as Sharon Merriam suggests, despite the rigorous and detailed nature of the Thematic Analysis approach, “analysis and interpretation – our study’s findings – will reflect the constructs, concepts, language, models, and theories that structured the study in the first place”.¹⁴⁷ Similarly, in his book *The Coding Manual for Qualitative Researchers*, Johnny Saldana quotes Lawrence Sipe and Maria Paula Ghiso in saying that “all coding is a judgment call since we bring our subjectivities, our personalities, our predispositions, [and] our quirks to the process”.¹⁴⁸

3.5 THEMATIC ANALYSIS AS APPLIED IN THIS STUDY: CODES, CATEGORIES, THEMES

For the purposes of consistency, the data in this thesis was analysed and reported according to the Thematic Analysis protocols and the nomenclature of terms proposed by Braun and Clarke and Saldana.¹⁴⁹ Despite a degree of inconsistency and even contradictions throughout the literature, most manuals on Thematic Analysis procedures converge on the following analytical framework:

1. Identifying and defining codes within the data set
2. Organising codes into broader conceptual categories
3. Developing a ‘thematic map’ through comparison and pattern analysis of the categories, often leading to hypothesis or theory, as in grounded theory approach

These three levels (or stages) of analysis represent an analytic trajectory from the specifics of the given data set towards a more abstract, generalised theorisation of the data and its implications for the broader disciplinary discourse.

¹⁴⁷ Sharon Merriam, *Qualitative Research and Case Study Applications in Education* (CA: Jossey-Bass Publishers, 1998), 48.

¹⁴⁸ Saldana, *The Coding Manual*, 8.

¹⁴⁹ Braun and Clarke, “Using Thematic Analysis in Psychology”; Saldana, *The Coding Manual*.

3.5.1 Stage One – Identifying Codes

According to Saldana, the first stage of analysis involves identifying the preliminary codes throughout the data set. To achieve this, the raw data is broken into small chunks of written or recorded (audio/visual) material which are then labelled with an appropriate code that “symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data”.¹⁵⁰ Subsequently, through several cycles of coding, the codes are refined and re-configured, and all data pertaining to a specific code is collated and organised together to facilitate the next, higher level of analysis.

The complete formal Thematic Analysis process was first performed on the data set pertaining to my collaboration with Kate Neal. The initial stages of analysis involved close familiarisation with the data through reviewing and transcribing the audio recordings of the two collaborative sessions in Princeton, re-reading pertinent reflective journal entries, examining the markings and notes made in the score by Kate and me during the workshop sessions, and organising and re-reading email correspondence relevant to aspects of this collaboration. Initial ideas and responses to material reviewed were jotted down with some thoughts on the possible codes, categories, and themes implied within the data.

The early coding cycles involved working with small chunks of text (reflective journals, emails, and score notes) and short segments of the audio recordings (of the collaborative sessions), to identify succinct verbal descriptions (codes) that best characterised a particular extract of the data. As the ideas developed and crystallised through iterated cycles of coding, codes were modified, collapsed into a broader code, or entirely discarded. As Saldana notes:

Coding is a cyclical act. Rarely is the first cycle of coding data perfectly attempted. The second cycle (and possibly the third and fourth, and so on) of recoding further manages, filters, highlights, and focuses the salient features of the qualitative data record for

¹⁵⁰ Saldana, *Coding Manual for Qualitative Researchers*, 3.

generating categories, themes, and concepts, grasping meaning, and/or building theory.¹⁵¹

Table 2 presents an example of the code-book generated through several cycles of coding the data from the Kate Neal collaboration.¹⁵²

Table 2. Example of codes identified in Neal–Lifschitz data set.

Analysis feeds into performative interpretation	Co-construction of identity through performance.
Breakthroughs and excitement	Composer's intentions are flexible
Building shared language	Collaboration and communication
Co-construction of work identity	Collaboration and creativity
Composer helps to understand notation	Collaboration and transmission
Composer helps to understand intentions	Dialogue leads to changes in interpretation
“Completing” notation	Dialogue leads to changes in notation
Changes in pedalling	Deepening connection
Changes in texture	Disagreement leads to stronger concept
Changes in phrasing	Ease in collaboration
Changes in tempo	Encouragement
Changes in dynamics	Effectiveness of felt/tacit communication
Changes in articulation	Experimentation leads to better decisions
Changes in expressive intent	Experimentation leads to changes in notation
Collaboration enhances imagination	Experimentation leads to changes in playing
Collaboration enhances confidence	Flexibility of notation
Composer as interpreter	Feedback loop

3.5.2 Stage Two – From Codes to Categories

The second level of analysis involves codifying and categorising the data – a process of applying (and re-applying) codes to qualitative data and arranging the codes in a systematic manner that enables the researcher to glean the patterns and connections within the data. As Carol Grbich suggests, the process of codifying and categorising enables the data to be “segregated, grouped, regrouped and re-linked in order to consolidate meaning and explanation”.¹⁵³ This phase of analysis involves a further examination and reassembling of the codes and concepts and begins to move further along the analytic trajectory explained above: from the specifics of the data towards a

¹⁵¹ Saldana, *Coding Manual for Qualitative Researchers*, 8.

¹⁵² Examples of the actual data extracts from which the codes in each of the three collaborations originated are provided within the body of individual case study chapters.

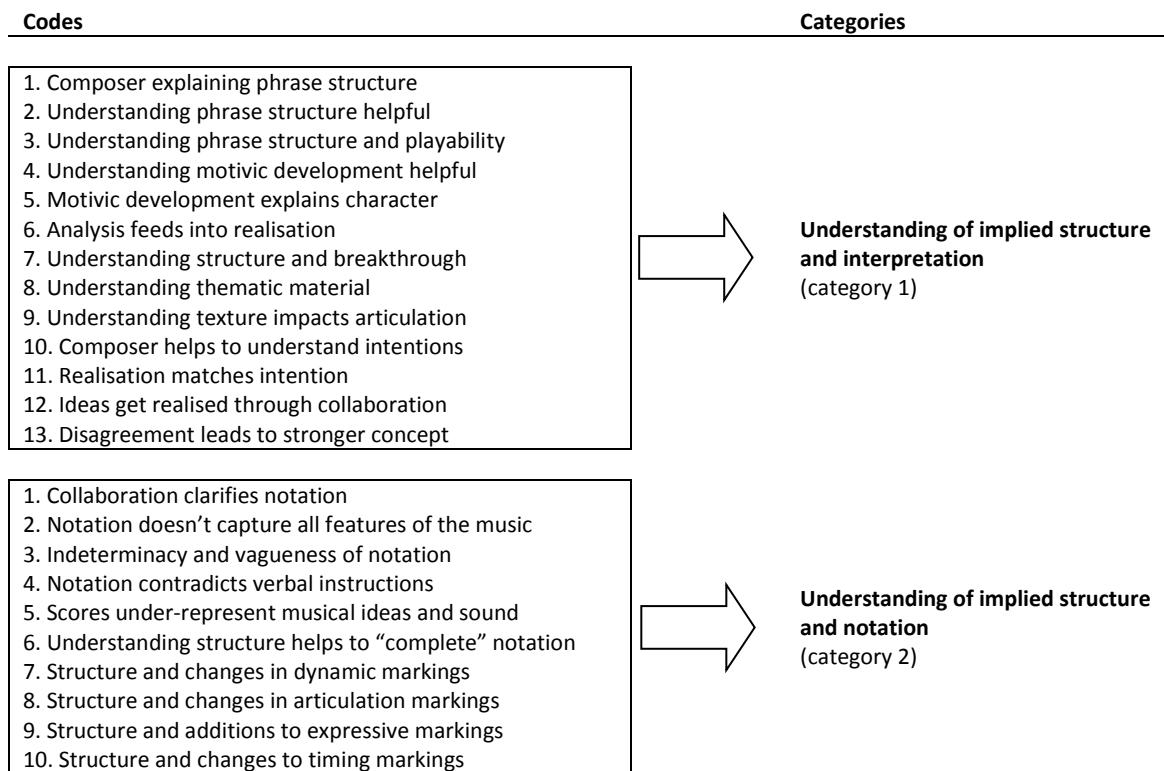
¹⁵³ Carol Grbich, *Qualitative Data Analysis: An Introduction* (SAGE Publications, 2007), 21.

more abstract thematising and theorising of it. According to Lyn Richards and Janice Morse, “categorising [data] is how we get ‘up’ from the diversity of data to the shapes of the data, the sorts of things represented. Concepts [or categories] are how we get up to more general, higher-level, and more abstract constructs”.¹⁵⁴

Having identified and refined the codes in the first phase of analysis, the next step involved reflecting on the possible broader conceptual categories into which clusters of codes seemed to fall. An example of this process is demonstrated in Figure 5.

¹⁵⁴ Lyn Richards, Janice Morse, *README FIRST for a User’s Guide to Qualitative Methods* (SAGE Publications, 2007), 157. Note that the authors use ‘concepts’ interchangeably with ‘categories’ which is inconsistent with the nomenclature chosen for the present analysis in which ‘concepts’ are synonymous with ‘codes’ but not with ‘categories’.

Figure 5. Condensing codes into broader conceptual categories.



Having thus categorised the codes into the conceptual categories, the analysis progressed onto the third analytical phase: generating a broader thematic map and explanation of the data.

3.5.3 Stage Three – Generating a Thematic Map of the Data: From Categories to Themes

As Saldana explains, “when the major categories are compared with each other and consolidated in various ways, you begin to transcend the ‘reality’ of your data and progress toward the thematic, conceptual, and theoretical”.¹⁵⁵ In this phase of analysis the relationships and patterns within the categories are examined and checked against both the coded extracts and the entire data set. Properties and dimensions of the

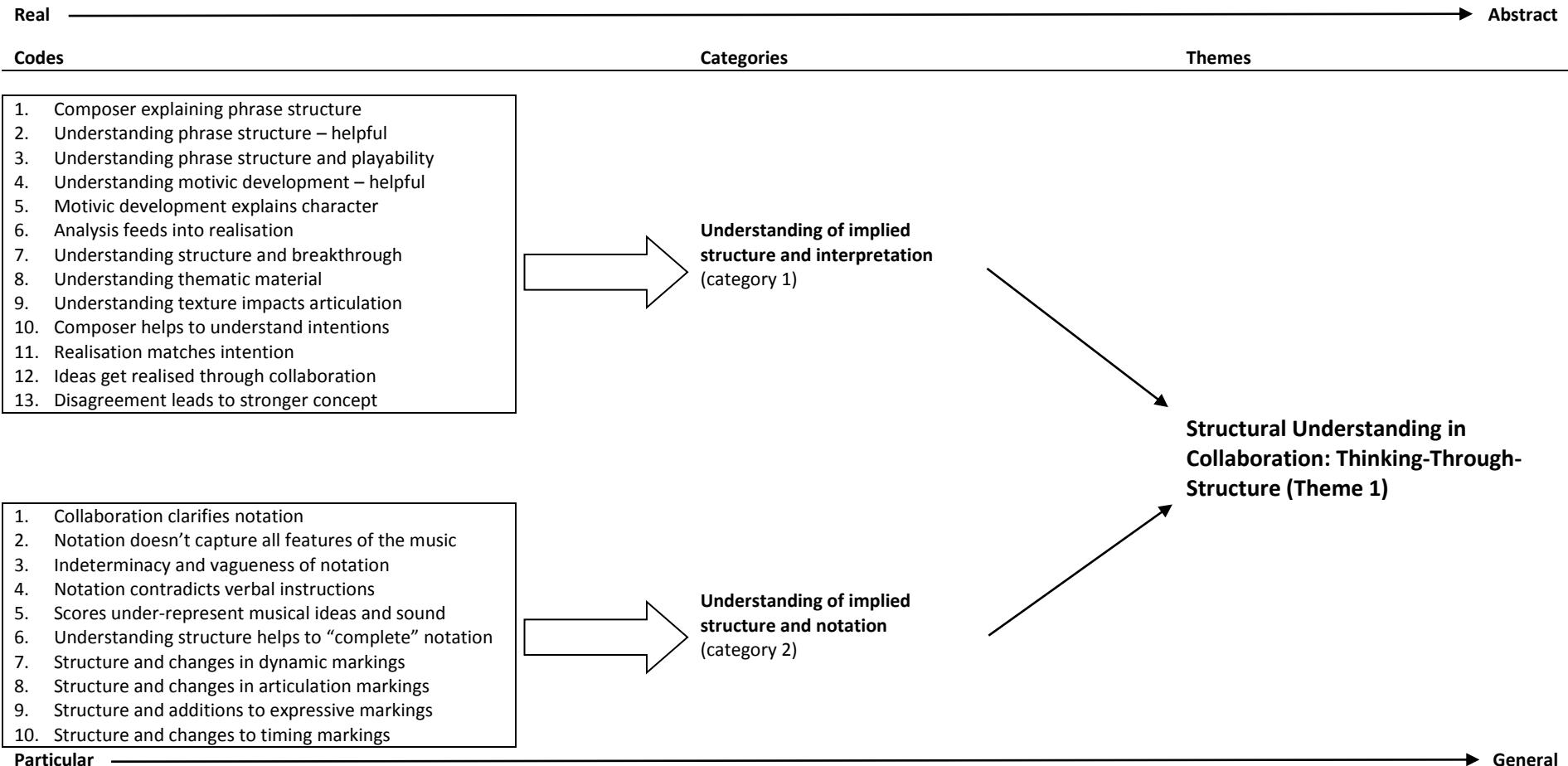
¹⁵⁵ Saldana, *Coding Manual for Qualitative Researchers*, 13.

categories are laid out, refined further and are integrated into a coherent thematic map which enables the development of propositions and a more precise and meaningful explanation of the studied phenomena.¹⁵⁶ This third stage of analysis aims to progress from the particular to the general by extrapolating predictable patterns observed within a specific study onto other related contexts in which similar patterns or phenomena might occur. Figure 6 demonstrates an example of how the categories derived from the original codes were distilled into a primary theme. The code–category–theme model presented is adopted from Saldana’s “streamlined codes-to-theory model for qualitative inquiry”.¹⁵⁷

¹⁵⁶ Strauss and Corbin, *Basics of Qualitative Research*, 12.

¹⁵⁷ Saldana, *Coding Manual for Qualitative Researchers*, 12.

Figure 6. Example of the thematic map generated for Neal–Lifschitz collaboration.



The thematic map generated for my collaboration with Neal served as a point of departure for the analysis and interpretation of the subsequent two case studies (Barbeler–Emmerson–Lifschitz and Lyons–Lifschitz). Thus, the process of analysis and conceptualisation of the data in this research was one of gradual expansion, with each project revealing additional codes and hence new or modified categories and themes unique to each of the collaborations.

The next chapter reports the Neal–Lifschitz project, employing personal narrative, critical reflection, and pertinent data extracts to support the discussion.

CHAPTER FOUR

PARTICLE ZOO II – FROM INCEPTION TO PERFORMANCE

(SONYA LIFSCHITZ AND KATE NEAL)

4.1 INTRODUCTION

This chapter examines the collaborative work I undertook with composer Kate Neal in 2008–2010 on the chamber piano concerto *Particle Zoo II*. The account of this collaboration is presented using personal narrative and pertinent data extracts comprising the verbatim transcriptions of dialogue (drawn from the collaborative workshops), sound files,¹⁵⁸ email exchanges, reflective journal excerpts and score examples.¹⁵⁹ This broad cross-section of data provides a detailed and authentic characterisation of this case study. Section 5.2 details the Thematic Analysis process and presents the thematic map distilled from cycles of coding and analysis of raw data (Table 3 and Figures 7–8). This thematic map underpins the subsequent discussion in this chapter. Sections 5.3–5.6 examine the collaborative processes through which the codes, categories and themes presented in the thematic map were identified. The discussion is presented chronologically, tracing the background to the project, the initial stages of conception and rapport-building (including a preliminary collaboration on Kate’s composition *Song for a Comb* 2007), the score learning phase, and the two main collaborative workshops (2010) leading to the world premiere of *Particle Zoo II* (Princeton, May 11, 2010). Finally, Section 5.7 presents a short summary of this collaboration. The account aims to demonstrate how the musical material and its interpretation evolved and was ultimately realised through cycles of bi-directional

¹⁵⁸ The sound files referred to in this chapter are found on DVD 3 (Supporting Material)

¹⁵⁹ The red circles and boxes around particular passages in the musical examples are intended as a convenient way to indicate/identify the part of the score being discussed. All symbols, markings and text appearing in red on the musical examples are intended to indicate the changes that occurred as a result of collaboration and are not part of the composer’s original score.

feedback between Kate and me. This was achieved by reflecting on the recurring, overarching patterns and themes within the data to construct a meaningful and structured explanation of various aspects of this collaboration.

4.2 DATA ANALYSIS AND THEMATIC MAPPING

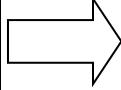
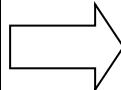
The data collected in this collaboration was subjected to a rigorous process of Thematic Analysis achieved through the coding process detailed in Chapter Three (Section 3.5). Several cycles of coding yielded 69 codes (Table 3), reflecting the broad range of data that emerged, from specifics of phrasing, articulation and dynamics to more general concepts of “imagery and felt knowledge”.

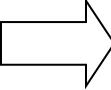
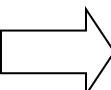
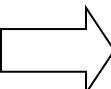
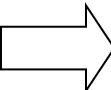
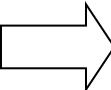
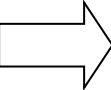
Table 3. Final code-book generated for Neal–Lifschitz collaboration.

Analysis feeds into realisation	Resistance of the instrument
Clarifying intention through feedback loop	Scores under-represent musical ideas and sound
Collaboration leads to changes in notation	Score is not ‘authoritative text’
Collaboration leads to changes in playing	“Sharp” = heavy
Collaboration enhances imagination	Slurs can often correspond to “fingery” articulation
Collaboration aids motivation	Slurs don’t always mean smooth/legato
Collaboration leads to breakthroughs	Small slurs = emphasis
Composer explaining phrase structure	Small slurs =heavy
Composer as interpreter (interchangeable roles)	Small slurs = structurally important
Composer helps to understand intentions	Structure and changes in dynamic markings
Composer’s intentions are flexible	Structure and changes in articulation markings
Deepening connection	Structure and additions to expressive markings
Discussing notation through feedback loop	Structure and changes to timing markings
Ease in collaboration and laughter	Taking creative risks
Ease of playability – important	Thinking together
Encouragement	Transcending notational limitations
Experimenting together and interpretive decisions	Trust
Excitement and fun	Using metaphor to help understanding
Gesture/effect more important than notes	Using singing to clarify meaning of words
Ideas get realised through collaboration	Using physical gesture to clarify meaning of words
Indeterminacy and inconsistency of notation	Understanding patterns in pedalling
Informal communication	Understanding patterns in articulation
Interpreting easier through collaboration	Understanding patterns in phrasing
Interpreting notation more accurate	Understanding patterns in creating desired effect
“Like xylophone” = articulated finger attack	Understanding phrase structure helpful
“Manic/crazy” = drive, strong forward direction	Understanding phrase structure and playability
Motivic development explains character	Understanding motivic development helpful
Mutual excitement about project	Understanding structure and breakthrough
Notation doesn’t capture all features of music	Understanding structure helps to “complete” notation
Notation contradicts verbal instructions/ intentions	Understanding thematic material
Patterns of inconsistency in notation	Understanding texture impacts articulation
“Pointillistic” = important, heavy, accented	Warmth
Positive	When too hard drop the notes, keep the tempo
Praise and respect	
Rapport and support	
Realisation matches intention	

As explained in Section 3.5, these codes were subsequently examined numerous times (yielding additional sub-codes) and condensed into broader categories, progressing from the specific features of the data to the more conceptual and abstract, as shown in Figure 7.

Figure 7. Condensing codes into conceptual categories.

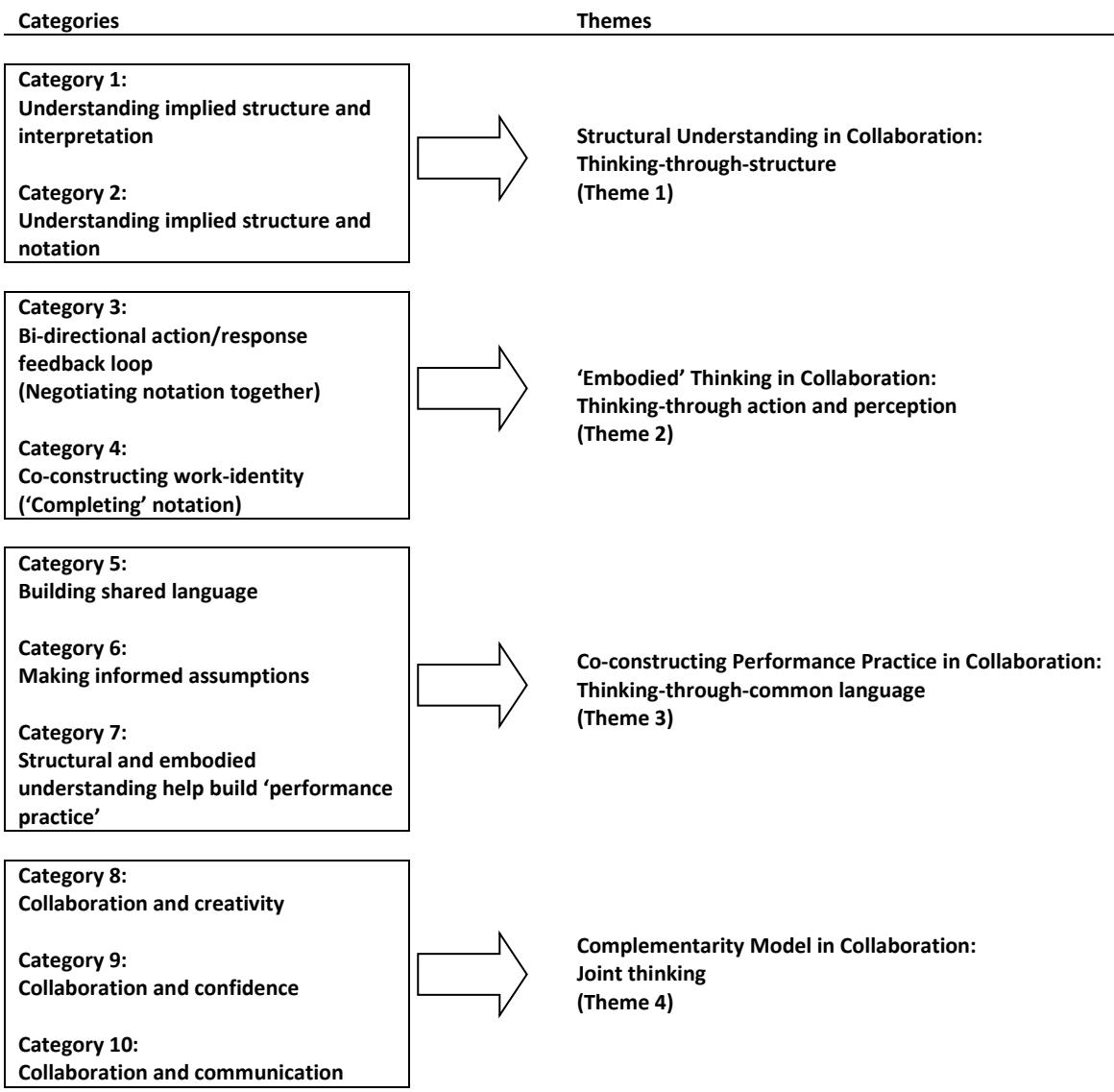
Codes	Categories
<ol style="list-style-type: none"> 1. Composer explaining phrase structure 2. Understanding phrase structure helpful 3. Understanding phrase structure and playability 4. Understanding motivic development helpful 5. Motivic development explains character 6. Analysis feeds into realisation 7. Understanding structure and breakthrough 8. Understanding thematic material 9. Understanding texture impacts articulation 10. Composer helps to understand intentions 11. Realisation matches intention 12. Ideas get realised through collaboration 13. Disagreement leads to stronger concept 	 Understanding implied structure and interpretation (category 1)
<ol style="list-style-type: none"> 1. Collaboration clarifies notation 2. Notation doesn't capture all features of the music 3. Indeterminacy and inconsistency of notation 4. Notation contradicts verbal instructions 5. Scores under-represent musical ideas and sound 6. Understanding structure helps to "complete" notation 7. Structure and changes in dynamic markings 8. Structure and changes in articulation markings 9. Structure and additions to expressive markings 10. Structure and changes to timing markings 	 Understanding implied structure and notation (category 2)
<ol style="list-style-type: none"> 1. Clarifying intention through feedback loop 2. Discussing notation through feedback loop 3. Thinking together 4. Composer as interpreter (Interchangeable roles) 5. Experimenting together and interpretive decisions 6. Composer's intentions are flexible 7. Inconsistency of notation 8. Indeterminacy of notation 9. Notation contradicts verbal intentions 10. Ease of playability – important 	 Bi-directional action/response feedback loop (Negotiating notation together) (category 3)
<ol style="list-style-type: none"> 1. Score is not 'authoritative text' 2. Collaboration leads to changes in notation Sub-codes: <ol style="list-style-type: none"> 1.1 Changes in pedalling 1.2 Changes in dynamics 1.3 Changes in articulation 1.4 Changes in tempo/agogics 1.5 Changes in phrasing 1.6 Changes in pitch/rhythm 3. Collaboration leads to changes in playing Sub-codes: <ol style="list-style-type: none"> 1.1 Changes in pedalling 1.2 Changes in dynamics 1.3 Changes in articulation 1.4 Changes in tempo/agogics 1.5 Changes in phrasing 1.6 Changes in expressive intent 1.7 Changes in texture/tone colour 1.8 Changes in pitch/rhythm 4. Resistance of the instrument 	 Co-constructing work-identity (Completing notation) (category 4)

Codes	Categories
<ol style="list-style-type: none"> 1. Using metaphor to help understanding 2. Using singing to clarify meaning of words 3. Using physical gesture to clarify meaning of words 4. "Sharp" = heavy 5. "Pointillistic" = important, heavy, accented 6. "Like xylophone" = articulated finger attack 7. "Manic/crazy" = drive, strong forward direction 	 Building shared language (category 5)
<ol style="list-style-type: none"> 1. Slurs can often correspond to "fingery" articulation 2. Slurs don't always mean smooth/legato 3. Small slurs = emphasis 4. Small slurs =heavy 5. Small slurs = structurally important 6. Gesture/effect more important than notes 7. When too hard drop the notes, keep the tempo 	 Making informed assumptions (category 6)
<ol style="list-style-type: none"> 1. Interpreting notation easier 2. Interpreting notation more accurate 3. Patterns of inconsistency in notation 4. Understanding patterns in pedalling 5. Understanding patterns in articulation 6. Understanding patterns in phrasing 7. Understanding patterns in creating desired effect 8. Transcending notational limitations 	 Structural and embodied understanding help build 'performance practice' (category 7)
<ol style="list-style-type: none"> 1. Collaboration enhances imagination 2. Collaboration aids motivation 3. Collaboration leads to breakthroughs 4. Taking creative risks 	 Collaboration and creativity (category 8)
<ol style="list-style-type: none"> 1. Encouragement 2. Positive 3. Trust 4. Respect 5. Praise 6. Support 	 Collaboration and confidence (category 9)
<ol style="list-style-type: none"> 1. Deepening connection 2. Ease in collaboration and laughter 3. Rapport 4. Informal communication 5. Warmth 6. Mutual excitement about project 7. Fun 8. Use of metaphor 9. Excitement 	 Collaboration and communication (category 10)

Reflecting on the conceptual commonalities amongst these categories enabled distillation of four core themes (Figure 8) through which to conceptualise the creative processes in this collaboration and their implications for the broader aims and questions of the research. As explained by Saldana, at this stage of the analysis one

begins to “transcend the ‘reality’ of data and progress toward the thematic, conceptual, and theoretical”.¹⁶⁰

Figure 8. Distilling 4 core themes from the 10 conceptual categories.¹⁶¹



¹⁶⁰ Saldana, *Coding Manual for Qualitative Researchers*, 13.

¹⁶¹ The notion of ‘thinking-through’ in the collaborative processes of interpretation and content-generation is adapted from Österjsö’s concepts of ‘thinking-through-practice’, ‘thinking-through-hearing’, and ‘thinking-through-performance’, which, he argues, constitute a ‘species’ of musical interpretation distinct from the analytical/critical interpretation.

These four core themes enabled the development of a conceptual model through which to interpret the recurring, overarching patterns within the data and draw possible implications from the findings for the broader discourse on collaborative creativity in composer–performer contexts. Table 4 illustrates how specific extracts of data were coded to arrive at the codes, categories, and themes presented above. The segments of text highlighted in yellow demonstrate the specific words, expressions, and concepts communicated, which gave rise to the corresponding codes.

Table 4. Kate Neal collaboration. Examples of coding raw data using Thematic Analysis approach.

Data extract	Codes	Categories	Themes
<p>Example 1 Dialogue transcript, collaborative session 1, May 5, 2010, Princeton, USA</p> <p>K.N.: <i>So that bit, right, that last bar, at 279</i> S.L.: <i>At 279 is so hard, yeah</i> K.N.: Just do anything! [Emphasises “anything” to reinforce her permission for me to do whatever I want there] S.L.: Anything? Can I do this? [I demonstrate my version with the simplified rhythm] K.N.: Perfect! S.L.: That makes my life a lot easier! K.N.: Just do anything there. It could be just like S.L.: There's just so much going on K.N.: Just ease. Just as long as it's ease S.L.: [I try again, feeling more comfortable and confident with this bar] That makes it a lot easier K.N.: Yeah! S.L.: Yeah? K.N.: You can even. You know how the last two 32s, you can even take out the triplet sign and just make it like a 16 with some 32s or something. It could just be anything. S.L.: Just anything [I play for the last time and the playing sounds powerful, confident and clear] K.N.: Yeah, perfect. Great!</p> <p>K.N.: [from later in the collaborative session] You can do whatever you want there as long as it sounds manic . . . It should just sound kind of crazy</p>	Composer's intentions are flexible; Ease of playability – important; Experimenting together leads to changes in notation and in playing (sub-code: changes in pitch/rhythm); Score is not ‘authoritative text’ Support; praise; encouragement; positive; Gesture/effect more important than notes; when too hard drop the notes, keep the tempo; ‘manic/crazy’= drive, strong forward direction;	Bi-directional feedback loop (3) Co-constructing work-identity (4) Collaboration and confidence (9) Making informed assumptions (6) Building shared language (5)	Embodied thinking in collaboration (2) Complementarily in collaboration (4) Co-creating performance practice in collaboration (3)

Example 2

Email correspondence (from Kate to Sonya), September 23, 2008

Well, you are a pretty special lady I feel and the more contact I have with you the more inspired I feel for the piece!

I have many thoughts on the things you have written this day, and have many similar experiences, both body and mind, artistically and environmentally.

A great well of stuff bubbles inside at your words and wants to splash on the page Cf'ing . . . and its ultra conservative creative squashing aesthetic... Blah blah f'ing . . . and it's struggle-town-tall-poppies worship of the underdog beat-everyone into the f'ing ground-wear-us out.

Excitement;
Deepening connection

Rapport;
Deepening connection;
Warmth;

Deepening connection;
Informal communication;

Collaboration and communication (10)

Complementarity in collaboration (4)

As seen in Table 4, the data extracts were examined for possible meanings, implications, and patterns and small chunks of data were assigned an ‘essence-capturing’ code.¹⁶² In light of the thematic map presented in Figures 7 and 8, this table also demonstrates the relationship between specific codes, categories and themes as they emerged through the analytic process. Having laid out the thematic structure and core concepts of this chapter, the discussion will now proceed to the actual account of this collaboration.

4.3 FIRST MEETING – INCEPTION OF *PARTICLE ZOO II*

I first met Kate at a concert of her music presented as part of the Melbourne International Arts Festival in October 2007. The concert was performed by the Dead Horse Band founded by Kate in 2003, with much of the material written with the specific band members in mind. I had known of Kate’s interest in collaboration with ensembles and individual performers and had previously heard some of her work. On this occasion, Kate’s music made a strong impression on me with its kaleidoscopic juxtaposition of styles, genres, and idiomatic instrumental writing. I approached Kate at the end of the concert and soon the conversation progressed towards a possible collaborative project, namely a commission of a new work. In the email exchange following the initial conversation, Kate wrote:

Let’s do something, because I’m flattered that you like it [her music] and because working with players who like the stuff is my big thing! Maybe we could do a little piano concerto – for small ensemble – rather like Gubaidulina’s *Introitus*.

February 28, 2008

After several more exchanges, Kate and I decided to apply for Arts Victoria commissioning funding, which we subsequently received in June 2008 for the composition of a chamber piano concerto.

¹⁶² A code that encapsulates the perceived meaning of a selected segment of text.

From the very outset, my relationship with Kate was characterised by ease of rapport, warmth, and a shared excitement about the upcoming project. As John-Steiner reminds, the mutual respect for each other's work and intellectual/emotional connection between collaborators are the foremost ingredients for creativity and artistic success.¹⁶³ The following extracts from my early email exchanges with Kate illustrate an increasing rapport and identification with one another's inner worlds and experiences. As Kate was preparing the initial draft of the score she wrote:

Well, you are a pretty special lady – I feel and the more contact I have with you the more inspired I feel for the piece. I have many thoughts on the things you have written this day, and have many similar experiences, both body and mind, artistically and environmentally. A great well of stuff bubbles inside at your words and wants to splash on the page. But I shall refrain!! And use this bubbling to write dots [meaning notes] for you instead.

September 23, 2008

This growing intellectual and emotional connection is reflected in my email to Kate shortly afterwards:

I am really enjoying our communication and getting to know you better. It's amazing how a person's inner world has this mysterious way of unfolding and yielding itself to the receiver on the other side of the world. I think you are pretty special yourself and am beginning to feel like there's more and more space inside me that is becoming allocated to you. It's amazing and so rare when artistic and personal sensibilities align – what a gift!

September 28, 2008

Consideration of these data extracts enabled to identify Codes 3, 4 and 6 in Category 9 (Collaboration and Confidence) and Codes 1, 3, 5, 6 and 9 in Category 10 (Collaboration and Communication, see Figure 7). The inception of my collaboration with Kate coincided with a critical stage of refining the core focus for my PhD thesis and led to 'creative collaboration' becoming the central subject of my research.

¹⁶³ John-Steiner, *Creative Collaboration*, 64.

4.4 FIRST PRACTICAL EXPERIENCE OF COLLABORATION: *THE SONG FOR A COMB*

The first ‘hands-on’ collaborative encounter between Kate and me took place in October 2008 in Melbourne. Kate approached me to record her composition *Song for a Comb* written for an animation film (DVD 1, Track 1), which was subsequently workshopped and recorded at my home studio (October 7, 2008). This was significant for both of us as the project afforded a first-hand opportunity to experience working together. While a solid intellectual and personal rapport had already been established on the basis of an extensive email exchange detailed, we were yet to establish a way of communicating and relating in practical, musical terms. Moreover, this preliminary project facilitated a direct experience of notions central to this research, such as the impact of collaboration on the interpretation-finding process, artistic creativity, and the construction of musical work’s identity. Considering these issues within the context of *Song for a Comb* helped develop my capacity to think and respond critically to the subsequent processes emerging from this collaboration. The following excerpt from my reflective journal made after the recording session illustrates how collaboration was already impacting on my artistic and reflective practice:

Today’s session was excellent! It highlighted many of the issues I’m grappling with in my PhD. Even though the material at hand was fairly simple today, it gave me the first taste of what a collaboration between composer and performer might yield in terms of interpretation-finding, the way the piece transforms and fully finds itself in sound through this exchange of ideas and perceptions, the way it grows, expands, and becomes so much more than what the notes on the page indicate! In effect, by the time the session was over and we got our best and final take of the piece, the ‘Comb-man’ was no longer a series of inanimate dots on the page – it had become our mutual baby: shaped, moulded, well, created together really! As the process of trading ideas between Kate and I unfolded, the music became more and more etched into our ears and brains, imagination firing, my body responding by finding more colours, articulations, and expressive ways of shaping and communicating the musical material that neither of us imagined was possible in this simple two-page piece. The result was longer phrases, much broader dynamic range, free use of rubato and tempo fluctuations, pauses, and imaginative use of pedal – certainly none of that was marked in the score! The notation literally seemed to come alive as we workshopped the Comb-man. Through the continuous cycles of feedback, both verbal, sung, gestured, and sounded, we found a language between us that lead to the realisation of the notes that felt really satisfying and exciting to us both.

Conceptualising the content and implications of this data extract led to the derivation of the following categories:

- Category 3: Bi-Directional Feedback Loop (Negotiating Notation Together)
- Category 4: Co-Constructing Work-Identity ('Completing' Notation)
- Category 5: Building 'Shared Language'
- Categories 8, 9 and 10: Creativity, Confidence and Communication in Collaboration (see Figures 7 and 8)

Building on these categories, the following discussion of the preliminary collaborative stages provides specific data extracts and reflection to demonstrate how the four core themes in this case study were distilled.

4.5 *PARTICLE ZOO II*

I received the complete score for *Particle Zoo II* on January 8, 2010, four months prior to its scheduled premiere in Princeton. Kate had also sent a MIDI version of the piece which enabled me to glean its general characteristics regarding orchestration, texture, tempo, and melodic and rhythmic patterning. Analysis of the communication between Kate and me during the initial stages of learning the score (January–April 2010) indicates how the collaborative experience was already being framed by three of the four core themes in Figure 8: 'Embodied Thinking in Collaboration' (Theme 2), 'Co-Creation of Performance Practice in Collaboration' (Theme 3), and 'Complementarity in Collaboration' (Theme 4).

4.5.1 Prior to Collaborative Sessions: Negotiating Notation

It was clear from the outset that Kate was open and, in fact, inviting of feedback from the performer in respect to aspects of the score to ensure the optimal realisation of the musical ideas embedded in it. As indicated by an extract from her email below, Kate did not see her score as 'authoritative text', autonomous and regulative in its function. For Kate, notation represented a framework within which the composer and

the performer collaboratively negotiate issues of performability and realisation. In the email accompanying the score, she wrote:

And so we begin the fun part! I have some questions about how to write some of the gestures properly (as in hands and crossings). I also feel some of the 'solo' like passages may be too fast and/or too many notes. Those things we can clean together. I will need your help and take your counsel on those things. Nothing is notated to be adhered to in a notational way – all things should be approached to be with ease (so, change the hands etc for playability if I have made errors of judgement) . . . Please see this as a draft, and not set in stone.

January 8, 2010

Further evidence of Kate inviting a collaborative approach to negotiating notation is found later in the same email:

I can foresee lots of things that will need changes/tweaking etc. . . . I do need to do a lot of editing, but am sending it in the hope that there are things you will come back to me with – some of the gestures are potentially not even possible at tempo – all things we can work on as the process unfolds.

January 8, 2010

Critically reflecting on the implications of these data extracts enabled to identify Codes 6, 8, and 10 in Category 3 (Bi-directional Action/Response Loop: Negotiating Notation Together, see Figure 7).

As I began learning the score and encountering the technical challenges posed by the indicated speed ($J = \text{MM.110}$) and the awkward semiquaver and demisemiquaver passages as well as the vast leaps characteristic of the writing, I began making minor adjustments at first (re-distribution of hands/hand-crossings), progressing to more significant modifications of the material. This was in line with Kate's suggestion that I alter passages that are too difficult/fast for execution. Examples 1 and 2 illustrate some of the changes I made to the score in an attempt to resolve technical impediments to the realisation of the perceived expressive intent in performance. In Example 1, the material in the left hand in bar 32 was moved an octave lower (as indicated by the hand-written annotation circled in red) to avoid the collision of hands

that prevented me from achieving the textural clarity and crescendo indicated in the score.

Example 1. *Particle Zoo II*. Re-registering the left hand an octave lower for greater playability, bars 31–33.

Handwritten musical score for bar 31 of Particle Zoo II. The score is in 3/4 time, treble clef, and includes a bass staff. The left hand part is annotated with "negotiating the 'impossible' - hand" and "K: doesn't matter". A red oval highlights a section of the left hand's eighth-note pattern.

Having resolved the issue of hand collision, I was able to communicate the dramatic gesture implied by Kate's use of the *crescendo*, and achieve a clear and even articulation.

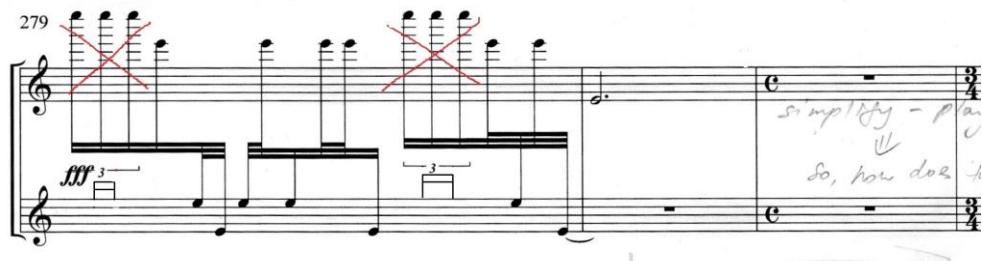
In Example 2 below, the feathered-beamed repeated demisemiquavers in bar 167 played at speed impeded my ability to generate the *fff* sonority and 'dramatise' the *crescendo* effect in this passage. To solve that, I reduced the number of notes and grouped the rhythm into triplets (as shown in hand-written annotation circled in red) to enable greater accentuation and accumulation of speed and resonance written into the notation.

Example 2. *Particle Zoo II*. Modifying rhythm for greater playability and realisation of perceived expressive intent, bar 167.

Handwritten musical score for bar 167 of Particle Zoo II. The score is in 3/4 time, treble clef, and includes a bass staff. A red oval highlights a section of the eighth-note pattern, which is annotated with "tri" and "ne". The dynamic "fff" is written at the end of the bar.

Another instance of modifying rhythm for greater playability is shown in Example 3 below. Bar 279 in this passage is marked *fff* and is placed at a structurally climactic point (end of the piano Cadenza section), suggesting that Kate intended power and resonance, which were not possible at speed with the rhythm as notated. Hence, simplifying this awkward passage by changing the triplets to straight semiquavers enabled more ease in creating the *fff* and the '*martellato*' effect, which I understood the alternating octaves to imply.

Example 3. *Particle Zoo II*. Modifying rhythm for greater playability and realisation of perceived expressive intent, bar 279.



The modifications to the score I made early in the collaborative process to enhance playability and musical expression led to the generation of Codes 6, 8 and 10 in Category 3 (Bi-Directional Feedback Loop: Negotiating Notation Together) and Codes 1, 2 (2.6) and 3 (3.6) in Category 4 (Co-Constructing Work-Identity, see Figure 7), demonstrating the inherent malleability of musical notation and flexibility of approach in regard to rhythm and the actual notated content. The following section examines the role of the developing 'performance practice', or shared aesthetic vocabulary, in the early phases of this collaboration.

4.5.2 Co-construction of Performance Practice: Building Shared Language

While the subject of 'performance practice' as co-constructed by the composer and the performer is best addressed in the context of the two collaborative workshops in Princeton, the data collected during the score-learning phase of this project illustrates how shared understanding regarding aspects of notation and its realisation in

performance was gradually established. The following email exchange between Kate and me provides an example of how the differences in musical traditions impacting on our respective approaches to musical notation and interpretation were gradually reconciled. The data extracts below suggest that Kate and I were initially approaching the score and its realisation from aesthetically different angles. While I had altered some passages that seemed unworkable (see Examples 1–3), my general inclination in negotiating the challenges posed by the tempo and the sheer technical demands of *Particle Zoo II* was to retain all (or most) of the notes and compromise the speed to achieve greater physical and expressive freedom. In this, my stance was that of a well-trained classical musician with an instilled responsibility ‘to play all the notes’ and ‘stay true to the score’ at any cost (including potential, albeit unintentional, hindering of the music’s vitality). By considering the notions of work-reproduction and work-preservation espoused by Goodman, as discussed in Chapter Two (Section 2.3.3) it is easy to see how such a stance is developed by a musician steeped in the tradition of Western art music. In an email to Kate, I explained:

I am predicting that getting it up to $J=110$ will probably be near impossible. I think I can pretty much negotiate all its challenges – found some good fingerings and uncrossings of hands where needed – but at a slower speed. I will aim to get close to 110, but as I said, it’s very unlikely. The part is super virtuosic, which I love, and I can see (or suppose) that some sections are meant to sound totally like a wild, free improvisation . . . which will probably be less achievable at a slower tempo. Still, my general inclination would be to go for a more moderate speed and really nail the gestures. Your thoughts?

March 29, 2010

Kate’s priorities, however, were aimed at maintaining the music’s energy and flow and retaining its gestural thrust and integrity at the expense of the notes. Further to her previous emails (above), in which she invited alterations to the score, she wrote:

Yes, look it is a beast. It is a very hard piano part. Hmm, tempo and notes. I expected to have to edit your part once you'd had a look. I know there are more notes than possible, well at least, I thought some of it might be impossible. My idea is that you really make this piece yours – by that I mean you can change, re-work, alter fast passages. My first instinct is to keep the tempo and change the notes. . . I'd be wary of things dragging, but as always these things can be surprising, i.e. – it may work slower . . . Let's try and keep the tempo and change the notes, I'm sure the ideas can transcend to easier things.

March 30, 2010

This discrepancy in approaches required Kate and me to move towards a greater integration and congruity of expectations and assumptions of how musical ideas presented in the score are to be realised. This is evidenced in the email I sent to Kate shortly after our note/tempo discussion:

Thanks Kate. Yes, the notes/tempo dilemma. It's always at the front of my mind. Us lot – the indoctrinated types steeped in the confines of the classical music police – are forever holding on to the notes as for dear life. You lot – the liberated ones – have such a different relationship to it. While to us 'perfection' represents immaculate punching out of the dots on the page, I know that you are after a very different thing altogether! Not that I'm not after those same things, of course, and notes are just a stage to get through, but I always feel it's a blasphemy to change/loose notes, and just go for the gesture. But as you say, the ideas can transcend to easier ways of getting to the same result and I'm going to give myself more freedom as to how I get there. I'll still aim to get most the notes there, only now I know it not to be the absolute priority.

April 5, 2010

These data extracts exemplify how the differences of aesthetic traditions, shaped by musical training, were increasingly reconciled and overcome through collaboration, achieving a more unified approach to work-realisation. This is reflected in Codes 6 and 7 in Category 6 (Making Informed Assumptions), and Codes 7 and 8 in Category 7 (Structural and Embodied Understanding Help Build Performance Practice, see Figures 7–8).

Further evidence of how 'performance practice' (or 'common language') is constructed through collaboration is provided in the following example. Having previously worked

with Kate on *Song for a Comb* (see Section 4.4) and presently learning *Particle Zoo II*, certain idiosyncratic notational patterns common to both these compositions were revealed. Specifically, Kate's use of small slur symbols (which could alternatively be interpreted as ties) between chords and falling notes, which I first encountered in *Song for a Comb* (Example 4, circled in red), posed interpretative questions in regards to the articulation, tonal colour, and physical approach implied by these symbols.

Example 4. *Song for a Comb*. Small slur symbols between chords and falling notes, bars 14–21.



Prior to the recording session of *Song for a Comb* (see Section 4.4), Kate sent an email to explain that "chords/falling notes with slurs are meant as 'sustained' and should be held over as much as possible".¹⁶⁴ Furthermore, in the recording session, she clarified that the use of small slurs (as she referred to these symbols) is intended to create harmonic clusters within the texture. Inferring this new knowledge to the analogous notation in *Particle Zoo II* (Example 5), I was able to understand and hence, render in sound the textural and harmonic effect implied by the notation.

¹⁶⁴ Personal communication, October 5, 2008.

Example 5. *Particle Zoo II*. Small slurs between falling notes, bars 1–16.



Whilst the score in this example does not indicate pedalling that would suggest 'sustaining' the notes in bar 12 for as long as possible, the knowledge gained through collaboratively workshopping *Song for a Comb* enabled me to make an informed interpretative decision to hold this cluster of notes with the pedal through to bar 15 (despite pedalling not being indicated), which was indeed congruous with what Kate had intended. This example also illustrates the inconsistencies characteristic of musical notation and the interpretational challenges they present to the performers. The pedal marking at the beginning of bar 15 suggests that Kate does utilise pedalling symbols in her notational practice to indicate sustaining of sound. The question arises as to why there is no pedalling marking in bar 12, where the small slurs indicate that notes are to be "sustained" and "held over as much as possible", yet there is pedal marked in bar 15. Why does Kate use small slurs in some cases and pedal symbols in others to communicate her intention for the notes to be held over and sustained? These questions are typical of the interpretative process and can be a source of confusion and frustration to the performer and, equally, dissatisfaction to the composer, whose ideas are not being adequately realised in performance. Without a collaborative practice, such questions at large remain unanswered and are left to the discretion of the performer, who often lacks the familiarity with the unique and idiosyncratic notational practices native to each composer's language. Considering the notation in bars 10–16 in Example 5, the markings suggest a number of interpretational variants:

1. Bars 10–12 are to be played without pedal (assuming that when Kate wants the use of pedal she indicates that with the pedal symbol as she has done in bar 15) and relying only on finger legato to sustain the notes for as long as they will sound;
2. Kate wants to contrast a dryer sound-aesthetic in bars 10–12 (where no pedal is indicated) with a more warm and resonant tone in bar 15 (where pedal is indicated);
3. Kate wants a clear sense of layering of individual voices to come through in bar 12 and therefore does not want it to be blurred by pedal, but indicates pedal when just playing the single note in bar 15.

Without the shared understanding of the musical intention implied by the small slurs between consecutive notes, all three variants could have been plausible, yet none matched the harmonic and textural effect intended by Kate. Having, however, established the meaning of the small slurs in Kate's notational 'dialect' through prior collaboration (*Song for a Comb*), I was able to interpret this figure to mean that notes in bar 12 are to be pedalled continuously until bar 15 to sustain the harmonic cluster created by these notes for as long as possible.

This example illustrates how notation is at best an approximation of the composer's intentions and is inherently limited and incomplete. Therefore, the fullest realisation of these intentions in performance is contingent on both the performer's familiarity with the composer's notational vocabulary and, conversely, the composer's knowledge of the idiomatic nature of the instrument for which the music is being composed. Examining the processes of negotiating notation in respect to Kate's use of small slur symbols enabled to identify Codes 10, 11 and 12 in Category 1 (Understanding of Implied Structure and Interpretation), Codes 1, 2, 3, 4 and 5 in Category 2 (Understanding of Implied Structure and Notation) and Codes 1, 2, 3, 4, 5 and 7 in Category 7 (Structural and Embodied Understanding Help Build 'Performance Practice', see Figures 7–8). Gleaned through the discussion above, collaboration offers an opportunity to establish this common notational and aesthetic language through which to negotiate aspects of work-realisation. Hence, the following section examines patterns of collaborative work as they are presented within this project.

4.5.3 Complementarity Model in Collaboration

The discussion above illustrates the complementarity that exists in a collaborative relationship between the composer and the performer, whereby individual discipline-based skills and knowledge are combined in order to achieve a shared goal. While there was a clear division of labour between Kate and me (as, according to John-Steiner, is typical of Complementarity pattern of collaboration), we were continuously engaged in the shared work of optimising the notation and realising the score through skill exchange and mutual trust in one another's expertise. Similarly, as demonstrated in the email exchanges thus far, there was a strong personal and intellectual rapport between Kate and me that, as John-Steiner suggests, is crucial for successful collaboration and artistic outcomes. Reflected in the email excerpts below is also an increasing mutual appreciation of artistic skill and ability, which John-Steiner maintains is vital for facilitating enthusiasm and excitement within a collaborative project. Several months after the workshop-recording session of *Song for a Comb* Kate wrote:

I love the way you played Comb Man. I really like the tune actually, I initially felt a little vulnerable with the simplicity of it and now I find that I like simple things so much. And you brought out that simplicity in him so beautifully. My dear, I have to tell you that your playing and the Comb Man tune makes the film – actually, the film is really only that. Thank you, for your spirit and generosity.

January 28, 2009

In response to Kate, I expressed a similar sentiment of appreciation and recognition:

Thank you, dear Kate. I really loved your little Comb Man creation – the simplicity, the beauty, the heart, and the fragility of that music. I had such a special time playing it and delving into your musical universe. And it's your spirit and mind that helped me tap into your piece as I did, and the result is quite beautiful I think.

February 8, 2009

Later communication during the course of this collaboration further illustrates my increasing appreciation and commitment to Kate's music. This is shown in the following email and journal extracts, written soon after I began working on *Particle Zoo*
II:

Hi my lovely friend Kate, I have started working on your piece – it's stunning!! I am really beginning to relate to it, care for it and love it, now that I've managed to listen and read through it enough times to establish some familiarity.

March 29, 2010

Similarly, the reflective journal entry of the same day reflects the impression the piece was increasingly making on me:

I have now been listening to the MIDI of Kate's piece for a week and am beginning to really understand it. Even though the MIDI is somewhat ridiculous in its rigidity and crazy speed, the piece is clearly dazzling. From what I know of Kate's music I think it's her best composition yet. The colours of the ensemble are hugely imaginative, the texture is always intricate and never too thick, the interplay between the electric guitar, harp and piano is so sophisticated and wonderfully weaved throughout the score. And the piano part seems to cover huge amplitude of expression – from most nostalgic and fragile (which I love in Kate's music) to most boisterous and violently virtuosic.

March 29, 2010

Evidenced from these data extracts is the recognition of the aesthetic 'kindredness' and complementarity developing between us as this artistic relationship evolved. As John-Steiner posits, this complementarity in skills, temperaments, values, and goals, facilitates a "very particular form of human interdependence", which in turn leads to mutual appropriation of skills and knowledge as well as enhanced motivation and creativity.¹⁶⁵ The increasing intellectual and emotional bond between us, implicated in the email exchanges and the journal entry above, engendered in me a greater commitment and creative energy at a time of personal and artistic crisis. Examining these data extracts from an analytical perspective led to the generation of Codes 1 and 2 in Category 8 (Collaboration and Creativity), Codes 1, 2, 3, 4, 5 and 6 in Category 9 (Collaboration and Confidence), and Codes 1, 3, 4, 5, 6 and 9 in Category 10 (Collaboration and Communication, see Figures 7–8).

¹⁶⁵ John-Steiner, *Creative Collaboration*, 199.

4.6 PARTICLE ZOO II – PRINCETON 2010

The two collaborative workshop sessions in preparation for the premiere of *Particle Zoo II* took place at Princeton University on May 5 and May 9, 2010. The primary goal of these sessions was for me to play the piece for Kate, for her to come back to me with suggestions, and for us to collectively find the most satisfying and congruous realisation of the score through performance. The sessions in their entirety were documented by audio recording to capture the full detail of the experience. Significant dialogues were subsequently transcribed verbatim to establish a greater familiarity with the data and used to substantiate the discussion. The account of these two sessions is framed by Themes 1, 2 and 3 (Structural Understanding; Embodied Thinking; and Co-Construction of Performance Practice in Collaboration). While Theme 4 (Complementarity in Collaboration) is implicated in much of the discussion that follows, it was decided not to present it as a separate section as much of the data pertaining specifically to this theme (including the codes and categories which led to it) was discussed in detail in Section 4.5.3. Thus, the primary three areas of investigation underpinning the remainder of this chapter are:

1. Structural Understanding in Collaboration (Thinking-Through-Structure) and its impact on performance outcomes and musical notation
2. Embodied Thinking (Thinking-Through-Action and Perception) in Collaboration and its impact on performance outcomes and musical notation
3. Co-creating Performance Practice (Thinking-Through-Common Language) in Collaboration and its impact on performance outcomes and musical notation

While the discussion is organised according to these themes, a degree of conceptual overlap between them was inevitable due to the non-linear, complex nature of the creative processes nascent in collaboration.

4.6.1 Theme 1 (Categories 1 and 2): Structural Understanding in Collaboration (Thinking-through-Structure)

Understanding of the implied structural detail in *Particle Zoo II* played a significant role in shaping my interpretation of the piece. The changes in my playing, which resulted

directly from collaboratively addressing aspects of musical structure, in turn impacted on the notation itself, specifically in regards to phrasing, dynamics, articulation, agogic and expressive markings. The following examples illustrate ways in which my playing was directly impacted by the increasing understanding of the structural organisation in *Particle Zoo II* as explained by Kate. The examples also demonstrate how musical notation, often incomplete in its work-identifying detail (as discussed throughout Chapter Two), is effectively determined and ‘completed’ through the process of structural clarification afforded by collaboration.

4.6.1.1 Example 1: Understanding Phrase Structure

In this example, Kate’s explanation of the phrase structure and the motivic development in the opening section of the piece (bars 1–161) resulted in tangible improvements in my playing in respect to phrasing, ease of execution, and rhythmic organisation of the material. Thus, the discussion below relates to the Conceptual Categories 1 and 2 (Understanding of Implied Structure and Interpretation; Understanding of Implied Structure and Notation). Explaining the passage in bars 140–149 (Example 6), Kate noted that the motif in bar 141 is the first indication of the “manic” things to come, “suggesting a little bit crazy land” of the later material (Track 1). Relating this motif (bar 141) to the gesture in bar 148, she explained that both serve to interrupt the rhythmic flow and the musical equilibrium of the opening section, foreshadowing the first major character change in the piece.

Example 6. *Particle Zoo II*. Clarifications of phrase and motif structure, bars 140–149.

As can be heard on Track 1¹⁶⁶, prior to Kate's explanation and her demonstration of the 'manic', 'crazy' character of these gestures in singing, my playing sounded rather heavy and ponderous, far from the character Kate intended. Partially, this was due to my interpretation of the *ff* marking to imply a heavy sound-aesthetic and partially it was a result of the technical difficulty of these passages. However, as these gestures began to take on a new structural and dramatic meaning through Kate's explanation and sung demonstration, my playing changed accordingly, reflected in the improved phrasing, dynamic amplitude, and even increased speed and fluidity.

Workshopping this section further, I expressed to Kate that maintaining the continuity of line while negotiating the metric irregularity throughout bars 129–161 posed a

¹⁶⁶ All audio tracks referred to in this chapter appear on DVD 3 unless otherwise specified.

significant interpretative and performative challenge. The fragmented nature of the material, with short, asymmetrical gestures punctuated by rests, as well as the rapidly changing time signatures (Example 7), necessitated consciously counting and subdividing the rhythm in my head, which hindered the natural flow in the playing, obstructing the larger musical shape.

Example 7. *Particle Zoo II*, bars 129–161.

As can be heard on Track 2, following my playing of this section, and perceiving my discomfort both in the playing and through verbal communication, Kate proceeded to explain the implicit phrase structure underlying bars 129–161. She pointed out that the phrases are increasingly expanding from the shorter, three-three and a half bar segments, towards longer musical blocks spanning between seven to eleven bars. For instance, she explained that bars 129–132 form the first phrase (see my phrasing annotations in red), with the second half of bar 132–134 and bars 135–139 forming the next two phrases respectively. From bar 140 the phrases become increasingly elongated, reaching up to seven bars in length (bars 151–157). Examining Example 7

from the notational perspective alone, this phrase structure, as explained by Kate, would have been very difficult to glean. In fact, faced with the short, irregular, gestures, punctuated by rests, as they appear in the score, a performer may legitimately assume that the intended sound-aesthetic for this section is that of fragmentation and disjuncture. However, as heard on Track 2 and documented in Dialogue Extract 1 below, joint verbalisation and vocalisation of phrase structure, as it was now understood, had an immediate impact on my playing, which was now marked with increased suppleness and fluidity, improved phrasing, and dramatic thrust.

Dialogue Extract 1

<i>S.L.: Yeah, that makes it so much easier to play when I think this way, wow!</i>
<i>K.N.: That sounds so much better, yeah.</i>
<i>S.L.: Wow, that just makes it so easy to play now when I think of it in this way.</i>
<i>K.N.: Oh good!</i>
<i>S.L.: Wow, it's like a totally different thing. And I don't need to count. It just flows so organically!</i>
<i>K.N.: Yeah, I can hear it much better, actually. It doesn't sound so stiff anymore at all. That's great.</i>
<i>S.L.: Yeah, that's what it kind of felt to me, stiff before, you know? And now it kind of, wow, this is excellent! [I play through the section again]</i>
<i>K.N.: That's fantastic! Wonderful!</i>

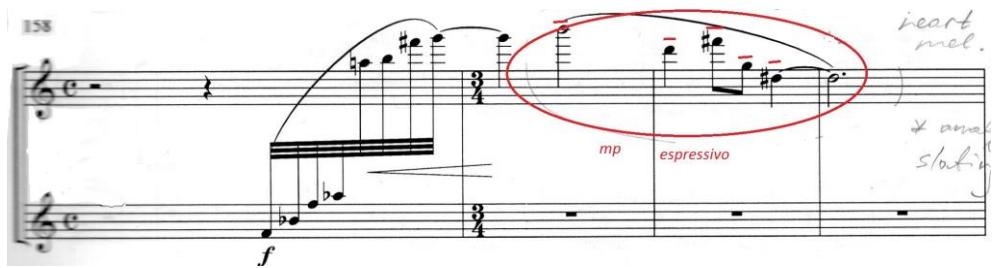
Princeton (USA), May 5, 2010

Reflecting on these data extracts (Tracks 1–2 and Dialogue Extract 1) and the processes leading to the enhanced realisation of bars 129–161 enabled the identification of Codes 1, 2, 3, 4, 5, 6, 7, 10, 11 and 12 in Category 1 (Understanding Implied Structure and Interpretation) and Codes 1, 2, 3, 4, 5, 6 and 8 in Category 2 (Understanding Implied Structure and Notation, see Figures 7–8).

4.6.1.2 Example 2: Structural Analysis and Dynamics, Articulation and Expression

As we workshopped the material in Example 8, Kate explained that the motif in bars 159–161 functions as the central melody of the entire piece, with fragments of this motif and its intervallic relationships occurring throughout the piece, as can be heard on Track 3.

Example 8. *Particle Zoo II*. Main melody, bars 159–161.



Prior to Kate's explanation, I had not ascribed much importance to this group of notes and, as Track 3 illustrates, my playing of this figure was lacking any specific articulation, dynamic, or expressive emphasis. However, re-conceptualising the thematic significance of this melody (as explained by Kate) enabled a more considered interpretation, resulting in quieter dynamics (opposite to what Kate had marked), greater inflection and shape, and added *tenuto* and *espressivo* quality, as evidenced on Track 3 and indicated by my annotations in Example 8. The journal entry made during my practice on the same day highlights the insights that occurred as a result of this collaborative session and details the modifications and improvements to both the interpretative and notational realisation of the score:

It is quite incredible what the composer can point out in the score that you could never identify by yourself. For instance today, Kate pointed out that the melody in bars 159–161 is at the heart of the piece – its main theme! I didn't give this little motif the slightest attention and played it very straight forward and kind of flat. But now I've spent quite a while experimenting with it, shaping it, moulding it, finding the sound that would communicate the significance of this tune. I am now putting *tenuto* marks on each of the five notes, am making the phrase super legato, giving extra attention to the inflection between the intervals that comprise this melody (the falling 6th, the rising 3rd, the very expressive falling major 7th etc), and most importantly, relating to this phrase with so much more emotional immediacy and intensity, which I am trying to communicate in the playing. Incidentally, after all the experimentation, I have changed the dynamics too: from the indicated *f* (actually *ff*, as there is a *crescendo* marking in b.158 leading into b.159) to *p-mp* to make this motif stand apart from the rest of the material in this section. Not only did our session illuminate aspects of this particular little phrase, I can now hear this 'theme' come back in different guises throughout the piece and it is giving me more ideas as to how to articulate these structural connections in sound. The shape of PZII is definitely becoming more etched out in my mind as we work on it together.

May 5, 2010

This journal extract highlights the role of collaborative practice in enhancing the understanding of implicit structural detail in the score, leading to the generation of Codes 6, 8, 10, 11 and 12 in Category 1 (Understanding Implied Structure and Interpretation) and Codes 1, 2, 3, 4, 5, 6, 7, 8 and 9 in Category 2 (Understanding Implied Structure and Notation, see Figures 7–8).

Having examined the collaborative processes pertinent to Theme 1 and its constituent categories, the following section presents the data leading to the origination of codes and categories comprising Theme 2, 'Embodied Thinking in Collaboration'.

4.6.2 Theme 2 (Categories 3 and 4): Embodied Thinking in Collaboration (Thinking-through-Action and Perception)

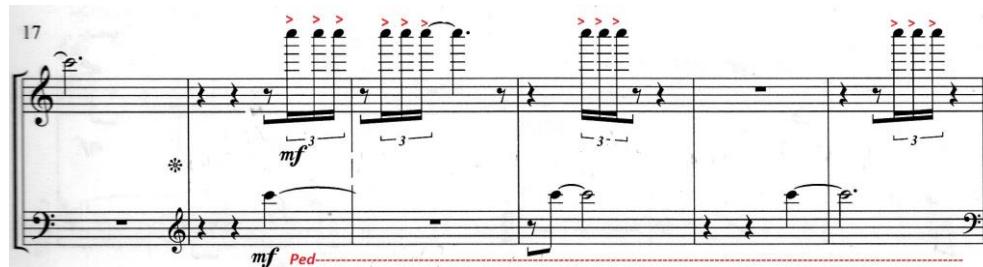
'Embodied' thinking, or 'thinking-through-action and perception', has played a central role in this collaboration and is best defined as an interpretative engagement with the musical material mediated by 'hands-on' experimentation and exploration of ideas through sound, language, and physical and vocal gesture. Hearing the scores realised

in sound through the performer physically interacting with the instrument enabled a bi-directional action/response feedback loop through which to make interpretative decisions in respect to pedalling, dynamics, articulation, tempo and in some instances even rhythm and pitch. Building on the codes in Categories 3 and 4 (Bi-Directional Feedback Loop: Negotiating Notation Together; Co-Constructing Work-Identity: Completing Notation), the following examples illustrate how collaboratively engaging in the embodied modes of thinking within the action/response feedback loop impacts on work-realisation processes.

4.6.2.1 Embodied Thinking and Pedal

Throughout the workshops, there were many instances where hearing the material played live by me impacted Kate's decisions in regards to pedalling markings. In Example 9 below, bars 18–22 are comprised of semiquaver triplets in the right hand punctuated by the increasingly longer rests with no pedal indication throughout.¹⁶⁷ The instruction in the score is to release the pedal in bar 17.

Example 9. *Particle Zoo II*, bars 17–22.



As Dialogue Extract 2 reveals, Kate did not have an established intention of how this section was best realised in regards to pedalling and asked me to experiment with different variants.

¹⁶⁷ Red pedal marking is added by me to indicate the changes resulting from the collaborative exchange.

Dialogue Extract 2

K.N.: *Was that second one, second one was with?*
S.L.: *They were all with pedal. Now I'll try without pedal.*
K.N.: *OK. [I play these bars without pedal].*
K.N.: *I think with.*
S.L.: *With?*
K.N.: *Yeah. Do you?*
S.L.: *Yeah, better. I like it more with, especially in the big hall.*

Princeton (USA), May 9, 2010

This exchange highlights how ‘thinking-through-action and perception’ enabled by the feedback loop directly impacted on the realisation of bars 18–22, arguably resulting in modification to the very ‘identity’ of this section. The addition of pedal (indicated by me in red) altered the overall aural and textural parameters of this passage, reflecting the origination of Codes 1, 2, 3, 4, 5, 6, 7, 8 and 9 in Category 3 (Bi-Directional Action/Response Feedback: Negotiating Notation Together) , Codes 1, 2 (2.1) and 3 (3.1) in Category 4 (Co-constructing Work-Identity: ‘Completing’ Notation), and Codes 1, 2, 3 and 4 in Category 7 (Structural and Embodied Understanding Help Build Performance Practice, see Figures 7–8).

An analogous instance of modified pedalling resulting from ‘thinking-through-action’ is seen in Example 10 (bars 84–88). As in the previous example, these bars are made up of short gestures (a single note preceded by arpeggiated grace notes) separated by rests.

Example 10. *Particle Zoo II*, bars 83–111.

84 RING
f (but not very ped)
ped or not?
Ped

85 f (but not very ped)
Ped

86 f (but not very ped)
Ped

87 f (but not very ped)
Ped

88 f (but not very ped)
Ped

90 mf
mf
f

99 ff
me: I suggest "xylophone".
K: agrees - bright, or celeste-like - though
K. was but...

102 ff
ff

106 mf
mf

As seen in this example, the original notation does not indicate pedal in bars 84–88 (red pedal marking is added by me to highlight the changes made to the score during the course of collaboration), with pedalling markings appearing later in bars 105–111. My inclination was to adhere to the score's instructions and play bars 84–88 without pedal. However, as this section was workshopped and numerous pedalling variants

were trialled, Kate decided that the tonal colour and the overall sonority in these bars would be significantly enhanced by the use of pedal, resulting in modifications to both the notation and my playing. Examining Kate's score through the prism of collaboration raised many questions in regards to the inconsistencies evident in her patterns of notating pedalling and, as the ensuing discussion will reveal, also patterns of articulation and dynamic markings.

4.6.3 Embodied Thinking and Dynamics, Articulation and Tempo Agogic

Considering the Cadenza section (Example 11 below) and how it was realised through the action-response continuum provides further evidence of how work-identifying detail is determined and refined through collaboration. As seen in Example 11, the notation does not provide dynamic, articulation, or agogic detail throughout the Cadenza. The only exceptions are the *rubato* indication in bar 259, *ff* and *fff* markings in bars 278–279, and 'small slurs' (discussed earlier in Section 5.5.2, Examples 4–5) in bars 269 and 277–8.

Example 11. *Particle Zoo II*. Cadenza, bars 256–281.

Given that the texture in this section is extremely dense up until bar 269 and that the writing is very demanding, my approach was to explore the upper range of the dynamics, namely *f-ff*, up to bar 269 and treat the following bars (269–277) with the ‘small slur’ symbols and relatively thin texture with more transparency in order to provide contrast to the rest of the Cadenza. However, as Kate and I workshopped this section, a very different topography emerged (as indicated by me in red). Tracks 4 and 5 and Dialogue Extracts 3 and 4 demonstrate how the approach to dynamics, articulation, and tempo/rhythmic agogic in this section was directly influenced and altered by collaboratively engaging with the score through the ‘embodied’ mode of thinking.

Dialogue Extract 3

K.N.: [Having just heard me play the Cadenza] *I think that bar there at 268 can be a little bit softer?*
K.N.: [I try playing softer] *Yeah, beautiful, that's beautiful. And I wonder if you could even start a bit softer at 259? You are very welcome to do that if you want to.*

Princeton (USA), May 5, 2010

Implementing softer dynamics in turn led to a different approach to articulation and character in my playing. As heard on Track 4, the opening of the Cadenza was now less forceful, more *legato*, and played with more sensitivity and rhythmic freedom, which was in line with the *rubato* marking indicated. Furthermore, starting softer and more legato enabled a gradual build up in intensity and volume through bars 262–267, resulting in the more climatic character in bars 263–265 and hence, a greater dynamic shape throughout this section. Hearing these changes in my playing, Kate continued:

Dialogue Extract 4

K.N.: *Yeah, that's beautiful. And then that 269 bar really ‘placed’.* [Kate sings to demonstrate how she means that]
S.L.: *Aha, yep, sure.* [I play].

Princeton (USA), May 5, 2010

Translating Kate's sung demonstration and verbal request to 'place' the notes in bar 269 to mean a heavy, accented touch, I changed the 'dreamy', sustained sound quality I interpreted the notation in this bar to indicate into a more powerful articulation. From our exchange, I understood that Kate intended a dramatic build up from bar 269 to bar 279 (the latter marked *fff*), which was almost in complete contrast to how I conceptualised this section from 'reading' the notation alone. While I imagined the thick chordal textures of bars 259–268 to be almost forceful and '*brutale*' and the more linear, transparent bars 269–277 to be much less resonant, working with Kate had reversed this relationship, resulting in a more exciting, well-shaped, and logically constructed performance (Track 4).

Having established the dynamic 'map' for this section, Kate further suggested that bar 267 could be interpreted as the end of the Cadenza section and proposed to add a *fermata* sign over the last crotchet (F#), as heard in Track 5. She explained that the following bar (bar 268) functions as a short Coda to the Cadenza section and thus can be played with some delay. Thinking of bar 267 as the end of the Cadenza with a long (*fermata*) note at the end and treating bar 268 as a *quasi-coda* resulted in a more dynamic and dramaturgically engaging playing, demonstrating greater agogic nuance and rhythmic elasticity.

The examples above illustrate how embodied thinking in collaboration impacted on aspects of notation and interpretation in respect to dynamics, articulation, and agogic emphasis, reflected in Codes 1, 2, 3, 4, 5, 6, 7, 8 and 9 in Category 3 (Bi-Directional Action/Response Feedback: Negotiating Notation Together) and Codes 1, 2 (2.1–2.5) and 3 (3.1–3.5) in Category 4 (Co-constructing Work-Identity: 'Completing' Notation, see Figures 7–8). Given Kate's compositional tendency to under-represented these details in her score, collaboration proved an effective model through which such work-identifying detail can be transmitted from the composer to performer and, subsequently, from the performer to the audience. Furthermore, the apparent lack of consistency in patterns of notation, as evidenced in the discussion above, necessitated greater familiarity with Kate's notational habits. This process of developing familiarity with the idiosyncrasies native to the composer's language is addressed in the following section.

4.6.4 Theme 3 (Categories 5, 6, 7): Co-Constructing Performance Practice in Collaboration

The notion of collaborative co-construction of ‘performance practice’ discussed in Section 4.5.2 is further explored through the specific examples below. Through working together in both structural and embodied modes of thinking (Sections 4.6.1 and 4.6.2), Kate and I gradually established a shared vocabulary of idiomatic terms, expressions, notational idiosyncrasies and the implicit messages they communicate. The following data extracts demonstrate how discernible recurring patterns of notation in *Particle Zoo II* began to emerge through the process of collaboration, informing my ‘reading’ and interpretation of the score. Thus, the discussion below builds on Categories 5, 6 and 7 (Building Shared Language; Making Informed Assumptions; Structural and Embodied Understanding Help Build Performance Practice).

4.6.4.1 Articulation: ‘Sharp’, ‘Pointillistic’, and ‘Small Slurs’ in *Particle Zoo II*

In this section I discuss how Kate and I came to a shared understanding of articulation markings and the descriptive language used to characterise a desired sound quality. The musical implications of terms such as “sharp”, “heavy”, “placed”, “pointillistic”, “gestural”, “fingery”, used by us to communicate the quality of attack within *Particle Zoo II* are discussed. Understanding the implicit meaning behind these idiomatic terms and notational markings impacted on my capacity to effectively ‘fill in’ the detail missing in the score, which in turn informed performance outcomes.

Kate’s frequent use of the word “sharp” to communicate a particular articulation is addressed in the context of the opening section of the piece (bars 1–61, Example 12). As seen in this example, the original notation does not specify any articulation markings. The only instructions in the original score are the iterated *mf* dynamic and a pedalling sign in bars 15–17.

Example 12. *Particle Zoo II*, bars 1–28.

As heard on Track 6, hearing me play the triplet gestures in bars 18–22, Kate asked that all the semiquavers in these bars are to be accented (as indicated by my annotations in red). This instruction was straight forward enough and immediately resulted in me changing the articulation from the gentler, even touch I assumed the notation to imply to a more deliberate, percussive one. However, Kate's next request to play the grace notes in bars 15 and 25 'sharper' necessitated more clarification, as evident in the following exchange.

Dialogue Extract 5

K.N.: So I guess all these sort of gestures should be on the upper side of *mf* and quite accented.
 S.L.: Yeah, sure.
 K.N.: And all the little grace notes should be quite sharp so that –
 S.L.: 'Sharp' as in that they could be heard better?
 K.N.: Sharp as in –
 S.L.: Or faster?
 K.N.: Sharp as in, that even though they are still leaning into the notes that they are following, sharp as in, ah, accented!

Princeton (USA), May 5, 2010

From this exchange the idiomatic meaning of the word 'sharp' in Kate's aesthetic vocabulary began to emerge. Hence, recognising the same gestures in bars 40 and 45 (Example 13), I was able to confidently assume that the sound/articulation intended (however, not notated!) was that of heavier, more accented quality.

Example 13. *Particle Zoo II*, bars 34–61.

34

f

mf

Ped.

Interpre - to - rays - pro - ce - sses
com - poser in - ter - pre - ting

8va

40

f

mf

f

mf

47 (8va)

f

7

3

"Sharp"

f

f

3

f

Similarly, extrapolating from the dialogue above, I was able to ‘translate’ Kate’s verbal (but not written) instruction to play the gesture in bar 47 (Example 13) “quite sharp” into a heavier, more accented sound I now knew she intended. Further into the session, when discussing bar 184, Kate once again asked for the notes to be played “quite sharp” and “heavy”. This time the accents are actually marked in the score, reinforcing that ‘sharp’ for Kate was synonymous with ‘accented’, ‘heavy’, and ‘placed’. Thus, through the collaborative process of negotiating the score a common understanding was reached: ‘sharp’ = ‘accented’ and ‘heavy’, as identified in Codes 1, 3 and 4 in Category 5 (Building Shared Language) and Codes 2, 5 and 7 in Category 7 (Structural and Embodied Understanding Help Build ‘Performance Practice’, see Figure 7).

Perhaps the most important lesson learnt in the process of collaboration in respect to Kate’s notational ‘dialect’ and its implications for interpretation involved her use of the ‘small slur’ symbols, discussed earlier in Section 5.5.2 in reference to pedalling, texture, and structural organisation. Perhaps more than any other notational idiosyncrasy in *Particle Zoo II* score, these symbols, at times appearing between consecutive notes and at others left unattached, posed an interpretative riddle and hence, warrant further analysis. Examples 14 and 15 illustrate the various contexts in which these symbols are employed in the score.

Example 14. *Particle Zoo II*, example of small slur symbols between consecutive notes, bars 311–315.



Example 15 *Particle Zoo II*, example of unattached small slur symbols, bars 269–278.

269

ff Heavy; Placed;

272

Build dynamics and intensity

275

277 8^{va}

"Pointillistic"

Heavy ff

Whilst by now I understood the small slurs between consecutive notes to imply sustaining the notes for as long as possible and indicate thematically important material, as was discussed in section 4.5.2, the implications of the unattached slurs remained unclear. However, as Kate and I worked our way through the score, the puzzle presented by these symbols was gradually resolved, revealing layers of meaning within the seemingly contradictory messages I was receiving through Kate's written notation and her verbal instructions. Specifically, when working on the Cadenza (discussed in Section 5.6.3), Kate asked for the notes in bar 277 (Example 15) to be

“pointillistic” (as heard on Track 7). The idiomatic use of the word “pointillistic” was first introduced by me into our shared vocabulary early in the collaborative sessions to describe a well-articulated, ‘fingery’, non-legato touch. This unorthodox use of the word “pointillistic” (conventionally employed to denote a particular compositional approach to texture) first originated when workshopping bars 29–32 (Example 16), when I asked Kate if I should play the semiquaver and demisemiquaver passages with a more “gestural” or “pointillistic” approach. My use of the word “gestural” was synonymous with ‘legato’, ‘shaped’, ‘in one sweep’, while by “pointillistic” I implied a more accentuated, clearly demarcated, and heavier articulation.

Example 16 *Particle Zoo II*, bars 29–32.

In this light, Kate’s verbal instruction to imbue the notes in bar 277 with a “pointillistic” quality (i.e. accented, clearly-demarcated and heavy in our vocabulary), seemed in contradiction to the unattached slurs marked in the score, which I assumed to indicate a sustained, ringing, legato articulation. Similarly, these slurs appear in bar 269 (right hand, Example 15), in which Kate asked for the notes to be “placed” and heavy, as was evident in Dialogue Extract 4 (Section 4.6.3). Observing this recurring relationship between the use of unattached slurs in the notation and the corresponding heavy, “pointillistic” articulation Kate requested, enabled to clarify the meaning implicit in

these symbols, which could subsequently be inferred onto analogous contexts throughout the piece. As implicated in Codes 4 and 5 in Category 5 (Building Shared Language) and Codes 1, 2, 3, 4 and 5 in Category 6 (Making Informed Assumptions, see Figures 7–8), it became increasingly apparent that the material marked with these slurs required special emphasis within the texture, conveyed by heavier, more accentuated touch. Feeding into my interpretation-building process, this insight enabled a greater congruity between the composer's intentions and their realisation in performance.

4.6.4.2 Reconciling Traditions: Notes versus Gesture

The notion of musical traditions and the hierarchy of work-realisation attributes prioritised within them was touched upon in Section 4.5.2 in the context of the preliminary, score-learning stages of this collaboration. The following discussion provides further evidence of how a greater mutual understanding (and agreement) between Kate and me as regards negotiating technically demanding passages in *Particle Zoo II* evolved. As mentioned in Section 4.5.2, my general tendency, instilled in me by my training in the 'elite' tradition of 'classical music', was to adhere to the score as much as possible, preferring to sacrifice tempo/speed and comfort in favour of the precise execution of notes. Kate, on the other hand, consistently prioritised gesture and dramatic effect and was open to modifications to both rhythm and pitch, as is evidenced in the example below. As previously discussed (Section 4.5.2), I had already modified bar 279 (Example 17) to achieve greater playability and power necessary to reflect the *fff* marking and the structurally climatic function of this passage, which concludes the Cadenza.

Example 17 *Particle Zoo II*, bars 279–281.

279 

However, when Kate and I came to work on this passage together, I attempted to play it as written, feeling it was inappropriate to present her with my 'altered' version without her consent. Detecting discomfort in my playing, Kate offered the following suggestion, resulting in the exchange below (Track 7).

Dialogue Extract 6

K.N.: *So that bit, right, that last bar, at 279 –*

S.L.: *At 279 is so hard, yeah –*

K.N.: *Just do anything!* [Emphasises the word “anything”]

S.L.: *Anything. Can I do this?* [I demonstrate my version with the altered rhythm]

K.N.: *Perfect.*

S.L.: *That makes my life a lot easier!*

K.N.: *Just do anything there. It could be just like –*

S.L.: *There's just so much going on.*

K.N.: *Just ease. Just as long as it's ease –*

S.L.: *OK.* [I play the passage through again, more confidently this time]

That makes it a lot easier!

K.N.: *Yeah!*

S.L.: *Yeah?*

K.N.: *You can even, you know how the last two 32nds, you can even take out the triplet sign and just make it like a 16 with some 32nds or something. It could just be anything!*

S.L.: *Just anything* [playing again, with a greater sense of ease, power, and direction].

K.N.: *Yeah, perfect! Great!*

Princeton (USA), May 9, 2010

Returning to this passage later in the session, I altered the distribution of notes further, changing the relationship between the semiquaver and the demisemiquaver notes. Consulting with Kate about these changes, she replied: “you can do whatever you want there as long as it sounds manic . . . It should just sound kind of crazy”.¹⁶⁸ This comment as well as the dialogue above extracted from the data set led to the identification of Codes 1 and 7 in Category 5 (Building Shared Language) and Codes 6 and 7 in Category 6 (Making Informed Assumptions, see Figure 7). Throughout the collaborative workshops, Kate consistently encouraged simplifying the material to enable greater ease and enhance my ability to bring out the essential character in the music. Witnessing Kate’s willingness to adapt her score and her invitation to “just do anything” to achieve the dramatic effect implicit in the writing (evidenced in Dialogue Extract 6) engendered greater interpretative freedom in my approach to score-realisation, and hence enabled closer integration between the musical traditions informing our respective relationship to musical notation.

4.7 SUMMARY OF THE COLLABORATIVE MEETINGS

This chapter examined the data collected throughout my collaboration with Kate Neal in the context of four core themes distilled in the process of Thematic Analysis. Various parameters of musical notation and interpretation, such as pedalling, articulation, dynamics, tempo agogic, structure, and rhythmic organisation were addressed. Furthermore, the discussion highlighted ways in which collaboration between composer and performer impacted on the processes of work-realisation and co-construction of work-identity. The underlying conceptual thread throughout the chapter was that musical notation is often limited in its capacity to communicate the nuanced complexity of musical dialectic, leaving much of the work-identifying detail unspecified. In this project, as in the two others addressed in the dissertation, collaboration served as a vehicle for transmission of musical ideas from composer to performer, facilitating greater integration and congruity between notation and performance.

¹⁶⁸ Personal communication, Princeton (6USA), May 9, 2010.

4.7.1 A Personal Reflection

Perhaps one of the greatest personal rewards from this collaborative experience came when I was listening to the recordings of the sessions as part of the data analysis, shortly after the Princeton premiere of the piece. Comparing my playing between the two collaborative sessions revealed the extent to which the playing had transformed as a result of joint thinking and experimentation. With only three days between the sessions, the stilted, heavy quality characterising much of the playing in our first meeting effectively metamorphosed into performance marked by greater sense of ease and confidence, technical command, rhythmic integrity, and suppleness of phrasing. Towards the end out second meeting I asked Kate how she felt about the progress we were making:

Dialogue Extract 7

K.N.: It's great. It's really coming along, isn't it? It's really actually changed a lot!

S.L.: Well, that has helped a lot what we did together!

Princeton (USA), May 9, 2010

Building on the thematic model presented in this chapter, the following chapter examines my collaboration with composer Damian Barbeler and pianist Stephen Emmerson in preparation for the world-premiere of *Bright Birds* for two pianos.

CHAPTER FIVE

BRIGHT BIRDS – PAINTING THE LANDSCAPE

(SONYA LIFSCHITZ, STEPHEN EMMERSON, AND DAMIAN BARBELER)

“Most things I write intuitively and then when you ask me what I want I have no idea!”¹⁶⁹

Damian Barbeler

Figure 9. Live Premiere of Bright Birds by pianists Stephen Emmerson and Sonya Lifschitz at the Four Winds Festival, Bermagui, NSW, April 7, 2012 (courtesy of Australian Broadcasting Corporation, NSW).



5.1 INTRODUCTION

The collaboration with composer Damian Barbeler and pianist Stephen Emmerson took place over February–April 2012 prior to the work’s premiere at the Four Winds Festival on April 7, 2012. This collaboration began as the Festival’s project to commission a

¹⁶⁹ Damian Barbeler, collaborative session, Brisbane, March 28, 2012.

new work, to be conceived and developed during a residency in Bermagui (a coastal fishing village in NSW where the festival takes place) and premiered by Stephen and me. Guided by the festival's Artistic Director, Genevieve Lacey, Damian Barbeler was chosen as the composer, known for his affinity for the Australian landscape and for his uncanny ability to capture its nuances in his music. The idea behind the residency, held at a property in Bermagui owned by festival supporters Cliff and Sayaka Wallis, was to enable Damian to immerse himself into the local landscape which would, overtly or implicitly, be reflected in the composition.

This chapter details the intensive collaborative process leading to the first performance of the work and how this impacted on notational and interpretative/performance realisation of *Bright Birds*. Using extracts of video documentation of the collaborative sessions (DVD 3, 'Supporting Material'), score excerpts,¹⁷⁰ verbatim transcriptions of pertinent dialogue, and email exchanges, the discussion builds on the themes examined in the previous chapter, detailing how parameters of pitch, rhythm, dynamics, pedalling, texture, articulation, ensemble, and structure were collaboratively modified to enhance the notation, transmission, and performance of the work.

The following discussion focuses on two concentrated collaborative periods – the initial residency in Bermagui (NSW) in February 2012 and subsequent workshops in Brisbane in March 2012. The one month between these collaborative phases enabled Stephen and me to absorb the changes made and integrate the new insights into the structure and conception of the piece. Conversely, it gave Damian time to re-think and re-write various passages in the score guided by the discoveries made through the collaborative experience.

Section 5.2 details the Thematic Analysis performed on the data pertinent to this collaboration and identifies the core themes for this chapter. Section 5.3 reports the

¹⁷⁰ The red circles and boxes around particular passages in the musical examples are intended as a convenient way to indicate/identify the part of the score being discussed. All symbols, markings and text appearing in red on the musical examples are intended to indicate the changes or realisations resulting from the collaboration, as referred to in text, and do not constitute the composer's original score.

first collaborative phase (February, 2012), examining the notion of ‘permanent plasticity’ introduced by Damian in relation to musical notation. Sections 5.4, 5.5, 5.6, and 5.7 examine each of the four core themes, providing relevant data extracts and critical reflection on their conceptual implications within the broader context of this research. Finally, section 5.8 provides a brief summary of results derived from this collaborative journey.

5.2 DATA ANALYSIS AND THEMATIC MAPPING

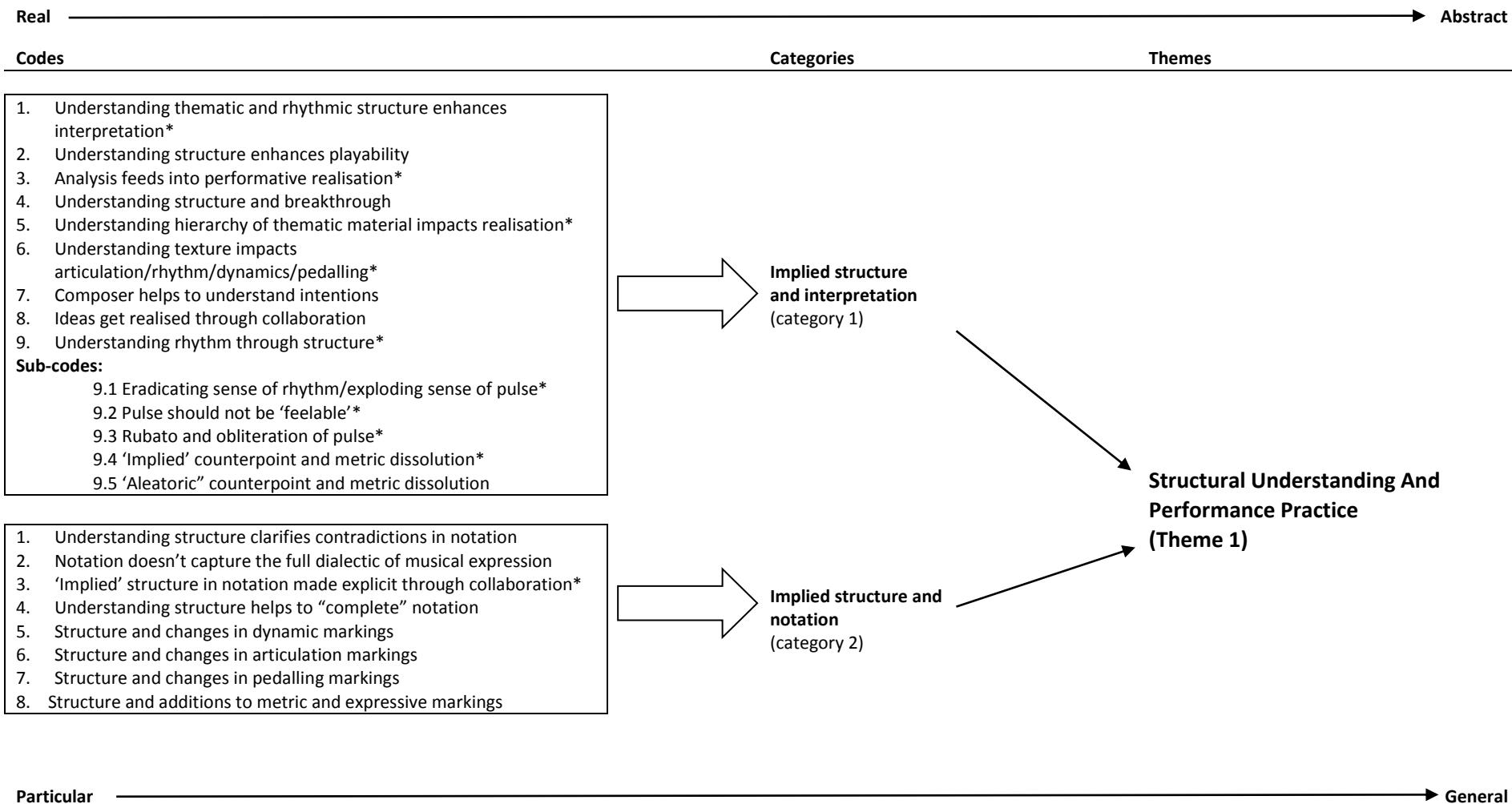
In line with the method of Thematic Analysis detailed in Chapter Three (Section 3.5), pertinent data was thoroughly reviewed and analysed through cycles of coding. Whilst conceptually modelled on the thematic map generated for my collaboration with Neal (see Chapter Four, Section 4.2), the analysis of the Barbeler-Emmerson-Lifschitz data yielded 35 additional codes unique to this collaboration, as shown in Table 5. Hence, whilst many of the codes and categories originating from Neal-Lifschitz case study proved relevant and applicable to the present project, the new codes resulted in modifications to categories and themes identified in my collaboration with Kate, as reflected in Figure 10.

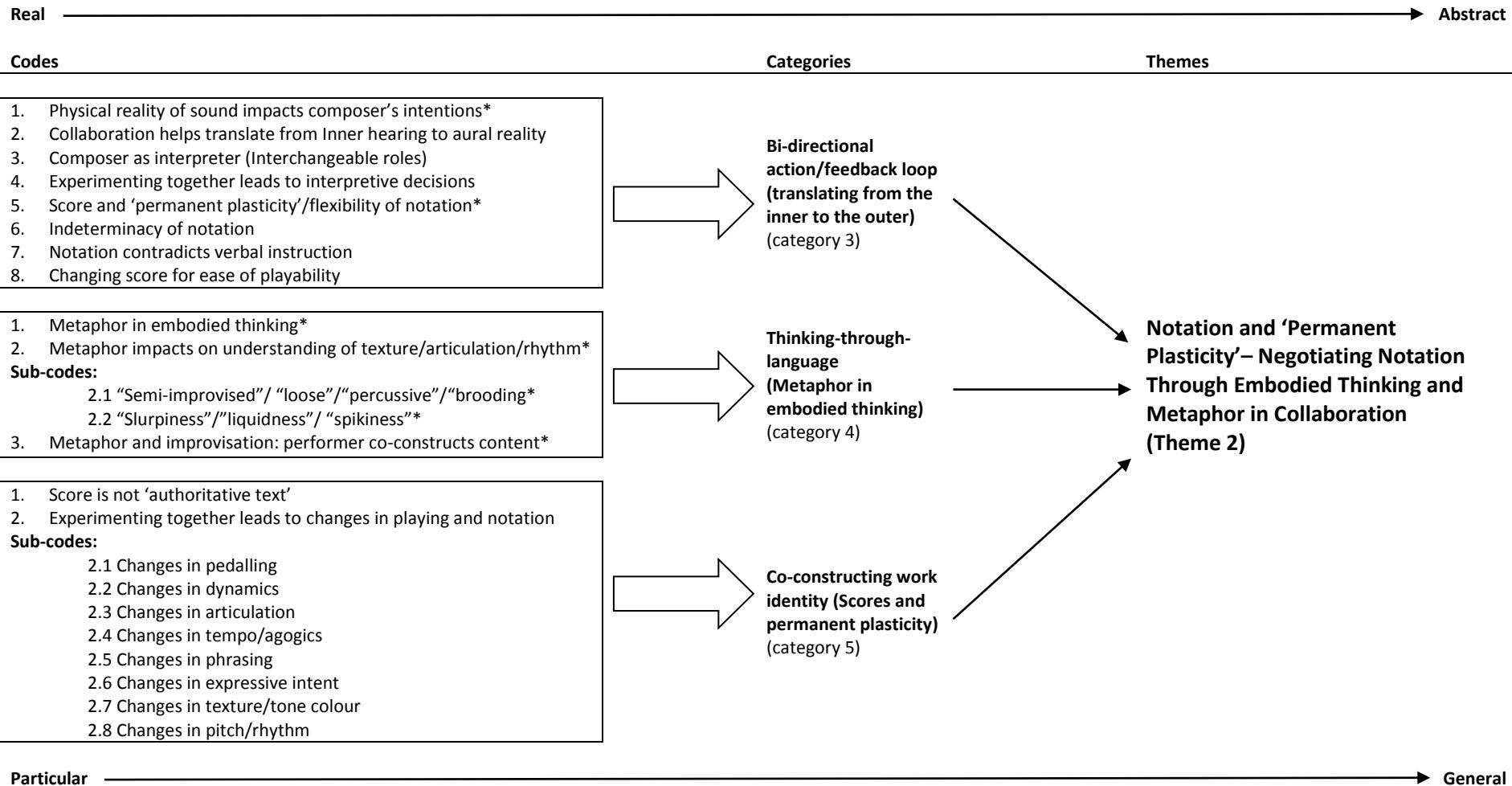
Table 5. 35 additional codes derived from the Barbeler–Emmerson–Lifschitz collaboration.

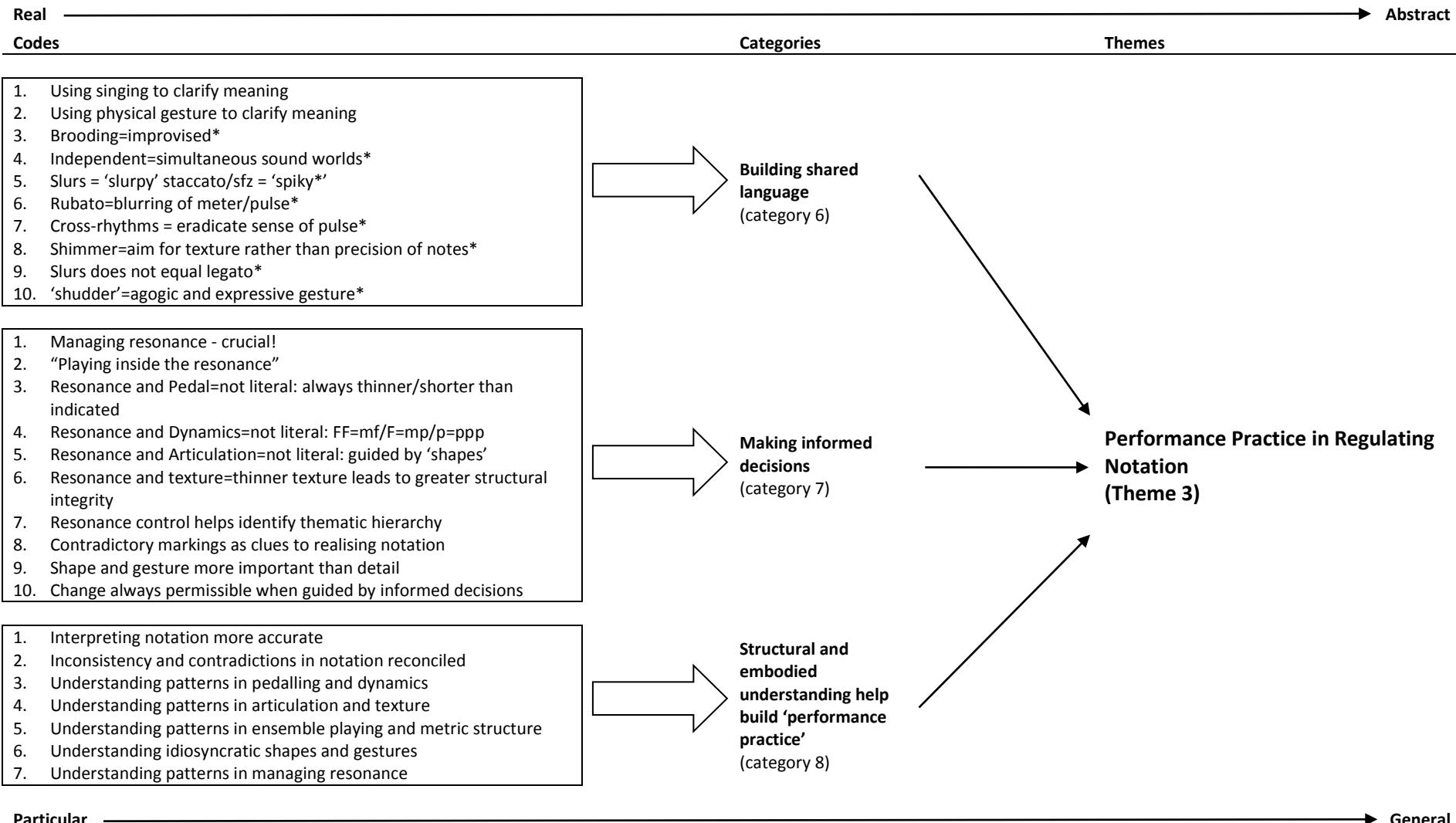
<p>Analysis feeds into performative realization Brooding=improvised Change always permissible when guided by informed decisions Contradictory markings as clues to realising notation Collaboration helps translate from Inner hearing to aural reality Composers willingness to change aspects of the score Collaboration enables to transcend limitations of notation Collaboration enhances interpretation and content Collaboration and ‘permanent plasticity’: Score as an evolving process Cross-rhythms = eradicate sense of pulse Flexibility of notation ‘Implied’ structure in notation made explicit through collaboration ‘Independent’=simultaneous sound worlds Metaphor in embodied thinking Metaphor impacts on understanding of texture/articulation/rhythm</p> <p>Sub-codes: ‘semi-improvised’ ‘loose’ ‘percussive’ ‘brooding’ ‘slurpiness’ ‘liquidness’ ‘spikiness’</p> <p>Physical reality of sound impacts composer’s intentions Performers willingness to change and adopt Playing inside the resonance/Managing resonance-crucial! Resonance and Pedal = not literal: always thinner/shorter than indicated, Resonance and Dynamics = not literal:FF=mf/F=mp/p=ppp Resonance and Articulation=not literal: guided by shapes</p>	<p>Resonance and texture= not literal: thinner texture leads to greater structural integrity Resonance control helps identify thematic hierarchy ‘Riddles’ in notation solved through collaboration Rubato=blurring of meter/pulse Score and ‘permanent plasticity’ ‘Shapes’ and improvisation: performer taking active role in content co-construction Shape and gesture more important than detail Shimmer=aim for texture rather than precision of notes Slurs does not equal legato Slurs = ‘slurpy’ <i>staccato/sfz</i> = ‘spiky’ ‘shudder’=agogic and expressive gesture Understanding rhythm through embodied thinking: Sub-codes: Eradicating sense of rhythm Exploding sense of pulse Pulse should not be ‘feelable’ Rubato and obliteration of pulse ‘Implied’ counterpoint and metric dissolution ‘Aleatoric’ counterpoint and metric dissolution</p> <p>Understanding hierarchy of thematic material impacts realisation Understanding thematic and rhythmic structure enhances interpretation</p>
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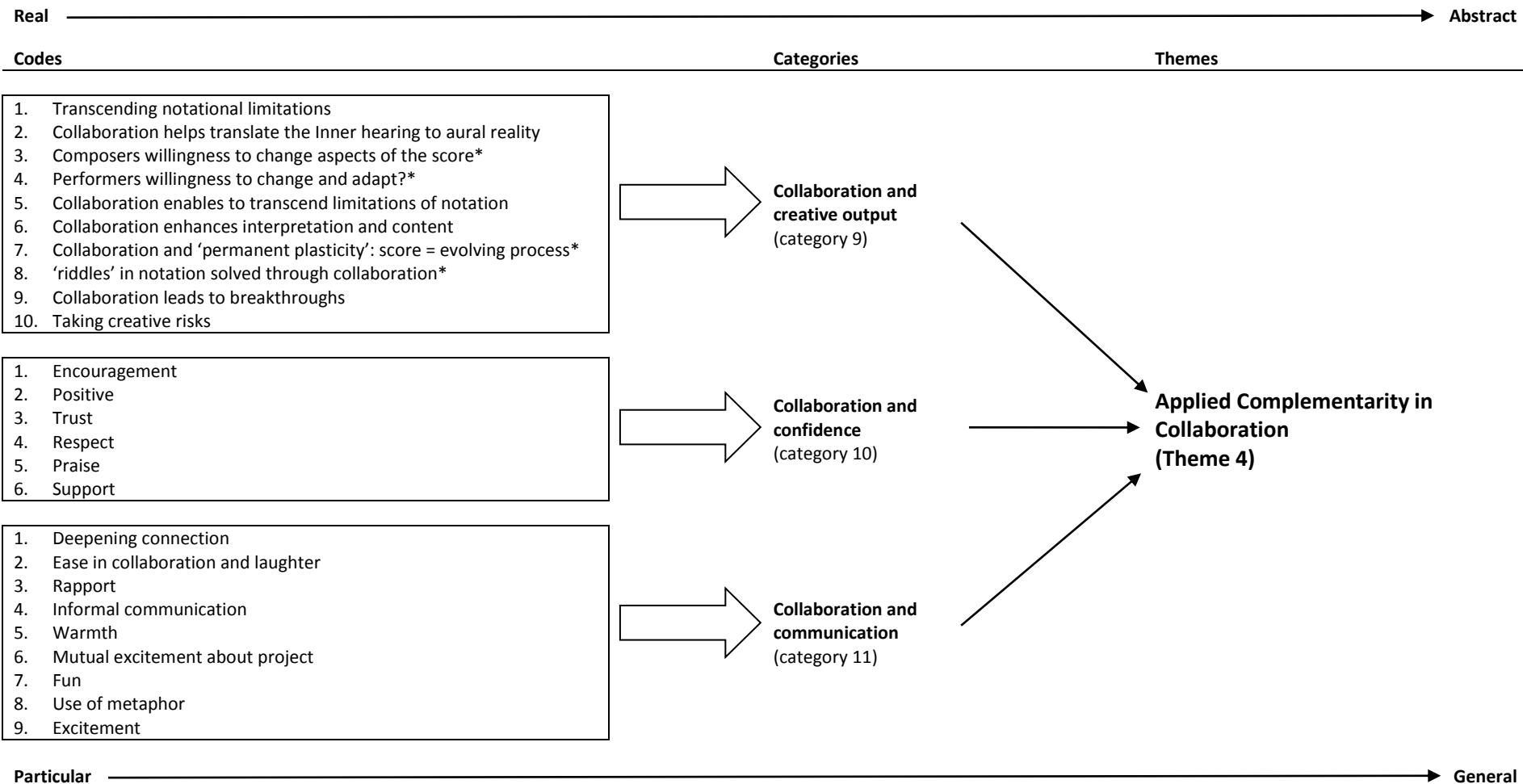
These 35 additional codes (marked with asterisks in Figure 10), combined with relevant codes originating from my collaboration with Kate, were condensed into broader conceptual categories and then distilled into core themes through which to conceptualise and interpret the core aspects of this collaboration, as shown in Figure 10.

Figure 10. Thematic map for the Barbeler–Emmerson–Lifschitz collaboration (new codes are marked with asterisks).









Thus, the four core themes underpinning the discussion in this chapter are:

1. Structural Understanding and Performance Practice in Collaboration
2. Notation and 'Permanent Plasticity': Negotiating Notation Through Embodied Thinking and Metaphor in Collaboration
3. Performance Practice in Regulating Notation
4. Applied Complementarity in Collaboration

As in reporting my collaboration with Kate, focusing the data in this way enabled identification of the essential aspects of this collaboration in relation to the research aims and questions. While the Thematic Map above reveals a degree of conceptual overlap between the two case studies (Neal–Lifschitz and Barbeler–Emmerson–Lifschitz), the discussion in this chapter examines the unique properties that distinguish this collaboration from the two others in this study. Table 6 provides specific examples of how data extracts were coded using the Thematic Analysis approach.

Table 6. Barbeler–Lifschitz–Emmerson collaboration, examples of coding raw data.

Data extract	Codes	Categories	Themes
Example 1 Conversation extract, collaborative session, (February 4, 2012, Bermagui, NSW) "Cos when I'm writing the gesture , I'm not thinking the specific notes , I'm really thinking of the contour of it and the emotion of it, and once you understand that, it's hard to get it wrong, 'cos it's so intuitively perfect."	Shape and gesture more important than detail	Making informed decisions (7)	Performance practice in regulating notation (theme 3)
Example 2 Interview transcript, February 5, 2012, Bermagui, NSW "I have written it fully out [bars 237–262], it's very, um, I suppose in a landscape term you can think of it as heavy materials in a landscape, the mountains, the Dromedary Ranges, the rocks , all these sorts of things, so, I've written it out as full notes, it's highly rhythmic, percussive kind of section , and actually what we've agreed is that they can kind of just do the shapes and not necessarily do the exact notes , because what I want is this kind of loose, almost improvised feeling ."	Metaphor in embodied thinking; Metaphor impacts on understanding of texture, articulation, rhythm; Metaphor and improvisation: performer co-constructs content; Shape and gesture more important than detail;	Thinking-through-language (4)	Notation and 'permanent plasticity' – negotiating notation through embodied thinking and metaphor in collaboration (theme 2)

<p>Example 3 Dialogue extract, collaborative session, March 28, 2012, Brisbane, QLD</p> <p>D.B.: Now, what I loved at A was, I'm feeling like you are giving me what I really ultimately wanted, which is that . . . at [bar] 61, it's like the pulse was gone and you did whatever in between and you still managed to then meet at the bottom and then go off again, and I think it would be nice to see whether we can just let that happen.</p> <p>But the thing is that really the pulse should not be 'feelable' from A onwards. The pulse is obliterated by that. So, it is this kind of [sings/demonstrates]. I don't know how much you can push that but the more you can take away any sense of pulse in what you are doing, whether by playing it unevenly or whatever but still keep track of each other. I think you must be doing it by feel because there's no way you can actually feel the pulse in here.</p> <p>S.L.: Well, I'm counting; I think we are probably both counting the large beats.</p> <p>S.E.: My left hand is in a pulse but actually, actually if I wasn't to do that I might...</p> <p>D.B.: Well I think your left hand is the only thing that is anywhere near in pulse.</p> <p>S.E.: yes, yes.</p> <p>D.B.: Can we just do an experiment where we approach that and see whether at A we can just, it's like the pulse has been exploded, just a blur of colour</p>	<p>'Implied' structure in notation made explicit through collaboration;</p> <p>Understanding thematic and rhythmic structure enhances interpretation: Understanding rhythm through structure</p> <p>Sub-codes:</p> <p>Eradicating sense of rhythm</p> <p>Exploding sense of Pulse should not be 'feelable';</p>	<p>Implied structure and notation (2)</p> <p>Implied structure and interpretation (1)</p>	<p>Structural understanding and performance practice (1)</p>
<p>Example 4 Dialogue extract, March 28, 2012, Brisbane, QLD</p> <p>D.B.: Yeah, and do you know what, I've just been noticing, just then, I don't know, in my ear it works, but it's not working now. I wonder whether you could make those quavers [meaning changing the semiquavers in the 2nd beat of bar 53 into quavers] and hit yours at the same time as him [Stephen] and then bring that in [the sub p]?</p> <p>S.L.: OK</p> <p>D.B: Can we try all that?</p> <p>S.L.: So let me just figure out how that works [I trial the changes on the piano]</p> <p>D.B: It's just that you are hitting your arrival note in a different time and it's not sounding correct. In my ear it's sounding right</p>	<p>Physical reality of sound impacts composer's intentions;</p> <p>Experimenting together leads to changes in playing and notation;</p>	<p>Co-constructing work identity (5)</p> <p>Bi-directional action/feedback loop (translating from the inner to the outer (3))</p>	<p>Notation and 'permanent plasticity' – negotiating notation through embodied thinking and metaphor in collaboration (theme 2)</p>

The next section details the first collaborative period in Bermagui, drawing on the thematic map above (Figure 10).

5.3 BERMAGUI, FEBRUARY 2012 – FIRST ENCOUNTERS

The first meeting between Damian, Stephen and me occurred in Bermagui, where we met for 3 days in February to get a first-hand experience of the place that inspired the piece, to establish personal and professional rapport, and to begin working together. One month prior, Stephen and I received the score and a MIDI recording of the piece. At that stage neither of us had had any input into the music's content nor had any clear idea of what to expect. Contrary to Damian's characteristically sparse and spacious style, this score revealed significant virtuosic demands, dense textures, extremes of speed and dynamics, and ensemble challenges due to large sections requiring the two pianists to play in different tempi, independent of each other. Consequently, when we arrived at Bermagui for rehearsals, the piece was not yet fully mastered, which turned out to be an advantage in the ensuing collaborative process, whereby the musical material and the playing could be freely moulded without preconceived ideas getting in the way.

5.3.1 Scores and 'Permanent Plasticity'

Like Kate, from the very first rehearsal Damian communicated a keen willingness to treat his score as a 'work-in-progress', open to modifications:

I didn't want to do much before now because you want to hear the resonance and how much I've filled that aural space. So, I think there is scope for taking some stuff out it's just a matter of what is going to be required.

February 4, 2012

Acknowledging the difficulty of the writing, Damian confirmed that any passage presenting an impediment to playability could be modified. His attitude towards the score as an evolving rather than fixed object is evidenced in the following quote, transcribed from the conversation early in our first collaborative session:

I always think of music as having a kind of permanent plasticity. I could always find a hundred solutions to do it [write out an idea] and sometimes what it gets down to is just subtleties of physicality that are beyond my understanding, that come from your personal experience and your personal techniques even. So, I'm really actually fascinated if there is something. Because I think the issue is: you don't want to be wasting time on something that is not important [laughs]. *Just because there is a note written does not mean it is necessarily important.* [Italics mine]

February 4, 2012

This quote reveals how the Complementarity pattern of collaboration, characterised by the division of labour, complementary skills, openness to change, and shared goals, was framing this project from the outset. Furthermore, Damian's remark that "just because there is a note written does not mean it is necessarily important" poses a profound challenge to the notions of work-reproduction and work-preservation espoused by Goodman (discussed in Chapter Two, Section 2.3.3), who claimed that true instantiation of a 'musical work' is contingent on the reproduction of every work-identifying detail notated in the score. Similarly, Damian's remark challenges the deeply embedded conditioning of performers brought up in the 'classical music' tradition, whereby the score is seen as normative (and regulative) and often 'sacred'. For Damian – a composer working within the art music tradition – a genuine 'reproduction' (performance) of the score is one that best captures the structural and emotional shape and content of the work, as evidenced in his comment below:

In the world of classical music, where things can be highly conservative, if we got a score of Beethoven, we might say that, well, every note is sacred. Well, I am a composer and I am still alive, and I can say: well, no, I'd like it to be slightly different and I'd like the percussiveness or the looseness of it to be what's expressed and not the exact notes!

February 4, 2012

A similar attitude from the composer regarding score-realisation can be recalled from my work with Kate (Chapter Four, Section 4.2.2), reflecting the commonality of prioritising 'gesture' and dramatic intent over the precise execution of notes across both collaborations. Such attitude stands in stark contrast to the approach most classically-trained performers are taught to employ. The precision and exact

faithfulness to the notes, rhythm, and markings in the score are perceived within this tradition as strongly indicative of the performer's musicianship and the degree of scholarship they bring to their interpretations, and are evaluated accordingly. However, while an invaluable asset in itself, such focus on the literal execution of notational detail, as emphasised by Goodman, can often stand in the way of penetrating the expressive content and thus impede, rather than enhance interpretation (and performance), as became increasingly evident as this collaboration evolved. Whilst neither Kate nor Damian endorsed 'wrong' notes *per se*, they were willing to *change* or *discard* notes that obscured structural logic and emotional gesture of the music, and encouraged me (and Stephen in the present case study) to adapt the notated score in ways which facilitated greater physical/technical freedom. In both collaborations, the music, as it was shaped into physical sound by the continuous cycles of bi-directional feedback, changed substantially, whilst the notation remained relatively unaltered save for the copious scribbles, corrections, additions, and notes we made in our scores, as neither of the composers produced an amended score post-collaboration. As the recorder virtuoso and renowned collaborator Genevieve Lacey aptly notes, "working with composers, I know that what is left to history is incomplete, inaccurate, often something else entirely from what happened in performance". She goes on to say:

I giggle over the riddles that some poor musicologist, a few hundred years down the track, might attempt to solve with this music, trying to learn more about performance practice in the early twenty-first century. It's a slippery thing, notation, and there's so much it can't tell us.¹⁷¹

As will be evident from the ensuing discussion, as Damian heard us play various sections of the piece, coaxing them into gradual submission, his perspective evolved, leading to modifications to musical content and structure, as well as articulation, pedalling, dynamics, tempi, texture and ensemble. This conceptual 'fluidity' and flexibility is similarly evident amongst some of the seminal composers of the twentieth- and twenty-first centuries. Specifically, in his essay, "On Letting the Music Speak for

¹⁷¹ Genevieve Lacey, 15th annual Peggy Glanville-Hicks Address 2013, <http://www.newmusicnetwork.com.au/PGH/GL13.html> (accessed 12 December 2013).

Itself”, Richard Taruskin relates an episode from a rehearsal of Elliott Carter’s *Duo* for violin and piano, involving the composer himself and the performers:

Whenever the performers sought guidance on matters of balance and ‘tempo, [Carter’s] reply was inevitably, “I don’t know, let’s see”, and then he would join them in seeking solutions, as often asking their advice as they his.¹⁷²

This example, as well as my experience of collaborating with Kate and Damian, suggest that in a collaborative context, the composer’s and the performer’s agencies become interdependent in the process of work-realisation, whereby work-identifying detail is established through the action/response loop discussed in the previous chapter.

The following sections examine each of the four core themes detailed in Figure 10 above. Each section presents relevant extracts of data from which the codes for this collaboration were derived and offers a critical reflection on the results.

5.4 THEME 1 (CATEGORIES 1 AND 2): STRUCTURAL UNDERSTANDING AND PERFORMANCE PRACTICE IN COLLABORATION

Similar to my work with Kate, this collaboration afforded an opportunity to study how understanding of the implicit structural organisation within the piece, as revealed by the composer, enhances interpretation and performance. Conversely, understanding recurring patterns of structural organisation in Damian’s notation led to the development of a shared aesthetic (‘performance practice’), which enabled Stephen and me to translate the symbols on the page into a coherent musical language.

5.4.1 From Structure to Chaos – a Lesson in Metric Dissolution

Considering the material in section A in Example 18, Stephen and I initially perceived the notation to communicate precise metric synchronisation of parts, whereby the left hand of Piano 1 (Stephen’s part) is aligned with the right hand in Piano 2 (my part).

¹⁷² Richard Taruskin, “On Letting the Music Speak for Itself” in *Text and Act*, 54.

Example 18 . Bright Birds, bars 56–68.

As seen on Track 8¹⁷³, hearing us struggle to achieve the shape, direction, and sonority he envisioned, Damian suggested to think of this section as comprised of repeated loops, beginning on the longer, heavier bass notes and spanning three to four bars (bars 57–60; 61–63; and 64–67 in Example 18, annotated in red). By employing physical and vocal gesture as well as verbal metaphor to transmit his intention, Damian explained the implied structure of this section and how it might be practically realised, as seen on Track 9 and evidenced in Dialogue Extract 7.

¹⁷³ All tracks referred to in this chapter appear on DVD unless otherwise specified.

Dialogue Extract 7

S.L.: It's actually really helpful thinking of it as blocks starting from this beat –

D.B.: Yeah, cos if you are starting to think “oh, are we in time with each other and stuff”. I mean, I almost wrote this section as not in tempo, but then I realised I needed you both to kind of meet, but in between.

S.L. Yeah, it's really nice to think of this as big blocks here –

D.B.: Yeah, I really think there has to be this kind of, this kind of abandon, a sense that you've abandoned yourselves to this flush of sound there; and then it's: bang! [makes a huge physical gesture], you just let it go. Because then, when you come to controlling it [meaning the material after this], it makes it all the more gorgeous.

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Damian's suggestion to think of the material in bars 57–68 as a “blur of colour” and effectively conceived as “not in tempo” (as evidenced on Track 9) enabled Stephen and me to reconceptualise the implied structural organisation of this section, whereby the rhythmic alignment of parts was de-emphasised in favour of the larger dynamic and structural shapes. Experimenting with destabilising metric precision and articulating the implicit three–four bar loops through a more sophisticated use of dynamic shading and rhythmic elasticity, aided by Damian's physical and vocal 'animation' of these bars (see Track 9), the following exchange ensued:

Dialogue Extract 8

D.B.: Now, what I loved at A was, I'm feeling like you are giving me what I really ultimately wanted, which is that . . . at [bar] 61, it's like the pulse was gone and you did whatever in between and you still managed to then meet at the bottom and then go off again, and I think it would be nice to see whether we can just let that happen. But the thing is that really the pulse should not be 'feelable' from A onwards. The pulse is obliterated by that. So, it is this kind of – [sings/demonstrates]. I don't know how much you can push that but the more you can take away any sense of pulse in what you are doing, whether by playing it unevenly or whatever but still keep track of each other. I think you must be doing it by feel because there's no way you can actually feel the pulse in here –

S.L.: Well, I'm counting; I think we are probably both counting the large beats.

S.E.: My left hand is in a pulse but actually, actually if I wasn't to do that I might –

D.B.: Well I think your left hand is the only thing that is anywhere near in pulse.

S.E.: yes, yes.

D.B.: Can we just do an experiment where we approach that and see whether at A we can just, it's like the pulse has been exploded, just a blur of colour.

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Given the permission to treat this section with a substantial degree of rhythmic and metric flexibility (despite no evidence of that given in the score's instructions) enabled Stephen and me to shift the focus towards achieving the textural and dramatic qualities Damian conceived, achieving a more coherent and congruous realisation of this section, as evident on Track 10. Examining the data extracts (Dialogue Extracts 7–8 and Tracks 8–10), reveals how the implicit structural detail is transmitted from the composer to the performers through collaboration, significantly impacting on the performance outcomes. Critical reflection on these extracts led to the derivation of Codes 1, 2, 3, 4, 7, 8 and 9 (9.1, 9.2) in Category 1 (Implied Structure and Interpretation) and Codes 2 and 3 in Category 2 (Implied Structure and Notation, see Figure 10).

Another example of the collaborative dialogue serving to 'translate' the implied cues and their structural function in notation is illustrated below. The material in question is Section B, Example 19.

Example 19 *Bright Birds*. Layering of cross-rhythms, bars 72–75.

B

72

P.1

fff

f decresc. poco a poco

8va

poco rubato, gently falling (pf.2 need not stay in tempo with pf.1)

P.2

fff ff

decresc. poco a poco

74

rall. (pf.1 need not stay in tempo with pf.2) -----

P.1

ppp

8va

Indulge

rall. -----

P.2

decresc. poco a poco

76

(rall.) -----

P.2

♩=50

The dynamics in bar 72 are marked *fff* and *ff*, with *decrescendo poco a poco* beginning in bar 73. Piano 2 is marked *poco rubato, gently falling* and the score specifies that the two pianos need not stay in time with each other. This is one of several sections in the

piece where the parts are not rhythmically aligned and unfold independently. The *rallentando* in Pianos 1 and 2 begins in bars 74 and 75 respectively. The notation presents various interpretive possibilities and our initial reading of the score suggested that Stephen's part (Piano 1) remains firmly in time until bar 74, with my part (Piano 2) employing minimal *rubato* (as the *poco rubato* would suggest). In line with the score's instructions, our intention was to generate a powerful sonority throughout bars 72–73, and to resist any *rallentando* until the second half of bar 74 in Piano 1 and bars 75 in Piano 2 to enable a gradual slowing down of tempo towards $J= 50$ in bar 79 (Example 19). However, amongst these seemingly congruent instructions and the sound aesthetic they appeared to communicate, the '*gently falling*' specification in my part in bar 72 posed an interpretative riddle. While it seemed an important clue within the overall dynamic and metric topography of this section, I was unsure how to reconcile it with the *ff* marking, especially when immediately preceded by the explosive *fff*. Considering the metric friction of the 2 against 3 cross-rhythm, the *ff* marking, and the material that directly precedes these bars, I initially perceived this section (bars 72–74) to communicate a rather fraught, tense quality, struggling to break away from the chaotic 'shimmer' of section A.

However, as seen on Track 11, realising that my 'reading' of the score did not match his conception, Damian explained that the *rubato* marking and the use of cross-rhythms in bars 72–73 (Example 19) were intended to 'destabilise' and 'cloud' the pulse, preparing for the change of character starting from bar 76. Reflecting on the earlier verbal (however, not notated) instruction from Damian to 'obliterate' the pulse in bars 57–68 (Example 18), which are largely comprised of polyrhythmic figurations, a discernible pattern of implied structural organisation in Damian's musical vocabulary began to emerge. Specifically, extrapolating the insights afforded by working collaboratively on sections A and B (Examples 18–19), it was becoming apparent that when Damian employed cross-rhythms across several layers of texture (as in sections A and B), he was seeking to effectively eradicate a tangible sense of pulse and meter. Additionally, considering the instruction in bar 72 that "Piano 2 need not stay in tempo with Piano 1", we began to realise that the intended dissolution of pulse was often coupled with the temporally 'independent' treatment of the two piano parts.

Understanding the structural implications of cross-rhythms as synonymous to metric dissolution and often also to the temporal independence of parts formed an important aspect of the developing ‘performance practice’ within this work, identified in Codes 1, 3, 7, 8 and 9 (9.1, 9.2, 9.3) in Category 1 (Implied Structure and Interpretation), Codes 6 and 7 in Category 6 (Building Shared Language), and Codes 1, 2 and 5 in Category 8 (Structural and Embodied Understanding Helps Build ‘Performance Practice’, see Figure 10).

Returning to section B (Example 19), and the riddle of the ‘*gently falling*’ instruction in my part, Damian explained that despite the *fff* and *ff* markings in bar 72, the material carries the ‘seeds’ of the new expressive aesthetic of section C (a quasi-improvised lyrical solo cadenza in Piano 1 beginning in bar 80; see Examples 29–30) and hence, requires a ‘smoother’ and more expansive approach. Additionally, he asked for the *decrescendo* (originally marked in bar 73) to begin immediately from bar 72 and suggested adding ample *rubato* in Stephen’s part to further destabilise the pulse, despite no indication in the score.

Inferring the insights offered by Damian into the expressive and structural implications of these bars enabled us, as performers, to prioritise certain markings over others as well as ‘read between the lines’ of what the notation tacitly implied. Specifically, we were able to ‘read’ ‘*gently falling*’ within the broader context of the rhythmic instability dictated by the cross-rhythms as we now understood them, and treat the dynamics and tempo markings only as a general guide. Reflecting on the processes that led to these realisations and considering the data extract captured on Track 11 enabled identification of Codes 1, 2 and 6 in Category 6 (Building Shared Language), Code 8 in Category 7 (Making Informed Decisions), and Codes 1, 2 and 5 in Category 8 (Structural and Embodied Understanding Helps Build ‘Performance Practice’, see Figure 10).

5.4.2 Simultaneous Sound Worlds – a Lesson in Independent Thinking

In this example, the extreme density of texture and a seeming absence of thematically important material in bars 317–323 (Example 20) made it difficult to make

interpretative decisions regarding textural perspective (i.e. foreground/middle-ground/background) and rhythmic organisation, complicated by the '*independent*' instruction in both piano parts.

Example 20. *Bright Birds*, bars 316–323

Handwritten musical score for orchestra and piano, showing rehearsal marks 34, 35, 37, 38, 39, and 40. The score includes parts for P.1, P.2, and P.3. Various markings are present, including dynamic changes (e.g., ff, fff), tempo changes (e.g., 3/4, 5/4), and performance instructions (e.g., 'dry', 'dryly', 'dryly'). A large red circle highlights a section of the score in rehearsal mark 40.

The dynamic markings in this excerpt range from *f* to *ffff* with large, cluster-like chords in both parts and long pedal markings. The massive resonance, accumulated by the two instruments playing dense chordal textures at maximum dynamics, obscured structural coherence and expressive clarity. Grappling with the '*Rubato (independent)*' instruction at the beginning of this section (bar 294; see Appendix F, Example 1), Stephen and I trialled various possibilities of rhythmic organisation, including aligning the large beats within the bar while maintaining a degree of freedom within the beats. Working with Damian provided a valuable insight into his conceptualisation of the structural patterning and thematic hierarchy within this section, substantially modifying our approach to realising it in performance, as heard on Track 12 and evidenced in Dialogue Extract 9.

Dialogue Extract 9

S.L.: Damian, there seem to be some fairly clear sort of structural points, you know, junctures where we meet, even though it's all a bit, ah, free. Like for example here, you know where I've got those [I point/sing b.319 and b.322], and then Stephen has the same gestures, like is that something we need to aim to actually to align?

D.B.: No, no I think –

S.L.: Or that triplet there for example, you know, the way it's –

D.B.: No, my experience of doing this in the past has been that you'd be surprised if you just let go and not worry about it, how often it works out. It actually usually it's self-assembling. If you start trying to worry about things, fitting things in the right spot, then it kind of, it's just one more thing that can kill off the mood I think. There has to be a sense of simultaneous sound-worlds going on that are just kind of interacting in this stream of, just, just don't worry about it, just enjoy yourself I'd say [laughs]. Have fun and it'll be fine!

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With a new focus on revealing the inherent textural, rhythmic, and timbral properties within each individual part, metrically independent of the other, Stephen and I ran through the section again, as heard on Track 13. Reflecting on the way the playing was evolving, Damian commented:

Awesome! That was really good! You know what really came out? It's funny how you forget these things and then hear the piece and you go, oh, that's right! I really was thinking that each of your parts was a slightly different character, and I heard it then. So, there's kind of this, the euphoria is actually more here [in Stephen's part] isn't it, and there's kind of this expansive, the whole time, we could really hear that. And yours [my part] is kind of more this angry, angular thing. I think maybe you can take out some pedal to bring out some of those, occasionally in there, do you know what I mean? So we get a bit more of the definition in there, that kind of ah, agitation that's there in your part.

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Damian's comment above further enhanced our understanding of the underlying structural, expressive, and dramatic intent conceived for this section and for each piano part individually. Additionally, Damian's remark (Track 13) that "in that sense you will be ignoring some of mine [markings]", prompted me to reconsider my approach to pedalling and articulation in order to achieve a more "angular", "angry" sound aesthetic, resulting in greater structural clarity and textural perspective. Furthermore, to enable the individual characters of the parts to come through with more distinction, Damian decided to add a *fermata* on beat one, bar 321 in Piano 1 to feature the Piano 2 material, and to remove the right hand notes in Piano 2, bar 323 to thin out the texture so that the 'euphoric' character of Piano 1 is not obstructed (Example 20, annotated in red circles). Track 14 and Dialogue Extract 10 document the tangible changes and improvements achieved as a result of collaboratively negotiating the structural organisation of this section.

Dialogue Extract 10

D.B.: [We had just played this section through again] *It was fantastic! So what happened was, it's quite extraordinary, 'cos this is what happens with these textures: these ones here* [points at 2nd beat of bar 219] *actually provided a downbeat to Stephen's things here* [points to the semiquaver triplet on the 2nd beat in piano 1, bar 319]. *So you are actually going: 'boom' and he's going: 'dju-dju-dju'; 'boom' – 'dju-dju'* [sings]. *Now, these things happen all the time in these sort of texture. And they kind of these extraordinary things you couldn't really get any other way, and it's a very natural feel because the person in themselves is just behaving naturally.*

S.E.: *So much nicer than having to co-ordinate!*

S.L.: *Yeah!*

D.B.: *And you get highly complex rhythms!*

March 29, 2012

As evidenced in this exchange (and on Track 14), the alterations to the notated instructions in the score, such as pedalling, articulation, pitch, rhythm, and agogic markings enabled a closer match between the composer's inner hearing and the acoustic reality of the performance. Examining the processes leading to these modifications enabled to identify Codes 1, 2, 3, 4, 5, 6, 7 and 8 in Category 1 (Implied Structure and Interpretation), Codes 2, 3, 4, 6, 7 and 8 in Category 2 (Implied Structure and Notation), as well as Codes 2, 3, 5, 6, 7 and 8 in Category 3 (Notation and 'Permanent Plasticity': Negotiating Notation Through Embodied Thinking and Metaphor in Collaboration) and Codes 1 and 2 (2.1, 2.3, 2.4, 2.6, 2.8) in Category 5 (Co-Constructing Work Identity: Scores and Permanent Plasticity).

The lessons learnt from the experiences reported in Sections 5.2.1 and 5.2.2 in respect to patterns of structural organisation in Damian's compositional practice can be summarised as follows:

1. Cross-rhythms imply metric dissolution/eradication of pulse
2. Rubato implies eradication of meter/pulse
3. '*Independent*' instruction in the score implies 'simultaneous, aesthetically distinct sound worlds' created by the individual piano parts, and suggests destabilisation of rhythmic and metric precision
4. Apparently contradictory instructions in the score serve as clues to underlying structural and expressive shapes
5. Understanding implied structure informs choices of pedalling, articulation, rhythmic organisation and textural perspective in performance
6. Notation may at times under-represent and mis-communicate structural detail

The next sections examines the role of the 'embodied' thinking in the collaborative processes of work-realisation and reports on data pertinent to Theme 2.

5.5 THEME 2 (CATEGORIES 3, 4 AND 5): NOTATION AND 'PERMANENT PLASTICITY': Negotiating Notation through Embodied Thinking and Metaphor in Collaboration

Building on the discussion in Chapter Four (Section 4.6.2), which examined the role of the bi-directional action/response feedback loop in a collaborative composer-performer dynamic, this section details specific examples of how work-realisation was enhanced by 'embodied' modes of joint thinking.

5.5.1 Thinking-In-Action: Co-constructing through Notation

Working on bars 53–56 in Example 21 revealed that the transition from the *ff* in the 3rd beat of bar 53 into *dolce, pp subito* (starting on 'D' in Piano 2) was not adequately realised. Failing to generate enough resonance on the *ff* undermined the dramatic effect of the *dolce, pp subito*, resulting in a 'flattened' dynamic contour in these structurally significant bars, which herald the first major change of texture, rhythm, and character in the piece.

Example 21. *Bright Birds*, bars 53–57.

As seen in Example 21, Piano 2 has a tied note ('B') marked *ff* just prior to beat 3, bar 53. The score indicates a change of pedal on this note, which is then held over for the remainder of the bar. This was another case of seemingly contradictory notational instructions, presenting a number of interpretative riddles, as outlined:

- The 'B' on the last quaver of beat 2 in piano 2, bar 53 (the final note of a long *crescendo*) is marked *ff* and > (accent), indicating it to be a powerful arrival of that phrase. Coinciding with that is a pedal change, which in practice would 'abort' the resonance of the preceding material, making the note sound thinner and potentially getting lost in the resonance of Piano 1;
- The *subito pp dolce* starting from 'D' in Piano 2, bar 53, while indicating a major change in sound aesthetic, dynamics, and texture, simultaneously asks for the pedal to be held over from the *ff*.

The notation offered several possible interpretative readings:

- Given the resonance and brightness of the Piano 1 material, Damian was mindful of accumulating too much resonance in Piano 2, instead aiming for clarity of texture and contrast of timbres between the registers of Piano 1 and Piano 2, bar 53;
- Given Piano 1 has rests when the *dolce pp sub* section starts (bar 53), Damian thought it necessary to have some residual resonance smoothing out this dynamic change to avoid a potential gap/'hole' in the sound and thus marked the pedal to be held over from the *ff*. However, to avoid too much resonance being carried over, the pedal change was marked on the last note preceding the *dolce pp sub*.

As Damian indicated that the dynamic change was not dramatic enough, my intuitive response was to change the pedal directly on the *pp subito* (instead of on the preceding 'D') and to insert a slight 'comma' between the *ff* and the *dolce*, which would allow time for the resonance of the *ff* to subside and a starkly different colour to be established on the 'D' (bar 53). Dialogue Extract 11 and Track 15, which captures a larger segment of the collaborative exchange, illustrate how 'embodied' experimentation at the instrument afforded by the bi-directional action/response loop enabled Stephen and me to better convey the intended musical and dramatic effect by modifying the score and hence the performance.

Dialogue Extract 11

D.B.: *I wonder also this stuff here, it's Dolce, can we dry it out a bit more? So when the resonance hits at [rehearsal letter] A it's a bit more contrast? Much more dry I think, yeah, much less pedal.*

S.L.: *Damian, do you think I should take a little bit of time on Dolce, like to create more contrast here, 'cos otherwise it just seems too kind of jammed together.*

D.B.: *I think you can actually, I think yeah, there's a sense that it's a bit more broad there.*

S.L.: *Like maybe after Stephen hits that note, 'cos he's on his own there, then maybe to let it ring a little bit. Because otherwise he's still ringing when I'm trying to, and I think that's why it doesn't quite create the contrast.*

D.B.: *Yeah, and do you know what, I've just been noticing, just then, I don't know, in my ear it works, but it's not working now. I wonder whether you could make those quavers [meaning changing the semiquavers in the 1st and 2nd beats of bar 53 into quavers] and hit yours at the same time as him [Stephen] and then bring that in [the sub p]?*

S.L.: *OK*

D.B.: *Can we try all that?*

S.L.: *So let me just figure out how that works. [I trial the changes on the piano]*

D.B.: *It's just that you are hitting your arrival note in a different time and it's not sounding correct. In my ear it's sounding right.*

March 28, 2012

Damian's last comment in this dialogue excerpt reiterates the notion that the inner hearing of the composer cannot always conceive the totality of the sound as it is heard in actual performance. Hence, the role of 'thinking-through-action' in collaboration becomes crucial to refining and fully realising compositional ideas in notation and sound.¹⁷⁴ Experimenting further, as documented in Dialogue Extract 12 and, more extensively, on Track 15, led to additional modifications, this time relating to pedalling and agogic markings.

¹⁷⁴ As mentioned earlier in the discussion, the notion of 'thinking-through-action' and, analogously, 'thinking-through-structure/language/listening/collaboration' as a vehicle for musical interpretation and, more broadly, musical work-realisation, is developed from Östersjö's concept of 'thinking-through-practice'/'thinking-through-hearing', and 'thinking-through-performance'.

Dialogue Extract 12

S.L.: *I mean the other thing here is that the pedal is sort of held over, there's so much resonance, so again it makes the subito a little bit –*
D.B.: *So just take the pedal off and then –*
S.L.: *Before the 'B'?*
D.B.: *No, take it, play that note with no pedal. [Meaning the ff and accented 'B' at the end of the crescendo].*
S.L.: *But it's not going to ring!*
D.B.: *I don't care. I think it's sounding too much dirt at the time when we need clarity. It might be again one of those things that in my ideal imagination –*
S.L.: *I mean, I reckon what we should do is I could just take the pedal before the pp rather than on the last note, 'cos if we want it to be the biggest, because it's just going to sound like a complete anti-climax.*
D.B.: *OK, good, alright, yeah, so if you want to just take a bit of time to make that feel like a real upbeat to there [i.e. my last beat of bar 53 into bar 54] that would make me happy, 'cos that's what it is – it's an upbeat to this Dolce.*

March 28, 2012

These data extracts reveal how cycles of action and feedback, experimentation, and joint creative input enable the composer and the performers to probe deeper into the expressive potentialities of the musical material and discover better ways of realising them. Further modifications to enhance the overall expressive potency of this section (bars 53–56) are gleaned through Track 16 and Dialogue Extract 13, where issues of tempo fluctuations and rhythmic organisation are addressed.

Dialogue Extract 13

D.B.: *That's good! You've got it. So, I think you could broaden a bit more to start the Dolce and maybe have a sense of a bit of a slight, not to say accelerando, but it's like, it's becoming hurried towards [rehearsal letter] A, like it picks it up again as it goes towards it, do you know what I mean? [He sings to demonstrate].*
S.E.: *So in fact the Dolce is meno mosso?*
D.B.: *Yes, I think it is. Yeah, yeah. But as the urgency comes back in we kind of hurry towards the bar-line [meaning towards rehearsal letter A].*

March 28, 2012

Reviewing the changes to the original instructions in the score in bars 53–56 (indicated in red, Example 21) and the improvements achieved in the playing through the

'embodied' interaction with the score, the instrument, and with each other, enabled to identify Codes 2, 3, 4, 5, 6, 7 and 8 in Category 3 (Bi-directional Action/Response Loop: Translating from the Inner to the Outer) and Codes 1 and 2 (2.1, 2.2, 2.4, 2.8) in Category 5 (Co-Constructing Work-Identity: Scores and Permanent Plasticity, see Figure 10). These changes can be summarised as follows:

- Modified pedal markings in both piano parts, bars 53–54
- Changed rhythm and pitch in Piano 2, bar 53
- Added *fermata* before the *Dolce* in bar 53
- Added *meno mosso* instruction in bar 54
- Added quasi-accelerando instruction in bar 56

Comparison of Tracks 15 and 16 reveals how implementing the solutions discovered and transmitted through the collaborative feedback loop to address the parameters unspecified (or misrepresented) by the score resulted in a significantly enhanced performance outcome. Equally, this joint 'thinking-through-action' enabled Damian to find the most accurate representation of his musical intentions in notation.

5.5.2 From Notes to Shapes – Co-constructing through Improvisation

Further modifications to the score resulting from the three-way dialogue involved the material in bars 238–253 (Example 22) gradually changing from the notated pitch and rhythmic structures to looser, more improvisatory shapes.

Example 22. *Bright Birds*, bars 237–253.

237

P.1

P.2

(8) *note heads*

239

P.1

P.2

PLEASE TURN

242

P.1

note heads

245

P.1

Note Heads Throughout - Improvised

P.2

248

P.1

P.2

251

P.1

P.2

Considering the writing in this section, Stephen and I ‘translated’ the long pedal markings, extensive slurs, extreme low register, recurring *sfz* and *sffz* instructions, and cluster-like harmonies to mean a heavy, thick sound-texture. However, adhering to the dynamic and articulation instructions in the score resulted in the texture and resonance being over-blown, compromising the contrast between the *staccato/sforzando* and the slurred articulation. Hearing us play this section in the acoustic of the physical space, Damian began to realise that the dynamics and the pedalling instructions were ‘over-written’, requiring some re-consideration. He explained: “Sonya, in [bar] 247, you are *p*-ish then, because it is very brooding”.¹⁷⁵ The last marking in my part prior to bar 247 is *Brutale* (bar 234; see Appendix F, Example 2 for a larger score excerpt) with no indication to the contrary marked in bar 247, leading me to believe that the *Brutale* sound-aesthetic is to be continued through. However, hearing and seeing Damian vocalise, gesture, and talk about the “brooding” quality, our understanding of this section began to transform. He further explained:

So, yeah, I mean, funny enough, even though there is a lot going on there, kind of the base dynamic of this section is quite soft, so when the really berserk, loud stuff happens, you can really stand out. So I think it could be one of these times when you are down low, doing all this rhythmic stuff, it kind of feels almost improvised, so the temptation will be to be quite loud, but I think it needs to be soft, so then we go [he makes a huge physical gesture to indicate that then the music explodes]. So the spiky bits kind of jump out. That’s kind of gonna make it work a lot better.

February 4, 2012

This data extract gives evidence to the origin of Codes 2, 3, 4, 5, 7 and 8 in Category 3 Category 3 (Bi-directional Action/Feedback Loop: Translating from the Inner to the Outer), Codes 1 and 2 (2.1, 2.2) in Category 4 (Thinking-Through-Language: Metaphor in Embodied Thinking), and Codes 1 and 2 (2.1, 2.2, 2.3) in Category 5 (Co-Constructing Work-Identity: Scores and Permanent Plasticity, see Figure 10), reflecting the importance of the collaborative action-feedback continuum in negotiating the inherently indeterminate and often conflicting notation. Conceiving of the dynamics

¹⁷⁵ Damian Barbeler, workshop session, Bermagui, NSW, February 4, 2012

and character as much quieter directly impacted on pedalling and articulation choices, leading to significant modifications to the score's instructions as follows:

- Significantly shorter pedal
- Lower dynamic range
- Substantially thinner texture

Further into the session, I asked Damian about the relationship between the dynamics, articulation and character in bars 255–257 (Example 23) and how to best reconcile the *crescendo* 'hairpins' with the *sfz* markings within them.

Example 23 Bright Birds. Relating dynamics to articulation in Piano 2, bars 254–259

The musical score consists of three staves. Staves 1 and 2 are for Piano 1 (P.1) and staff 3 is for Piano 2 (P.2). The score is divided into measures by vertical bar lines. Red circles are used to highlight specific dynamic and articulation markings. In P.1 (top two staves), red circles are placed around a dynamic *p*, a dynamic *f*, a dynamic *ff*, and a crescendo hairpin. In P.2 (bottom staff), red circles are placed around a dynamic *p*, a dynamic *f*, a dynamic *ff*, a dynamic *sff*, and a dynamic *mf*. Articulation markings *sfz* are also circled in red. Pedalling instructions (Ped.) are shown as horizontal lines with arrows below the staves. Measure numbers 254, 255, 256, and 257 are indicated above the staves.

Considering the relationship between the dynamic markings (hairpins) and the articulation (*sfz*) precipitated the following exchange:

Dialogue Extract 14

S.L.: *Say with something like this [bar 256] . . . where there's no melodic material of any kind, but sort of . . . this is going to be quite brutal [256-257], do you think I should drop here [beginning of bars 256, 257] and let*

D.B.: *Yes, I think so, I mean, that bit there is the base background texture [pointing at Stephen's part]. If you look out here [pointing outside the window] and you can see this sense of the mountains out there, with the texture of the greenery and trees, but then you have certain features that then jump out when you scan across the landscape. So it's almost [meaning this section] kind of a literal translation of this specific view outside this window . . . But you can drop back from that. It is actually in my mind as quite melodic, but it is more of a kind of a –*

S.L.: *Just murmuring.*

D.B.: *Yes, it is, kind of brooding! [lots of sung demonstrations of liquid, 'gooey' sound] . . . you can see how everything that has a long slur over it is going to be that slurpiness in one way or another.*

S.L. and S. E.: *Yeah, yeah.*

D.B.: *So what will happen eventually, is that these kind of clarity occurs unexpectedly, as these shapes kind of, the ones that sit in the front, sit in the front, and the ones that sit in the back, sit in the back, and have the right liquidness happen, and before you know it, it's starting to sound like the landscape – Ideally!*

February 4, 2012

In addition to the codes detailed on p.175, this dialogue exchange led to identifying Codes 1, 2 and 5 in Category 6 (Building Shared Language), Codes 1, 3, 4, 5, 6, 7, 8 and 10 in Category 7 (Making Informed Decisions) and Codes 1, 2, 3, 4, 6 and 7 in Category 8 (Structural and Embodied Understanding Help Build 'Performance Practice', see Figure 10), indicating the inextricable relationship between the lessons afforded by the 'embodied' feedback loop and the construction of a shared aesthetic vocabulary necessary for optimum realisation of musical nuance. Working with the images/metaphors Damian suggested was immensely helpful in re-conceptualising this entire section from heavy and angular to more fluid and multi-textured. However, the material itself, with the angularity and thickness written into it, posed a barrier to fully achieving these qualities in performance. Experimenting with various approaches to articulation, phrasing, rhythmic emphasis, and dynamics, Damian proposed a rather radical solution to turn the notes/pitches into note-heads (i.e. clusters), improvised around the shapes as they appear in the score:

‘Cos when I’m writing the gesture, I’m not thinking the specific notes, I’m really thinking of the contour of it and the emotion of it, and once you understand that, it’s hard to get it wrong, ‘cos it’s so intuitively perfect.

February 4, 2012

This insight into Damian’s compositional thinking, contributed to the generation of all nine codes in Category 3 (Bi-directional Action/Feedback Loop: Translating from the Inner to the Outer), Codes 1 and 2 (especially 2.8) in Category 5 (Co-Constructing Work-Identity: Scores and Permanent Plasticity), Code 3 in Category 6 (Building Shared Language), Codes 9 and 10 in Category 7 (Making Informed Decisions), and Code 6 in Category 8 (Structural and Embodied Understanding Help Build ‘Performance Practice’, see Figure 10).

As evident, Damian was effectively inviting us to take on a more involved role in the content-construction, extending the notion of ‘interpretation’ to include ‘improvisation’, “because what I [Damian] want is this kind of loose, almost improvised feeling.¹⁷⁶ Having the freedom to treat the material as ‘gestures’, ‘contours’, or ‘shapes’ and using the notation as a guide rather than a set of prescriptions, Stephen and I were able to achieve a much closer match between the sound-aesthetic conceived by Damian and the realisation of his ideas in performance. The resulting version of this section can be heard on Track 17 (Examples 22–23), demonstrating the following changes to the original conception of this section:¹⁷⁷

¹⁷⁶ Personal communication (collaborative session), Bermagui, NSW, February 4, 2012.

¹⁷⁷ The excerpt in Track 17 is taken from the Brisbane session on March 28, 2012. However, much of the work discussed in this section took place in Bermagui on February 4. The video documentation of that session was unfortunately lost due to technical faults, with only a poor quality audio recording remaining. This recording was used for analysis and for transcribing pertinent dialogue and conversation for inclusion in this chapter.

- Changed pedalling (much shorter than indicated)
- Changed dynamic range (much lower than indicated)
- Changed texture (thinner, multi-layered)
- Changed pitch (from notes to note-heads/clusters)
- Changed rhythm (from precise to looser shapes)

These changes, resulting from prioritising shapes and sound-images within the texture and de-emphasising the specific pitch and rhythm notated, are reflected in codes comprising Category 4 (Thinking-Through-Language: Metaphor in Embodied Thinking, see Figure 10).

The next section examines how both the structural and embodied thinking in collaborative practice enables the co-construction of a ‘common language, shared between the composer and the performers.

5.6 THEME 3 (CATEGORIES 6, 7 AND 8): PERFORMANCE PRACTICE IN REGULATING NOTATION

Expanding on the discussion in Chapter Four (Section 4.6.3), which addressed the role of the ‘performance practice’ within the context of the specific composer’s work, this section details how working collectively in the ‘embodied’ and ‘structural’ modes of thinking revealed a number of recurring compositional and notational patterns unique to Damian’s musical language. Extrapolating and interpolating lessons learnt as the collaboration unfolded, enabled Stephen and me to make informed assumptions about musical nuance implicated in the notation, resulting in a more ‘accurate’ (i.e. congruous with the composer’s intentions) reading of the score.

5.6.1 Managing Resonance: Slurs, Pedal, Dynamics and Articulation

One of the most important things we were collectively discovering about the mechanics of the piece was how to manage the resonance and mitigate against the texture becoming too dense and ‘overblown’. As evidenced in previous examples, the predominance of loud dynamics, long slur and pedal markings, and thick layering of textures, often tended to compromise the musical detail and structural coherence.

Hence, learning to manage the resonance became crucial to achieving the right balance, clarity, and rhythmic precision where required, and the nuanced layering of textures and metric freedom where necessary.

Jointly negotiating the opening section of the piece (Example 24) provided further opportunity to learn how Damian's notational tendencies regarding pedalling, dynamics, and articulation are best adapted in performance. This section is characterised by long (two to three bars) pedal markings, consistent slurs indicating legato articulation, and *f* markings throughout.

Example 24. *Bright Birds*, bars 1–17.

The musical score for 'Bright Birds' consists of two piano parts (Piano 1 and Piano 2) over 17 bars. The title 'PART I - Morning Chorus Sparkling (♩=136)' is at the top. The score is in common time with a key signature of one sharp. Dynamic markings include *f*, *sim.*, and various slurs. Long pedal markings are present in every bar, with some specific to each piano part. Handwritten markings are visible in the piano 2 part, including 'King off big' and '2 + 3 + 4 +'.

Interpreting long pedal markings and slurs to suggest a 'liquid' sound aesthetic, and the *f* in both parts as an indication of powerful sonority, Stephen and I were adopting a consistent legato articulation with generous pedalling to enable the harmonies and textures to overlap. Not able to determine the thematic/structural hierarchy within the writing led us to unintentionally compete against each other's sound, resulting in the additional accumulation of resonance. As heard on Track 18, Damian was

concerned about the overwhelming dynamic presence of the two pianos compromising the rhythmic clarity, ensemble precision, and structural integrity of the section. Both the notation and the playing required substantial re-conceptualisation, as evident in Dialogue Extract 15 (and on Track 18).

Dialogue Extract 15

D.B.: First thing I realise [upon hearing us play], with this opening texture, it is highly rhythmical . . . just a clean line, but very clean, crisp, bouncy pulse. I realise I wrote these big slurs and stuff, which obviously suggest that I want it really blurred, but I actually think, in my mind I suppose what I'm trying to do is to show you the phrasing, but actually I realise that these bits then are . . . just clean and even.

S.E.: I was thinking of it more in terms of fluid shape [suggested by the long slurs and pedal markings throughout] but that's not really helping the ensemble.

D.B.: [sighing] that's what I realise now . . . It always surprises me hearing it in tempo – I don't think of myself as writing in tempo.

March 28, 2012

This was another instance where the sound inwardly imagined by the composer did not translate into performance when the notation was closely adhered to. Hearing us play afforded Damian an opportunity to clarify his intentions and recognise potential pitfalls in how they are notationally represented. Conversely, recognising the slurs to delineate the idiomatic gestures within the texture (and not indicative of *legato*) and adjusting pedalling and articulation accordingly enabled Stephen and me to achieve greater control of the resonance and texture. However, as the work progressed, further insights into how the realisation of this section might be optimised emerged:

Dialogue Extract 16

D.B.: *I'd like to see if we can lighten off even more, kind of softer, but also let the longer notes [sings to demonstrate] those sort of notes stay kind of in the foreground and let the other stuff become more in the middle-ground. You still doing the accents and stuff but we are just letting those key melodic notes . . . sit more in the front and we might actually get a bit more contour.*
[We incorporate these changes into the next run-through]
D.B.: *That's perfect! And faster! Yeah, way faster! I totally loved that!*
S.E.: *Excellent!*
D.B.: *The other thing is, what you were playing then, would you call it f or mf?*
S.E. and S.L.: *mf.*
D.B.: *Oh well, call it mf. It feels f out here, because there's so much going on. It's so bright.*

March 28, 2012

Besides an increasing recognition of Damian's tendency to exaggerate pedal, dynamics and slur markings, we were additionally learning that within the seemingly opaque, monochromatic textures there was always an implied layering and perspective, as evidenced in Dialogue Extract 16. Bringing out the syncopated notes and highlighting the high points in each gesture, as well as 'under-playing' the markings in the score, resulted in greater textural contrast and structural cohesion, as heard on Track 19 and reflected in Dialogue Extract 17.

Dialogue Extract 17

D.B.: *Well that was really awesome. Did that feel really good? Were you doing less pedalling all of a sudden?*
S.L.: *A little bit less. I mean, crisper, generally thinking much crisper.*
D.B.: *Yeah, there's certainly plenty of resonance going on and we are certainly getting . . . that sort of clarity, so that what we are trying to go for is the best of both worlds!*

March 28, 2012

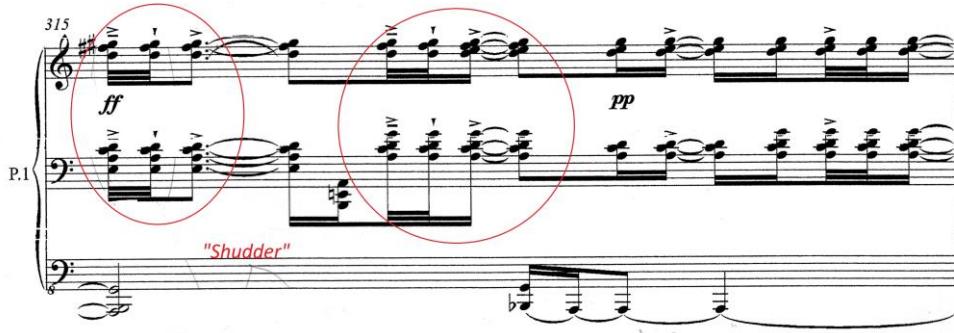
The coding process of the dialogue and video extracts in this example yielded Code 9 in Category 6 (Building shared Language), Codes 1, 3, 4, 5, 6 and 7 in Category 7 (Making Informed Decisions), and Codes 1, 2, 3, 4 and 7 in Category 9 (Structural and Embodied Understanding Help Build 'Performance Practice', see Figure 10), highlighting how

recognition of consistent notational patterns and their implications may assist the score-realisation process.

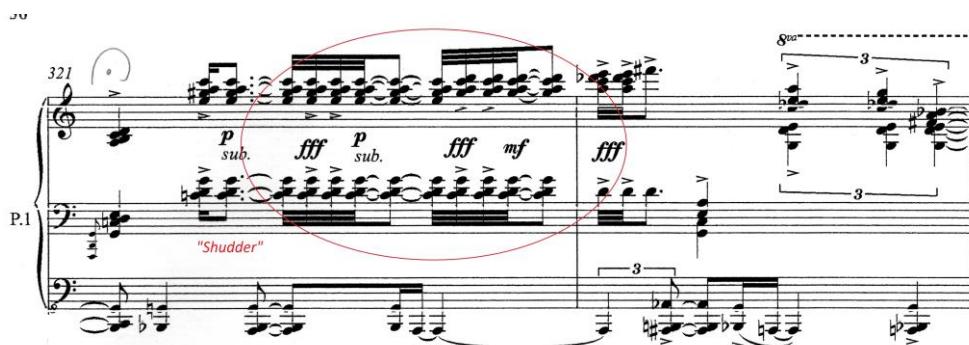
5.6.2 In Search of Gesture – Painting the Landscape

The following example examines how collaboratively negotiating the notational complexity and the expressive implication of bars 315 and 317 in Piano 1 (Examples 25 and 26) enabled greater understanding of the particularities of Damian's expressive musical devices.

Example 25. Bright Birds. The “Shudder”, bar 315.



Example 26. Bright Birds. The “Shudder”, bar 321



The extreme dynamic and articulation changes in the circled passages could at best be approximated and at worst disrupt musical coherence in performance. Grappling with the rapidly alternating *sub p*, *fff*, and *mf* markings as well as '*>*', '*-*' and '*^*' articulation

on the repeated chords at fast tempo required a greater understanding of the overall dramatic shape conceived for these passage. Clarifying his intentions through physical gesture and sung demonstration (see Track 20), Damian explained that the gesture in bar 315 could be felt as a “shudder”, foreshadowing the “beginning of the end”, the first moment of the “unnatural human figure coming into it”. As revealed in Dialogue Extract 18 and on Track 20, ‘shudder’ was one of Damian’s native expressive devices, employed to communicate a specific dramatic effect.

Dialogue Extract 18

D.B.: To me they are very intuitive, natural shapes, but I find it very hard to make them ah, anybody else understand them. So I don't know if it's just me or whether it just that it takes time for gestures to become more tangible.

S.E.: Oh that helps, that helps.

D.B.: I find that as people play more and more of my stuff, when they get the next piece, they go: "oh, there's that old Barbeler gesture again!"

March 29, 2012

Conceptualising the implications of this extract and the more extended exchange captured on Track 20 resulted in the derivation of Codes 1, 2 and 10 in Category 6 (Building Shared Language), Codes 2, 5 and 9 in Category 7 (Making Informed Decisions), and Codes 1 and 6 in Category 8 (Structural and Embodied Understanding Help Build Performance Practice, see Figure 10), reflecting how the ability to recognise such ‘native’ gestures within the composition may facilitate greater dramatic potency in the performance and alleviate confusion caused by notational complexity. Relating to gestures in bars 315 and 317 (and analogous passages throughout this section; see Appendix F, Example 1) as ‘shudders’ enabled greater personal identification with the otherwise cumbersomely notated repeated chords, resulting in the playing that reflected greater fidelity to Damian’s conception, as affirmed by him on Track 21.

The following section examines the role of the Complementarity model in this collaboration and its impact on the notational and performance outcomes.

5.7 THEME 4 (CATEGORIES 9, 10, 11): APPLIED COMPLEMENTARITY IN COLLABORATION

In both collaborations discussed thus far, the Complementarity model served as a useful paradigm through which all aspects of musical work-realisation could be optimised. In essence, it facilitated an ‘alchemic’ process, whereby symbols on the page were moulded into sounds, and the sounds produced, in turn fed back into the composer’s re-evaluation of notational detail. As evidenced in the discussion above (Sections 5.4–5.6), working within the Complementarity model was invaluable in calibrating the composer’s *inner* hearing with what was *actually* heard in performance, and the performers’ *perception/reading* of the notated score with the composer’s *actual* intentions. The following examples provide evidence of how sections of the piece were substantially revised (both in notation and performance) through the Complementarity pattern of work.

5.7.1 Complementarity in Action – First Cadenza

Initial work on the Cadenza section in Piano 2 (bars 133–150; see Appendix F, Example 3) uncovered an unexpected difficulty in transitioning from bar 143 into *a tempo* in bar 144 and from bar 149 into bar 150 (Example 27), resulting in compromised ensemble and fluency in bars 145 and 150. The original version of the Cadenza is shown in Example 27.

Example 27. *Bright Birds*, bars 142–153, original version.

142 (8) *rubato* *mf* *not jettie* *more rubato*
 P.2 *PP*

145 *mf* *make rhythm halped* *bln p. 18(2)* *dig tempo*
 P.1 *PP*

(15) *loose shape, rubato* *(mf)*

148 *mf* *8va*
 P.1 *(15)*

149 *mf*

150 (8) *mp* *Ped. sempre* *building toward's big climax* *loco*
 P.2 *mp* *ff*

151 *ff*

The *a tempo* 'Glistening' instruction given in bar 144 is preceded by the lyrical material of the Cadenza, marked *rubato, con moto* (see Appendix F, Example 3 for the full Cadenza section). In the rehearsal, the transition into bar 144 sounded disjointed and unnatural, resulting in ensemble difficulties in bar 145 due to the tempo not being clearly established. Similarly, transitioning into bar 150 felt awkward and insecure,

resulting in rhythmic instability and compromised ensemble precision. The repeated attempts to 'iron out' these transitions did not result in significant improvements in the playing and hence required some re-thinking of the actual notated content. The combination of individual discipline-specific skills and jointly generated ideas, characteristic of the Complementarity model, enabled Damian to revise this section in a way that allowed for more seamless contour in bars 143–144 and for a more comfortable entry in bar 150. This was one of the few sections Damian re-worked in the actual type-set score as a result of collaboration, as evidenced in Example 28.

Example 28. *Bright Birds*, bars 139–153, revised version.

The musical score for 'Bright Birds' consists of two staves, P.1 and P.2, for two pianos. The score is divided into sections by dashed horizontal lines. The first section starts at bar 139 with a dynamic of *mf esp.* The second section begins at bar 142 with a dynamic of *mf* and a tempo of *15ma*. A red circle highlights a change in the notation for P.2 in bar 142. The third section begins at bar 145 with a dynamic of *mf* and a tempo of *15*. A red circle highlights a performance instruction 'Independent/ parts do not line up' above the P.1 staff. The fourth section begins at bar 148 with a dynamic of *pp* and a tempo of *poco*. A red circle highlights a performance instruction 'molto raff.' above the P.1 staff. The fifth section begins at bar 150 with a dynamic of *mp* and a tempo of *120 Glistening*. A red circle highlights a performance instruction 'Ped. sempre' below the P.1 staff. The score includes various rhythmic patterns, slurs, and grace notes.

Example 28 reveals the following modifications to the original score:

1. The *a tempo* and 'Glistening' instruction is removed in bar 144
2. Stephen's part and hence the *crescendo* marking is removed in bar 149
3. *Molto rallentando* and a *fermata* sign added in bar 149
4. 'Glistening' instruction and a new tempo added in bar 150

Considering these modifications alone, it is evident that the section was considerably transformed in regards to tempo, rhythm, character, dynamics, content and ensemble. However, it is not until we returned to this section in the Brisbane workshops, that the full scope of the transformation and its impact on the structural and musical coherence became apparent, as demonstrated on Track 22 and in Dialogue Extract 19.

Dialogue Extract 19

D.B.: You know the changes I sent through, is that this is more rubato and so Stephen, you just kind of fitting your stuff across when you are near there [indicates that he would like us to play independently from bar 145], which lets Sonya loosen it up. So I don't really want to go into strict tempo there, I'd like to, so we are going to make this highly rubato . . . and its looser in its shapes, it's not as rhythmically clean . . . and then we'll start this *p* or even *pp* [bar 150] so it's like the tempo has come in and it's really soft, and it doesn't have to be up full tempo yet –

S.E.: So, with the rubato [meaning at G], is that independent sort of rhythm just within the beat?

D.B.: Yes, it's kind of your part is not, should not feel the same tempo with Sonya.

S.E.: Ah, OK, OK.

D.B.: It should feel independent, yeah. So, I've really changed the feel of this bit, it's more like a hint of what's about to come, and then we creep in.

March 28, 2012

These dialogue and video extracts provided the basis for the derivation of Codes 1, 2, 3, 5, 6 and 7 in Category 9 (Collaboration and Creative Output, see Figure 10), indicating that complementarity in collaboration may assist in discovering successful creative solutions to interpretative and conceptual challenges. Implementing the changes illustrated in Example 28 and in Dialogue Extract 19 enabled us to resolve the

transition difficulties in bars 144 and 149 and to expand the expressive, textural, and rhythmic richness of this section beyond its original conception, as heard on Track 23.

5.7.2 Complementarity in Action – Second Cadenza

Another pertinent example of ‘complementarity in action’ is evident from the transformation of the second Cadenza (Piano 1), which was the only other section revised by Damian in the type-set score as a result of collaborative dialogue. The original version of this section is shown in the Example 29.

Example 29. *Bright Birds*, bars 82–88, original version.

P.1

82

83

86

88 *ppp*

The treatment of the *rubato* in these bars suggested by Damian in our first meeting in Bermagui demanded that the contour of the melodic shapes be reflected in fast sweeps towards the higher pitches and significant broadening as the line fell. This required a degree of physical freedom and flexibility which proved difficult to attain

due to the large leaps and awkward stretches. Reflecting on how to best resolve the technical difficulties to achieve the desired outcome, Stephen initiated the following email exchange:

Hi Damian,

[...] given that you are open to reconsidering things, I just thought I would mention one bit that is giving me particular difficulty - bars 83-88. I know you want that bit to be fluent and for the rubato to allow fast gestures as well as breathing spaces. But I am finding that the sorts of lines with big leaps and changes of direction (that can be negotiated elsewhere with 2 hands) are really difficult to negotiate with 1 hand (eg bar 85 in RH and 86-87 in LH). I recall that many of the changes you made were in fact taking out notes, so if any reworking of those bars was possible without losing the effect you are after, I'd be happier. But you are welcome to just tell me to just work at it harder if you'd prefer to leave it as it is.

February 20, 2012

Considering Stephen's comments, Damian was able to translate his compositional/musical ideas into a pianistic language that enabled greater fluency and ease, as reflected in Example 30. He wrote:

Hi Stephen,

I reworked those bars you asked for. This is a more "physically responsible" solution, and perhaps clearer musically even. Sorry for the previous insanity, imagination is a dangerous thing. Don't hesitate to ask for any other fixes (you too Sonya!)

February 21, 2012

Example 30. *Bright Birds*, bars 82–88, revised version.

82

P.1

83

P.1

86

P.1

rumbling

Completely reworked

88

P.1

droplets (rall.)

ppp

As demonstrated, the two cadenza sections in the piece were substantially re-worked as a result of the performer's and composer's discipline-specific knowledge coming into symbiotic interplay to achieve the synthesis between the composer's intended conception and what we come to know as the 'musical work', manifested through notation and performance (or recording).

Although Categories 10 and 11 (Collaboration and Confidence; Collaboration and Communication) have not directly been addressed in this section, relevance of all the codes comprising these categories was evident in most data extracts presented throughout the discussion, reflecting the encouragement, trust, support, laughter and rapport permeating this collaborative relationship.

5.8 SUMMARY OF RESULTS

Having carefully considered and addressed the four core themes underpinning this case study, it can be argued that successful work-realisation in a collaborative setting can comprise, and be dependent on, the dialectic synthesis of the following factors:

- Composer's *implied* instructions in the score (as intended by the composer)
- Composer's *actual* (expressed) instructions in the score (as they appear to the performer)
- Composer's *inner* hearing of the piece (imagined, idealised sound-image of the work)
- Composer's *actual* hearing of the piece (perceived through the reality of the acoustic sound)
- Performer's *perceived* understanding of musical content/ notation (prior to collaboration)
- Performer's *informed* understanding of the composer's intentions (through collaboration)
- Composer's compositional means to achieve desired outcomes (idiosyncrasies of notation)
- Performer's interpretative means to achieve desired outcomes (overcoming technical and interpretive impediments)
- Capacity to communicate and listen
- Willingness to change and adapt

Negotiating these elements within the Complementarity framework enabled Stephen, Damian and me to gradually transform chaos into structure, rigidity into freedom, heaviness into brightness, awkwardness into (relative!) comfort, and confusion into cohesion. Hearing the score realised in physical terms by the performers within a specific acoustic inevitably led to changes in perspective and hence, changes to all musical parameters, such as pitch, rhythm, structure, ensemble, texture, dynamics, articulation and tempi, resulting in more congruous and satisfying artistic outcomes.

For me as a performer, this collaboration afforded an invaluable lesson in reconciling the dichotomy between the 'sacredness' of the score and its inherent

'incompleteness', between precision and freedom, faithfulness and imagination, respect and artistic liberty, and ultimately a greater symbiosis between notation, composer's intentions, and my capacity to fully realise them in sound.

CHAPTER SIX

TRACE ELEMENTS – IN SEARCH OF SYMBIOSIS

(ANTHONY LYONS AND SONYA LIFSCHITZ)

6.1 INTRODUCTION

This chapter reports the extensive and multi-faceted collaboration with composer Anthony Lyons between December 2010 and November 2012 (Melbourne). Of the three collaborative case studies presented, this project was perhaps the most sophisticated and fulfilling in terms of collaborative co-involvement, conceptual and aesthetic breadth, and creative potency, resulting in a multi-movement suite for piano and computer, *Trace Elements*. The suite explores the interaction between acoustic, electronic and electroacoustic domains and was conceived for both live performance and studio environment.

The discussion begins with an overview of this project (Section 6.2), followed by a detailed presentation of the thematic map, distilled from cycles of coding and conceptualising pertinent raw data (Table 7 and Figure 11) in Section 6.3. This thematic map and its constituent codes, categories and themes provide an analytical framework through which to report the creative processes and experiences within this collaboration. Sections 6.4 and 6.5 detail the processes leading to the construction of ‘Diffraction’ and ‘Hiver’ – the two movements from the *Trace Elements* suite under study in this chapter. Finally, Section 6.6 provides a brief summary and personal reflection on this collaboration.

6.2 PROJECT OVERVIEW

Our work together yielded an enormous amount of musical sketches, score drafts, and mock-up recordings, which were gradually distilled into a cohesive composition. Thus, unlike my collaborations with Kate and Damian, which rested on the premise of a completed score, my project with Anthony, specifically in relation to ‘Diffraction’ and ‘Hiver’, began from an entirely ‘clean slate’. As both miniatures were co-created

through close collaborative engagement, whereby musical content and its notational and performative realisation resulted from an almost equal creative input, they provide a valuable insight into the creative processes that extend beyond the Complementarity model of collaboration towards a more Integrative pattern of artistic work. Therefore, the discussion draws on the creative cognition theory and specifically the Geneplore model detailed in Chapter Two (Section 2.6.2), to enable a more systematic observation of the creative trajectory leading to the co-construction of 'Diffraction' and 'Hiver'. Based on the premise that creative activity is largely comprised of iterated cycles of generativity and exploration of 'preinventive' structures (germinal ideas), the Geneplore model afforded a theoretical framework through which to glean the nature of creativity in the collaborative work-realisation context.

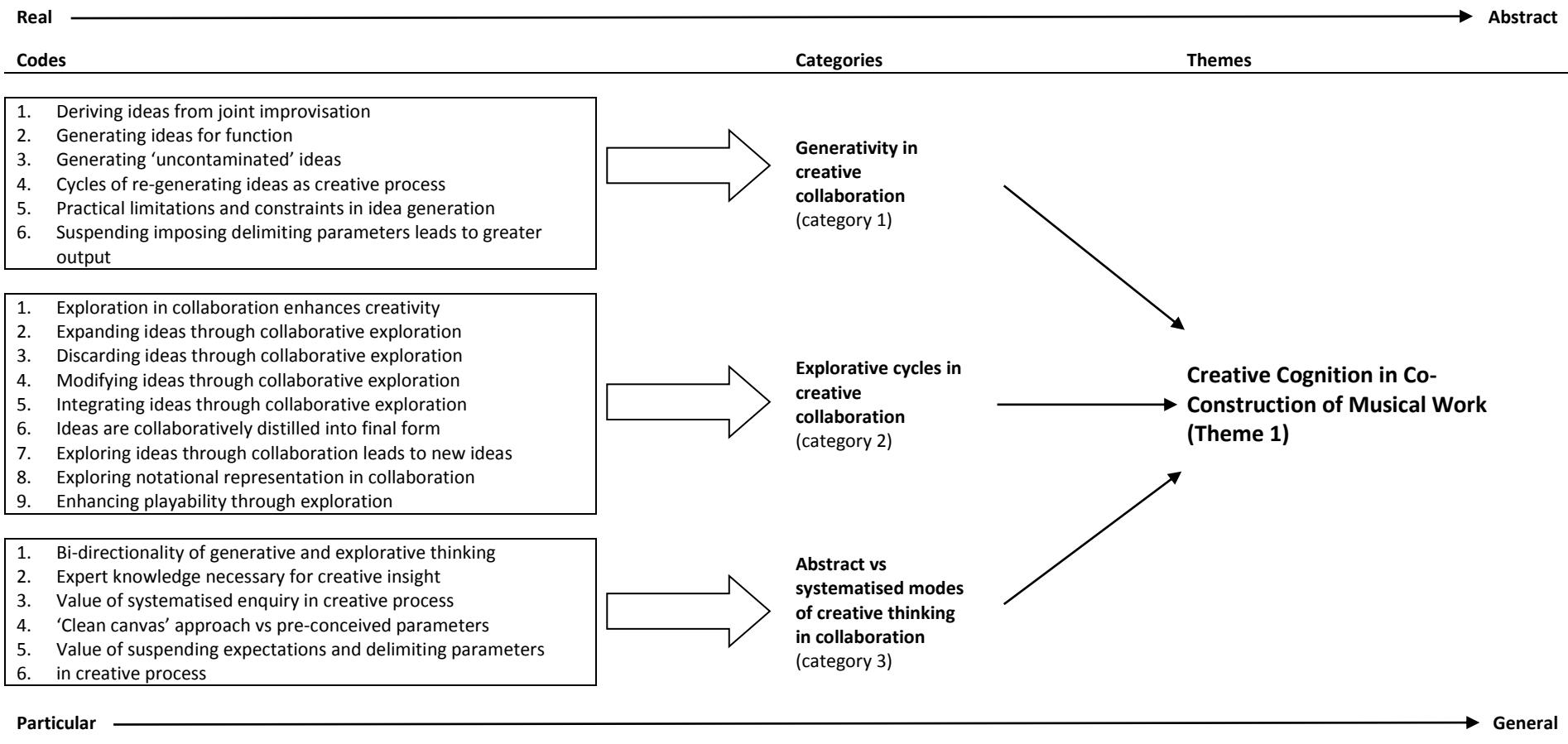
6.3 THEMATIC MAPPING AND REPORTING

Building on the model presented in Chapters Four and Five, pertinent data was coded and analysed in line with the Thematic Analysis protocol detailed in Chapter Three (Section 3.5). While the analysis revealed a degree of thematic overlap between this and the other two collaborations, new codes and hence new categories and themes emerged, shown in Table 7.

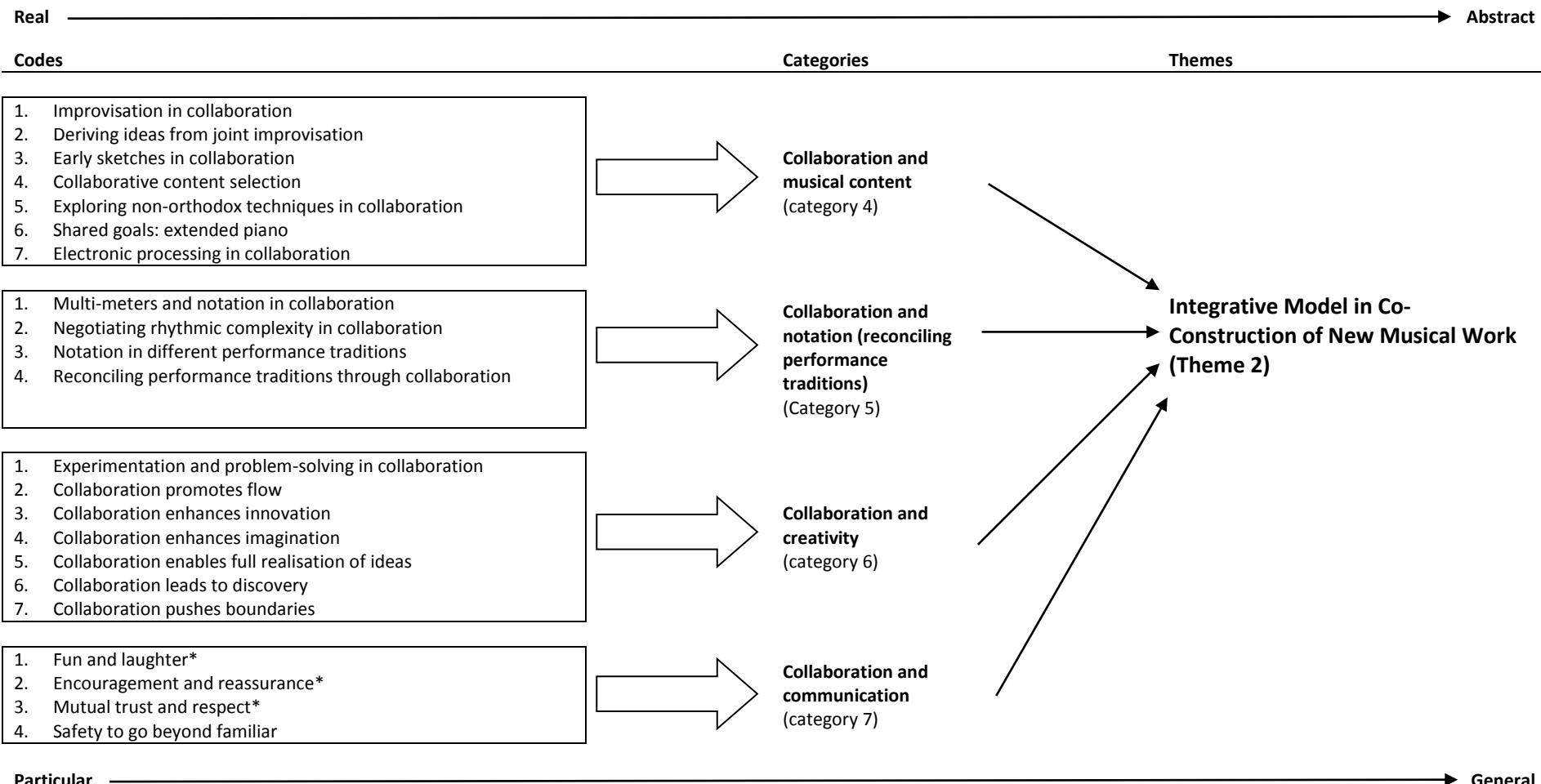
Table 7. Final codebook generated for Lyons–Lifschitz collaboration.

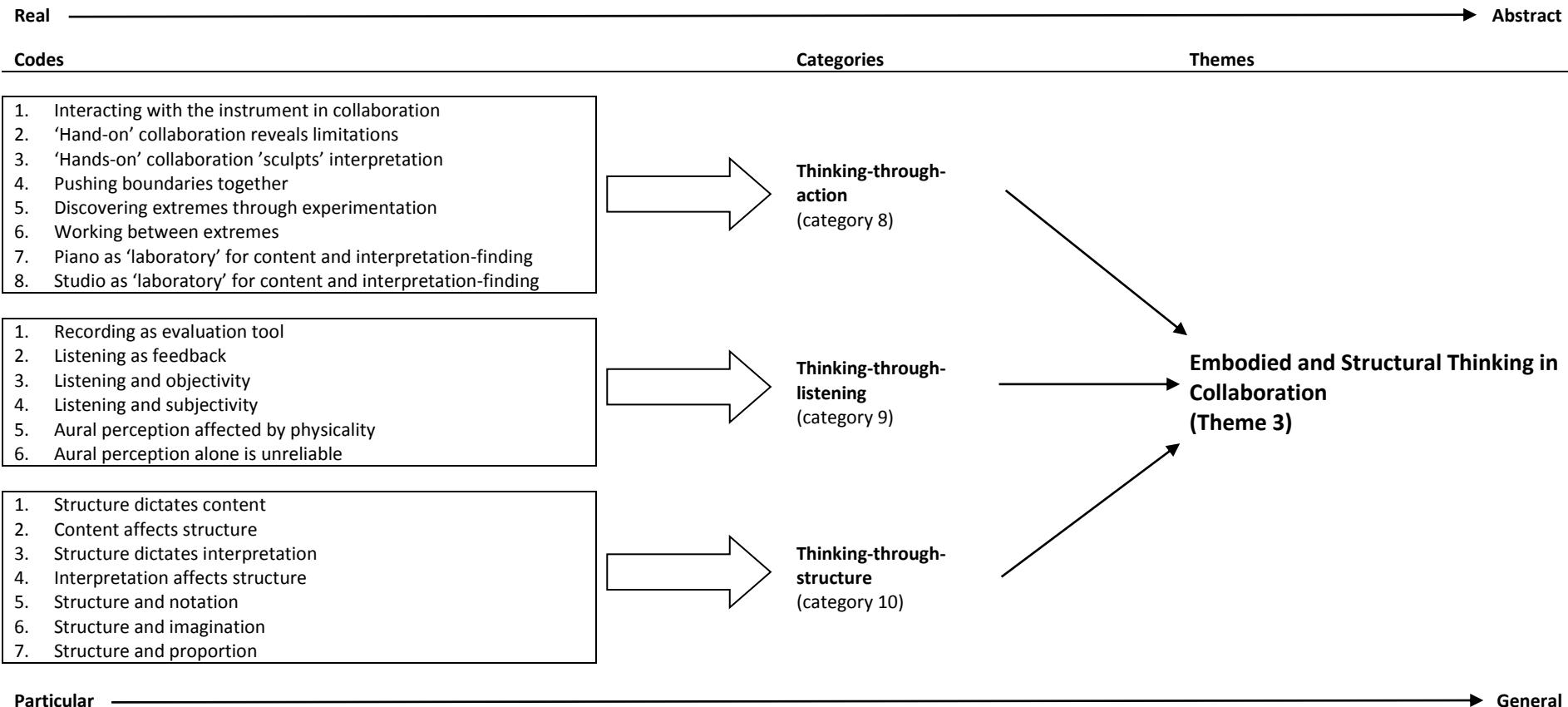
Aural perception is affected by physicality	Ideas are collaboratively distilled into final form
Aural perception alone is unreliable	Imagery in collaboration
Bi-directionality of generative and explorative thinking	Integrating ideas through collaborative exploration
‘Clean canvas’ approach vs pre-conceived parameters	Improvisation in collaboration
Collaboration promotes flow	Interacting with the instrument in collaboration
Collaboration enhances innovation	Interpretation affects structure
Collaboration enables full realisation of ideas	Listening as feedback
Collaboration leads to discovery	Listening and objectivity
Collaboration pushes boundaries	Listening and subjectivity
Collaborative content selection	Modifying ideas through collaborative exploration
Content affects structure	Multi-meters and notation in collaboration
Cycles of re-generating ideas as creative process	Negotiating rhythmic complexity in collaboration
Deriving ideas from joint improvisation	Notation in different performance traditions
Discarding ideas through collaborative exploration	Piano as ‘laboratory’ for content and interpretation-finding
Discovering extremes through experimentation	Practical limitations and constraints in idea generation
Early sketches in collaboration	Pushing boundaries together
Electronic processing in collaboration	Reconciling performance traditions through collaboration
Enhancing playability through collaborative exploration	Recording as evaluation tool
Expanding ideas through collaborative exploration	Safety to go beyond familiar
Experimentation and problem-solving in collaboration	Shared goals: extended piano
Exploring ideas through collaboration leads to new ideas	Structure dictates content
Exploring notational representation in collaboration	Structure dictates interpretation
Expert knowledge necessary for creative insight	Structure and notation
Exploring non-orthodox techniques in collaboration	Structure and imagination
Exploration in collaboration enhances creativity	Structure and proportion
Generating ideas for function	Studio as ‘laboratory’ for content and interpretation-finding
Generating ‘uncontaminated’ ideas	Suspending expectations and delimiting parameters in creative process
‘Hands-on’ collaboration ‘sculpts’ interpretation	Value of systematised enquiry in creative process
“Hand-on” collaboration reveals limitations	Working between extreme of expression and structure

Figure 11. Thematic map for Lifschitz–Lyons collaboration.¹⁷⁸



¹⁷⁸ Asterisks denote codes shared between all three collaborations





These ten conceptual categories and three core themes provided a conceptual model through which to identify and explain the underlining patterns in this collaboration, specifically pertaining to the creative processes of work-realisation, from the initial stages of conception to final output. Table 8 provides specific examples illustrating how extracts from raw data extracts were coded.

Table 8. Lyons–Lifschitz collaboration. Examples of coding raw data using Thematic Analysis approach.

Data extract	Codes	Categories	Themes
<p>Example 1 Dialogue extract, collaborative session, March 23, 2011, Melbourne</p> <p>A.L.: My main question is: I started writing out 10 against 8 and 12 against 8. But is it easier to do that, which is like, quite syncopated, right?, or is it easier to, if one part is fixed, and this part is moving against it? Uh, is it easier to use boxes: 10/8 and 12/8, it's not necessary precise, like this, or is it easier to actually read...</p> <p>S.L.: Well, for my brain I think it's easier actually for it to be worked out, because then . . . Yeah, 'cos this for me is something that, you know, I have trained capacity to do this</p> <p>A.L.: I knew you'd be more used to do this</p> <p>S.L.: Whereas with that, it's a new concept. I can get my head around it, I'm sure, you know, with practice, but that's more challenging</p> <p>A.L.: Ok. Yeah, yeah, yeah, that's so interesting, yeah</p> <p>S.L.: And what about you? Do you find this way too fiddley and kind of fixed, yeah?</p> <p>A.L.: Well, you know, the trained part of me understands this. But if I was trying to play it, I'd find this easier [meaning the boxed notation, with one part fixed and the other loosely playing around it in polyrhythm]. Just to, uh, I think that would be easier for me, yeah. It's interesting because you would probably get a different feel</p>	Multi-meters and notation in collaboration; Deconstructing notation in collaboration; Negotiating rhythmic complexity in collaboration; Notation in different performance traditions;	Collaboration and notation (reconciling performance traditions) (5)	Integrative Model in Co-Construction of New work (2)

<p>Example 2 Journal entry, September 2, 2012</p> <p>Listening back to the recording we had just made was a revelation: as much as I think of myself as a good listener at the instrument, my perception of the sound I was making as I plucked the strings was completely skewed! The constant motion of my body and arms, moving from string to string, and the feverish speed at which my brain and eyes were processing what came next, must have obliterated my sense of listening, creating a completely distorted aural image in my mind of what I was producing. While my body felt fluid and communing with the instrument, the sound moved at an excruciatingly slow and 'stuck' pace. Thank god for the recording technology!</p>	<p>Recording as evaluation tool; Listening as feedback; Aural perception affected by physicality; Listening and subjectivity Aural perception alone is unreliable</p>	<p>Thinking-through-listening (8)</p>	<p>Embodied and Structural Thinking in collaboration (3)</p>
<p>Example 3 Dialogue extract, collaborative session, September 13, 2012, Melbourne</p> <p>S.L.: I mean, alternatively, what we could do is we could do one line of the original, then, you know, it could go say, even through to this</p> <p>A.L.: It's true. Or have the original, yeah, have this as the middle line, or part of it, and have the original where it is? Or?</p> <p>S.L.: Maybe just three verses? You know, like the original [line 2 from our working sketch], second [new melodic variation], third [back to the original]. Then come back, like finish with a few of these [meaning add a few more cells of Eb-D at the end]</p> <p>A.L.: Yeah!</p> <p>S.L.: . . . Like to have the original as it was and treat this [meaning new idea 2] as a second stanza, or like a set of variations. It would be like a miniature set of variations, you know? This could be the theme [Eb-D; Eb-D-G motif 'theme'].</p>	<p>Shaping proto-ideas through collaboration; Expanding ideas through collaborative exploration; Modifying ideas through collaboration; Content affects structure; Structure and proportion; Structure dictates content;</p>	<p>Generativity in creative collaboration (1) Explorative cycles in creative collaboration (2)</p> <p>Thinking-through-structure (9)</p>	<p>Creative Cognition in Co-Construction of Musical Work (1)</p> <p>Embodied and Structural Thinking in collaboration (3)</p>

The ensuing narrative alternates between the actual collaborative ‘story’ as it unfolded, illustrated in dialogue transcripts, journal entries, audio/video files (DVD 3, ‘Supporting Material’), musical sketches, and the analytical commentary linked to the underlining thematic map presented in Figure 11.

6.4 ‘DIFFRACTION’ – AT THE BEGINNING OF THE JOURNEY

‘Diffraction’ materialised from the initial improvisations early in the collaboration, intended to find a starting point for the new work. The emerging material was intentionally kept as ‘uncontaminated’ by any pre-conceived forms and ideas as possible, as evidenced in my journal entry:

We’ve decided to just plunge into it next week at the piano . . . just get something happening – no context, no concept, but just a splash of paint on an empty canvas, and we’ll see where that goes!

February 17, 2011

In our first ‘hands-on’ session we generated some preliminary ideas through improvising around texture and timbre, employing mostly non-conventional, extended sound-production techniques, such as plucking and strumming piano strings, utilising both wooden and metal piano frame, as well as trying simple pitch and rhythmic cells on the keys in a conventional manner, as can be heard on Track 24. Despite my anxiety and inexperience in an improvising context, typical of a classically-trained musician, the first collaborative improvisation afforded a glimpse into unanticipated creative possibilities, as is documented in my journal entry:

When we tried a few improvisations, we, or certainly I, entered a space of internal quietness, curiosity and almost a sort of surrendering to the flow of sound. It was possible to be simply responding to the sound, colour, rhythm, gesture, that was already there, created by us, and to suspend the 'thinking' that so inadvertently accompanies playing. And the most interesting thing for me was that in that mode of sound-making, my ability to physically embody musical gesture was so much stronger than in my usual playing.

February 24, 2011

The 'creative flow' engendered by joint experimentation as documented in this journal extract is identified in Codes 2 and 7 in Category 6 (Collaboration and Creativity) and Code 4 in Category 7 (Collaboration and Communication, see Figure 11). Additionally, this journal entry echoes the findings of Keith Sawyer, Guerino Mazzola, Mihaly Csikszentmihalyi, and especially Vera John-Steiner, that collaboration between artists facilitates increased creativity, freedom to experiment, and willingness to take risks despite personal vulnerabilities.¹⁷⁹

Reflecting on these early collaborative experiments additionally led to the identification of Codes 1, 3 and 6 in Category 1 (Generativity in Creative Collaboration) and Codes 1, 5 and 6 in Category 4 (Collaboration and Musical Content, see Figure 11). Further, both Anthony and I expressed an interest in integrating live electronic processing and sampling into the composition to create a kind of complex reactive 'resonator network', capable of transcending standard piano sonorities. Similarly, we were keen to introduce elements of indeterminacy into the work to encourage a degree of improvisatory freedom. As a result, the idea of a suite of idiomatic miniatures exploring various non-traditional piano sounds emerged.

Amidst the preliminary improvisations, one idea emerged as particularly compelling. It involved silently running the back of my fingernails on the key surface, applying just enough pressure to produce a faint 'scratching' sound, with both hands modulating

¹⁷⁹ Guerino Mazzola, Paul Cherlin, *Flow, Gesture, and Spaces in Free Jazz: Towards a Theory of Collaboration* (New York: Springer, 2008). Works by K. Sawyer, M. Csikszentmihalyi and V. John-Steiner have been discussed and cited in Chapters One and Two.

the speed, intensity, span and direction (parallel and contrary) of the ‘glissando’. Anthony found this idea and its aural and visual effect particularly appealing due to its unusual sound properties and the explorative possibilities it offered in terms of textural layering and electronic processing. Examining the first explorative steps towards the construction of what eventually materialised into ‘Diffraction’ led to the generation of Codes 1 and 7 in Category 2 (Explorative Cycles in Creative collaboration) and Codes 1, 2, 4, 5, 6 and 7 in Category 4 (Collaboration and Musical Content), reflecting the underlying relationship between Themes 1 and 2 (Creative Cognition In Co-Construction Of Musical Work and Integrative Model In Musical Work-Construction, see Figure 11).

From the outset, it is clear how the principles of creative cognition were reflected in the initial stages of this collaboration. Through improvisation, we ‘discovered’ a useful preinventive structure, which formed the basis for the subsequent exploration. As Ward et al. propose, “innovation can be fostered by developing preinventive structures that are relatively uncontaminated by knowledge of the specific goal or task”, resulting in greater originality.¹⁸⁰ This approach enabled Anthony and me to generate musical ideas which may not have otherwise occurred given a more fixed, pre-conceived compositional goal in mind.

Expanding on the glissando idea, Anthony developed a sketch incorporating short, sparse melodic cells (from 2 to 5 notes) demarcated by *fermata* symbols, layered against the glissando texture denoted by the zigzag line, as seen in Example 31.

¹⁸⁰ Ward, Smith and Finke, “Creative Cognition”, 202.

Example 31. Sketch 1, initial Ideas.



The sketch introduces elements of indeterminacy into the developing miniature through time-space (stemless) notation, whereby the melodic note placements and the glissando are played at the performer's discretion. This sketch demonstrates how both generative and explorative phases of creative cognition were informing the evolving composition by exploring the notational representation of the two proto-ideas (the glissando and the melodic cells) and the textural and temporal relationship between them. Consequently, the sketch necessitated extensive experimentation with physically rendering these ideas on the piano, considering that both the pianist's hands are producing the consistent glissando effect, while needing to additionally play the melodic notes, as heard on Track 25. Reflecting on this in my journal, I wrote:

It was lovely to note that with the minimal means the miniature provided, there were nonetheless so many possibilities for exploration and interpretation in terms of shaping the notes within the gestures; the speed for each gesture and the overall piece; the dynamic variety and relationships between both the individual notes and the gestures; the quality of glissandi: smooth versus staggered, continuous versus interrupted, slow versus manic; the balance between the glissando sound and the pitched sounds.

March 2, 2011

Considering the implications of this journal extract in light of the creative cognition theory led to the generation of Codes 1, 2, 5, 7, and 8 in Category 2 (Explorative Cycles in Creative Collaboration, see Figure 11). Furthermore, the data extracts (Sketch 1, journal excerpt, and sound file on Track 25) demonstrate how the initial phases of work-construction were framed by thinking-through-action (physically interacting with the instrument), thinking-through-listening (accessing the viability of emerging ideas via critical listening), and thinking-through-structure (conceptual combination of the two ideas) – concepts developed from Österjsö's notions of 'thinking-through-practice' and 'thinking-through-hearing' and here identified as Categories 8, 9 and 10 (see Figure 11).

Collaboratively exploring the two preinventive structures (glissando and melodic cells) from the notational and performative perspectives enabled Anthony to refine the initial sketch and to introduce electronic processing ideas, specifically the delay effect, as seen in Example 32.

Example 32. Sketch 2, refining ideas.

3/6/2011

Miniature #1 for Solo "The first Ray" Anthony hypers.

w/ Delay setting 1.

piano

ca. 15 secs

back of mallets, fairly upright shape

piano

Pedal

ca. 10-15

Delay setting 1 (medium delay - proto)

Delay = 337 ms
feedback = 38%
(tempo 60 bpm) this

left thumb same setting

* NOTES may be played pizzicato.

In this sketch, the melodic cells (circled in red) are extended from the original idea and new dynamic, articulation and pedalling markings are added, informed by joint experimentation (see journal extract above). Furthermore, in contrast to the initial sketch, this new version (Example 32) reflects the decision to end the miniature with the glissando.

Experimenting with the delay settings Anthony specified in the sketch expanded the textural, rhythmic and timbral parameters of the developing miniature, as can be heard on Track 26. Tracing the process of structurally organising and integrating the three proto-ideas (glissando, melodic cells, electronic processing component) through iterated phases of generation and exploration, reveals the principles of 'conceptual expansion' and 'conceptual combination', central to creative cognition theory. This process of synthesising separate, seemingly unrelated concepts into new, original

forms is identified by Ward et al. as key to creative discovery and innovation.¹⁸¹ Reflecting on the developing trajectory of 'Diffraction' via sketches, journals and sound files enabled to identify Codes 1, 2, 3, 5 and 7 in Category 2 (Explorative Cycles in Creative Collaboration, see Figure 11).

Additionally, experimenting with how the microphones might be placed to pick up the sound signal from the glissando layer for electronic processing, we discovered the following solution: when placed close to the piano keys (as seen in Figure 12), rather than above the piano strings as is usual, it was possible to catch just enough signal for this layer to be electronically affected.

Figure 12. Rehearsal of 'Diffraction', Eleventh Hour Theatre, Melbourne, October 28, 2012.



The microphone can be seen on the left hand side of the piano, placed directly above the keyboard.

¹⁸¹ Ward, Smith and Finke, "Creative Cognition", 202.

Electronically manipulating the glissando sound further enhanced the overall textural and timbral dimensions of the piece and triggered the idea to experiment with additional processing effects, such as ‘stutter’, ‘granulation’ and ‘grain delays’, resulting in a richly textured, original electro-acoustic soundscape, as heard on Track 7, CD 1. The processes of conceptually combining and structurally integrating the seemingly abstract layers of material into a cohesive composition supports Ward’s et al. findings that properties not inherently evident in the individual constituents of the creative object can often emerge through novel and previously unconsidered combinations.¹⁸² Unpacking these processes through data analysis resulted in Codes 1, 2, 5, 6, 7 in Category 2 (Explorative Cycles in Creative Collaboration), Code 1 in Category 3 (Abstract versus systematised Modes of Creative Thinking in Collaboration), Codes 3 and 7 in Category 4 (Collaboration and Musical Content) and Codes 3, 4, 5 and 6 in Category 6 (Collaboration and Creativity), reflecting the indivisibility of Themes 1 and 2 within this collaborative experience (see Figure 11).

Having established the basic textural, melodic, structural and electro-acoustic parameters for this miniature, we decided to explore how its individual components could work in other contexts. As the Geneplore model suggests, the emerging properties discovered in the preinventive structures through exploration, will often result in further re-generation or modification of these ideas. As Ward et al. explain:

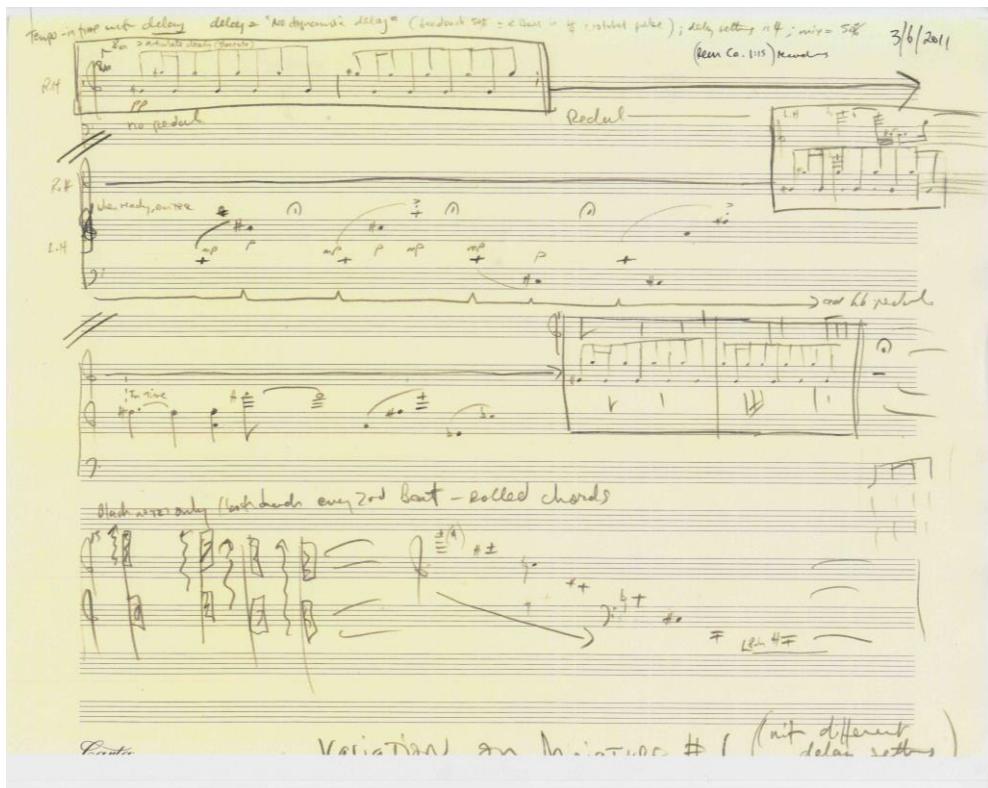
After the exploratory stage is completed, the preinventive structures can then be refined or regenerated in light of the discoveries and insights that might have occurred. The process can then be repeated, until the preinventive structures result in a final, creative idea or product.¹⁸³

Consequently, Anthony decided to experiment with substituting the textural glissando layer with a pitched quaver-based pattern (centred on G#) intended to be electronically processed using delay effect, as seen in Example 33.

¹⁸² Ward, Smith and Finke, “Creative Cognition,” 202.

¹⁸³ Ibid., 193.

Example 33. Sketch 3, exploring alternative pedal layers.



In this sketch, the pitched melodic material originally conceived for this miniature (see Sketch 1, Example 31) is kept the same and is juxtaposed against the electronically affected quaver layer. Identifying the collaborative processes resulting in this sketch led to Codes 2, 4 and 6 in Category 1 and Codes 2, 4 and 7 in Category 2 (see Figure 11).

Exploring this new combination of ideas exposed unanticipated difficulties. Playing the new quaver pattern (placed in boxes in the sketch) with enough rhythmic precision to match the delay pulses proved extremely challenging. When the quavers aligned exactly with the delay signals, a rich yet clear textural and rhythmic layering was achieved. However, even the slightest misjudgement created desynchronisation between the quavers and the delay pulses, resulting in blurred textures and individual layers deteriorating into cacophony. After extensive experimentation, including using a click-track, modifying the delay settings, and exploring various physical approaches to piano touch to optimise the placement precision, we were unable to find a reliable

method to achieve the necessary consistency, as documented in the following journal entry:

We recorded the first attempt of me playing it and analysed what worked and what needed further refinement, modifications, re-thinking. I was really struggling with the whole experience. First – the opening gesture sounded rigid, dull and lacking direction. I couldn't quite match the delay signals and was trying too hard to guess where the next pulse would occur, compromising the flow of the music. Physically, in trying to match the delay, I felt quite stuck and disconnected from the music I was trying to bring to life. I tried to experiment with staying really close to the key as I assumed that perhaps my 'normal' way of playing (anticipating the sound and touch of the key in the air) was causing me to play late with the delay. But playing right from the key and with a stiff attack felt foreign and dissatisfying.

June 17, 2011

Reflecting on the analytical implications of this extract resulted in Codes 1 and 2, Category 8 (Thinking-Through-Action, see Figure 11). Unable to realise this combination of ideas in performance, it was eventually abandoned. However, exploring it in practice invariably led to generating additional preinventive structures, which could enable the delay idea to be realised (as implicated in Codes 2, 4, 5, Category 1; Codes 2, 3, 4, 7 and 9, Category 2; and Code 1, Category 3, see Figure 11). For this purpose, Anthony devised a sketch deriving from the quaver-based pattern initially conceived for delay processing (see Sketch 3, Example 33), while juxtaposing it against asymmetrical rhythmic layers, shown in top red box in Example 34.

Example 34. Sketch 4, introducing rhythmic asymmetry.



Having discovered the practical limitations of using the delay processing in conjunction with faster moving figurations, Anthony proposed to loop the quaver pattern so that it remains in the texture throughout and use the delay to affect the slower moving ostinato pattern, shown in lower red box in Example 34. Considering this process from an analytical perspective, a discernible pattern begins to emerge. Namely, the continuous oscillation between the generative and explorative phases in creative cognition was resulting in a substantial modification and expansion of the original ideas, evidenced in the comparison of Sketch 1 and Sketch 4.

Example 35. Comparison of Sketches 1 and 4.

Sketch 1

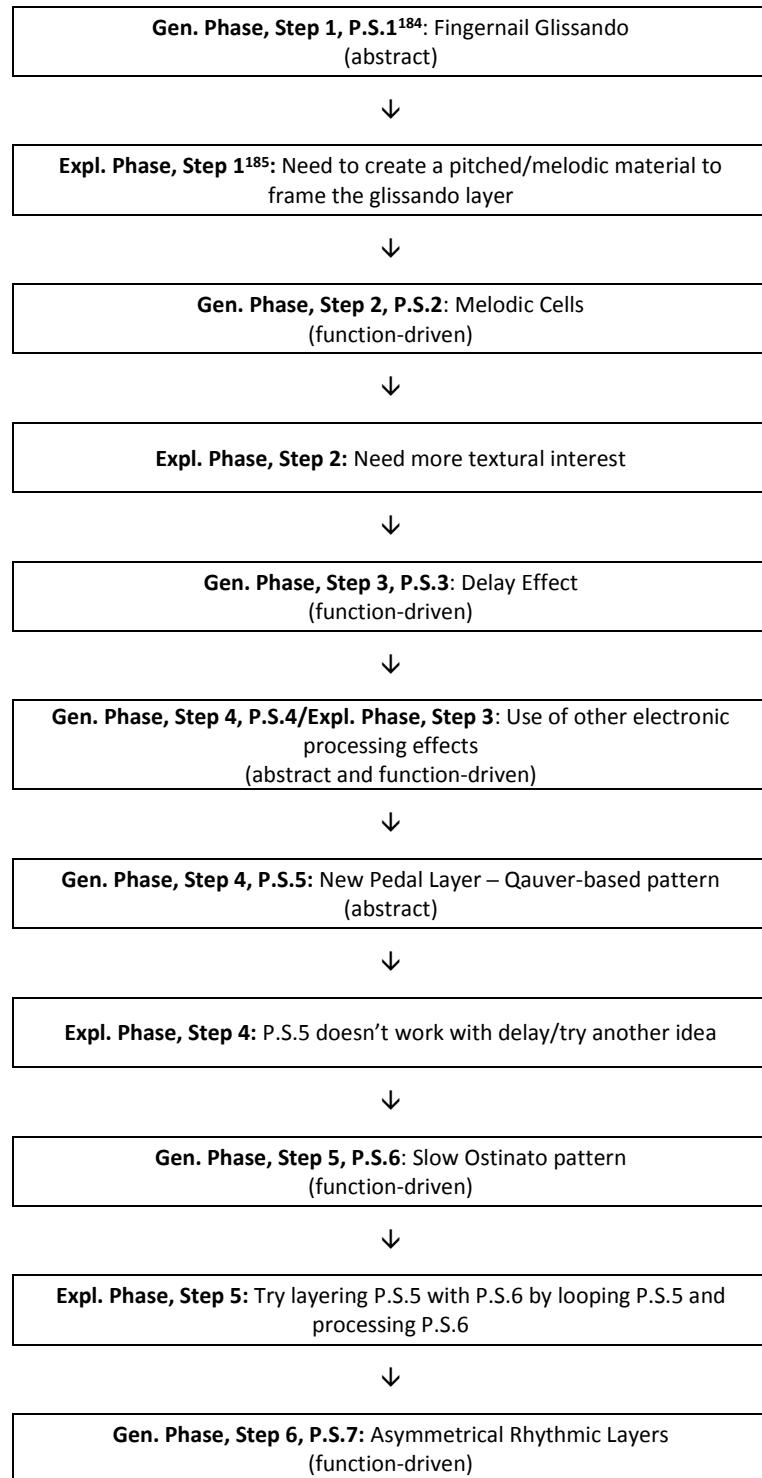


Sketch 4



Conceptualising the generative processes observed so far (from the initial improvisation experiment to Sketch 4) within the creative cognition framework, one can argue that the preinventive ideas fell into two distinct categories: abstract (such as nail-glissando) and function-driven (such as asymmetrical rhythmic layers), whereby the abstract ideas were randomly discovered through improvisation, while the more function-driven ones were devised to serve a particular compositional intent, as reflected in Codes 2 and 3 in Category 1 and Codes 1 and 4 in Category 3 (see Figure 11). This oscillation between the function-driven and abstract ideas, devised through cycles of generation and exploration, is traced in Figure 13.

Figure 13. Tracing the development of ideas through cycles of generation and exploration.



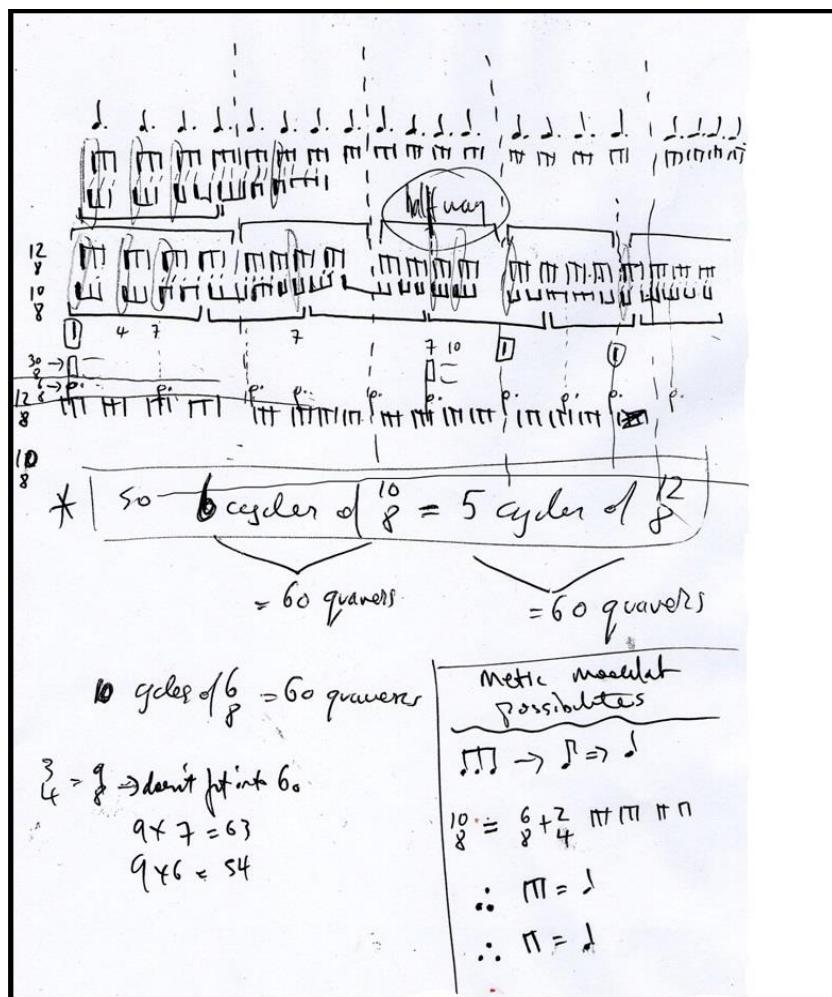
¹⁸⁴ 'Gen. Phase' denotes 'Generative Phase'; 'P.S.' denotes 'Preinventive Structure'.

¹⁸⁵ 'Expl. Phase' denotes 'Explorative Phase'.

This figure reveals an increasing shift from the more abstract, open-ended structures to the more complex and function/intention-driven ones, suggesting that while randomness and spontaneity may play an important role in creative thinking and serve as impetus for new creative ideas, a full realisation of artistic work is contingent on an increasingly systematic, organised and structured activity.

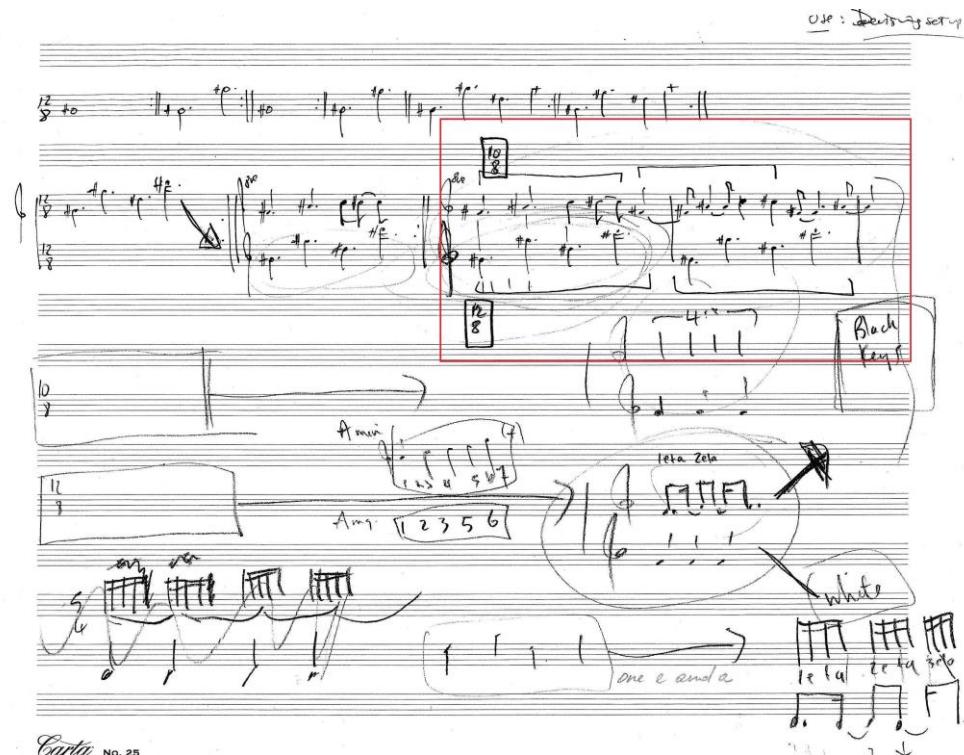
Collaboratively exploring the new sketch (Example 34) at the piano revealed a new set of challenges, specifically in relation to negotiating the 10/8 against 12/8 polymeter sketched in short-hand (annotated in top red box). My attempts to physically realise 10/8 against 12/8 as was presently notated (12 quavers in the right hand against 10 quavers in the left hand per bar) proved somewhat disastrous, challenging both my mental and physical coordination. This raised an important issue of the aesthetic differences framing our approaches to musical notation. While my training as a 'classical' pianist relied almost exclusively on notational precision, Anthony's musical background was shaped by years of playing guitar and electronics in bands, drawing predominantly on aural instinct and improvisation. The opportunity to workshop the sketch was instrumental in discovering notational representation that retained the essential rhythmic properties of this preinventive idea (i.e. its syncopated, quasi-improvised quality), while making its rendition possible for a musician with my musical background, exclusively dependent on detailed notational 'prescription'. In an attempt to find a more accurate notational expression of 10/8 against 12/8, we proceeded to break down the rhythmic patterns into smaller units, shown in Figure 14.

Figure 14. Sketch 5, negotiating rhythmic complexity (10/8 against 12/8).



Identifying how many 10/8 cycles of quavers fit into 12/8 cycles, as shown in Figure 14, and how they are distributed across the crotchet pulse, made it possible to notate this idea in 12/8 meter without losing its syncopated asymmetry, as shown in Example 36 (material in red box).

Example 36. Sketch 6, notating 10/8 against 12/8.



Negotiating these notational variants (see Example 34, Sketch 4 and Example 36, Sketch 6) at the piano triggered the following exchange (Dialogue Extract 20), which sheds light on the way the differences in our musical backgrounds were expressed and subsequently reconciled in this collaboration (Track 27).

Dialogue Extract 20

A.L.: *My main question is: I started writing out 10 against 8 and 12 against 8 [as sketch 5 demonstrates]. But is it easier to do that, which is like, quite syncopated, right? Or is it easier to, if one part is fixed, and this part is moving against it? Uh, is it easier to use boxes: 10/8 and 12/8, it's not necessary precise, like this [more like in sketch 4], or is it easier to actually read –*

S.L.: *Well, for my brain I think it's easier actually for it to be worked out, because then –*

A.L.: *I mean it's probably more accurate but –*

S.L.: *So if I was thinking [I play on the piano trying to read off the sketch with the new, more detailed and precise notation]. Yeah, for me that's much easier.*

A.L.: *Is it?*

S.L.: *Yeah, 'cos this for me is something that, you know, I have trained capacity to do this.*

A.L.: *I knew you'd be more used to do this.*

S.L.: *Whereas with that [meaning the boxed notation], it's a new concept. And what about you? Do you find this way too fiddley and kind of fixed, yeah?*

A.L.: *Well, you know, the trained part of me understands this. But if I was trying to play it, I'd find this easier [meaning the boxed notation, with one part fixed and the other loosely playing around it]. Just to, uh, I think that would be easier for me, yeah. It's interesting because you would probably get a different feel.*

S.L.: *You would, yeah.*

A.L.: *This comes out a bit like mathematics.*

S.L.: *Yes, yes, yes, exactly.*

A.L.: *Because that's how you are thinking and counting all the time, whereas this comes out more . . . Yes, that's the only way I could do it. I couldn't count. I mean I was counting in my head, but I probably couldn't read it like this.*

S.L.: *Yeah, sure, whereas I wouldn't know quite how to reproduce that . . . But this is immediately kind of easy, you know?*

July 2, 2011

Considering this exchange and the developing trajectory throughout Sketches 4 to 6 (Examples 34 and 36) enabled me to reflect on ways in which notational representation of a musical idea impacts performative outcomes beyond the expressive nuance and micro-level detail, such as dynamics, articulation, phrasing, etc. As evidenced in Track 27 and the dialogue above, in this example, the changes in the notational realisation of 10/8 against 12/8 meter led to the possibility of me physically rendering this idea in sound, which I was unable to do from the original sketch

(Example 34). Further experimenting with Sketch 6 (Example 36, material in red box) at the piano reinforced the decision to proceed with this notational approach, as it afforded clarity and ease of playability, evidenced in Dialogue Extract 21.

Dialogue Extract 21

S.L. *Wow, that's so much easier, when it's written like this!*
A.L.: *Is it?*
S.L.: *Like it's actually very easy to play!*
A.L.: *Oh great!*
S.L.: *It's amazing, how whatever notation you are used to, yeah?*
A.L.: *Yeah.*
S.L.: *How that's just like, it's amazing!*
A.L.: *Oh, great!*
S.L.: *Because this to me is a really familiar language, like I can totally, whereas the other one, which you wrote out, which for you is easy to read, I couldn't get my head around at all.*
A.L. *Oh, that's great!*

July 2, 2011

Reflecting on the implications of Dialogue Extracts 20 and 21 on the way notation is perceived across different performance traditions and realised via collaboration enabled to identify Codes 8 and 9 in Category 2 (Explorative Cycles in Creative Cognition), Codes 1, 2, 3 and 4 in Category 5 (Collaboration and Notation), and Codes 1, 5 and 6 in Category 6 (Collaboration and Creativity, see Figure 11). Track 28 reveals the improvement in my playing facilitated by joint exploration of this rhythmic structure. Having resolved the challenge of negotiating 10/8 against 12/8 meter in turn enabled further work on the sketch, incorporating the delay effect (heard on Track 29), which resulted in substantial expansion of its textural parameters. The final version in which ideas in this sketch were notated is demonstrated in Example 37.

Example 37. Sketch 7, final version of notating 10/8 against 12/8 idea, bars 1–12.

The musical score for piano consists of three staves. The top staff shows the right hand in 10/8, with asterisks above the notes to mark the start of each 10-quaver cycle. The middle staff shows the right hand in 10/8 and the left hand in 12/8. The bottom staff shows the bass line in 12/8. The score is in 12/8 time. The right-hand part features a complex pattern of eighth and sixteenth notes, with asterisks above the notes to mark the start of each 10-quaver cycle. The left-hand part provides harmonic support in 12/8. The bass staff shows a steady eighth-note pattern. The score includes dynamic markings such as $\text{p} \cdot$ (pianissimo) and $\text{f} \cdot$ (fortissimo).

In this sketch, the asterisks above the notes in the right hand denote the beginning of each 10-quaver cycle, enabling the awareness of the intended polymetric ‘feel’ and rhythmic emphasis in the playing, despite the uniform 12/8 meter. Tracing the improvements in my execution of this material from Tracks 27 to Track 28 and the changes in notation from Sketch 4 to sketch 7 (Example 38), attests to the potency of collaborative exploration in creative problem-solving and realisation of musical ideas.

Example 38. Comparison of Sketches 4 and 7.

Sketch 4

Sketch 7

As the material had essentially metamorphosed from its starting point (Sketch 3, Example 33) into an entirely new musical structure, it was decided to treat Sketch 7 as a separate miniature, while retaining the original ideas in Sketch 2 (Example 32) to be included into the final version of *Trace Elements* under the name of 'Diffraction', shown in Example 40

Example 39. 'Diffraction', final version.

The image shows a musical score for 'Diffraction (Ray I)' by Anthony Lyons. The score is divided into four systems, each consisting of two staves: Piano (top) and Electronics (bottom). The score is handwritten with musical notation and includes various performance instructions and markings. Some of the markings include 'ca. 30 secs', 'ca. 50 sec +/-', '30. 30. 30.', and dynamic markings like 'p', 'mp', and 'f'. The score is dated © Anthony Lyons 2012.

In this final version of 'Diffraction' the material from Sketch 2 (Example 32) has virtually remained unchanged, apart from the addition of electronic processing instructions. Thus, as a result of continuously iterated generative and explorative cycles suggested by the Genepture model, we had effectively created, albeit unintentionally, two self-contained compositions from what had started as a simple and abstract nail-glissando idea. Although the developing miniature in Sketch 7 (Example 37) was never fully realised, its structural, rhythmic, and textural properties gave rise to many of the subsequent ideas generated and explored within the scope of

this collaboration. This suggests that not imposing premature limitations on the unfolding generative and explorative cycles of creative cognition may yield unexpected creative discoveries and lead to greater artistic output.

The next section investigates the generative and explorative processes leading to the construction of 'Hiver'.

6.5 HIVER – RECURRING CYCLES

'Hiver' was the last miniature to be co-devised for the *Trace Elements* suite. As such, it reflects a number of recurring elements explored throughout the other movements of the suite and specifically 'Diffraction', such as the concepts of layering, pitched and non-pitched pedal points, expanding melodic cells, ostinato patterns, time-space notation, and the use of electronic processing. Furthermore, the initial intention to explore the non-traditional modes of sound-production, such as pizzicato playing on the piano strings and elements of indeterminacy, was expressed most vividly in this miniature.

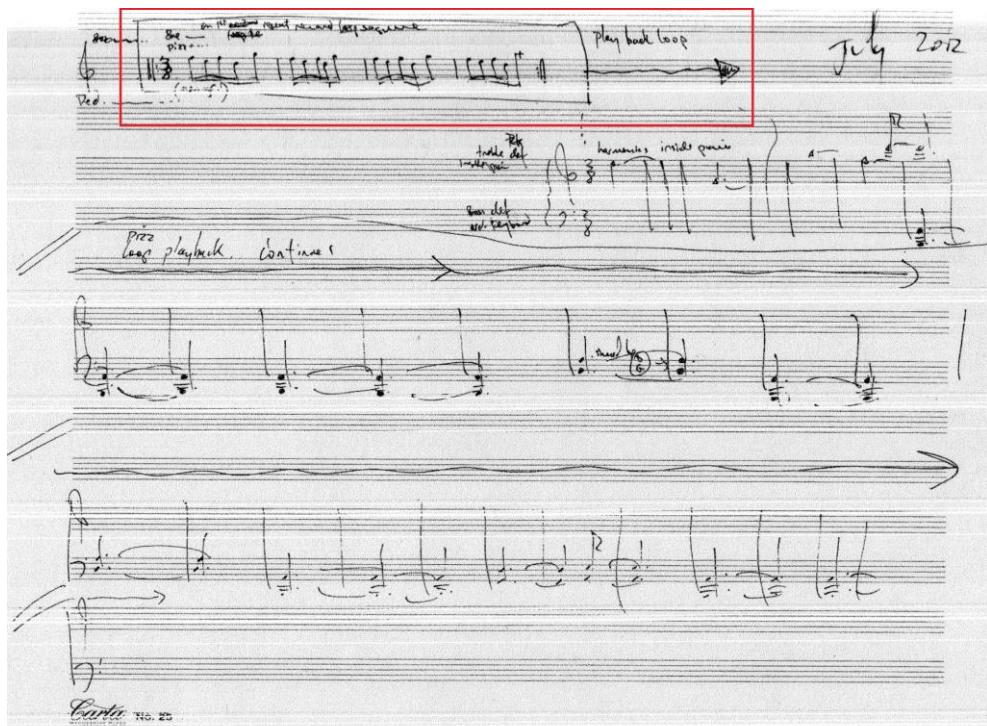
The following discussion traces the creative processes involved in co-devising 'Hiver' from both the content-generation and interpretation-building perspectives. It examines how musical interpretation evolved within the collaborative context, in turn impacting the content and structure of the composition. Furthermore, the discussion investigates the bi-directional relationship between the generative and the explorative phases in co-constructing 'Hiver' and highlights aspects of Integrative collaboration in this process.

6.5.1 'Hiver': Initial Sketches

For our first session on 'Hiver', Anthony brought in a few preliminary sketches comprising a number of germinal ideas (preinventive structures):

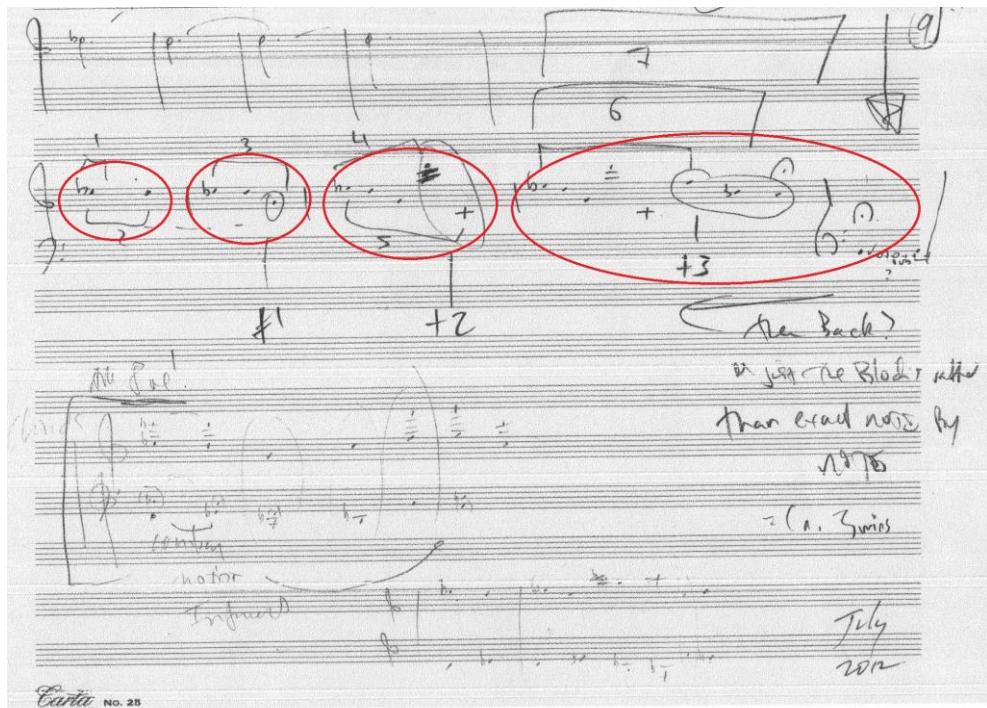
1. Ostinato figure played pizzicato on the strings of the piano (Example 40)
2. Short motifs comprising consecutive fifths played on the keys (Example 40)
3. Melodic cells played pizzicato on the strings of the piano (Example 41)

Example 40. Sketch 1, preinventive structures 1 and 2: pizzicato ostinato and parallel fifths motifs.



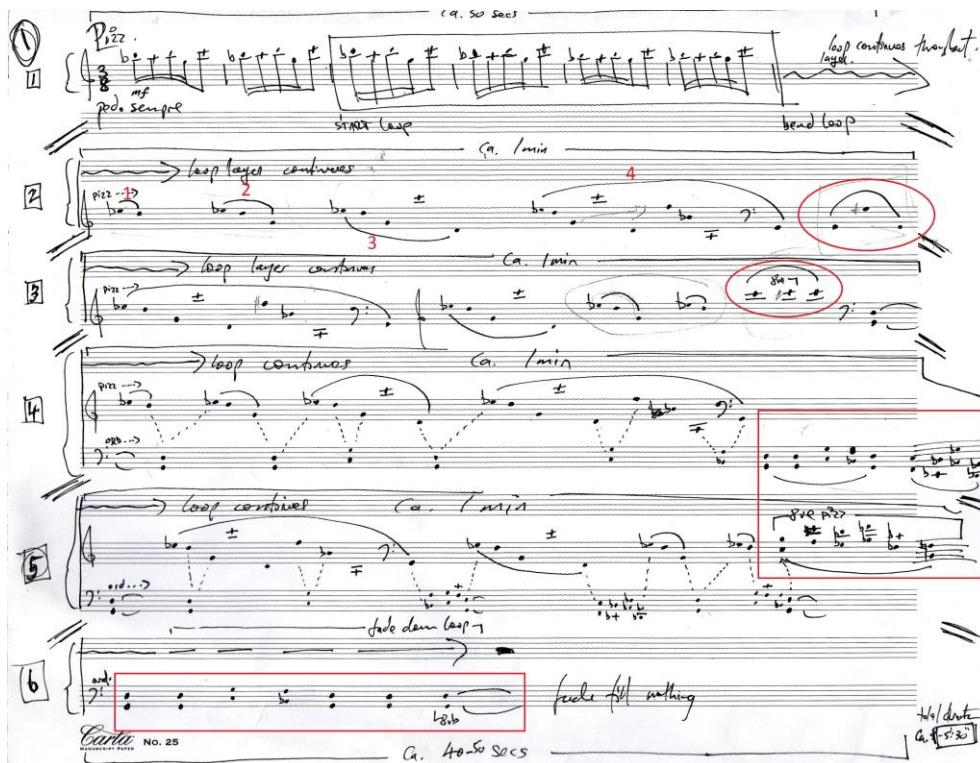
In this sketch, the semiquaver ostinato figure (shown in red box) is looped and juxtaposed against parallel fifths motifs notated in tied dotted crotchets.

Example 41. Sketch 2, preinventive structure 3: melodic cells.



This sketch is comprised of four expanding melodic cells (annotated in red) built on the recurring Eb–D motif. The initial workshops involved discussion and ‘hands-on’ exploration of how these three ideas (ostinato pattern, consecutive fifths motifs and the melodic cells) could be conceptually and structurally integrated, resulting in the following sketch (Example 42).

Example 42. Sketch 3, integrating three preinventive ideas.



As seen in the sketch, the initial idea comprising the four melodic cells (see Example 41) has been retained in its original form as well as used in retrograde (i.e. cells 1, 2, 3, 4 have been reversed in lines 3 and 5), with an addition of a short 'link' motif at the end of lines 2 and 3 (placed in red circles). The consecutive fifths motif idea was substantially reworked, with the individual fifths being interspersed within the melodic cells and the longer fifths motifs placed between lines 4 and 5 and lines 5 and 6, and used as a Coda for the miniature, as shown in the red boxes in Example 42. Presently, the form of the sketch could be described as: Introduction–A–B–A’–B’–Coda. The following sections examine stages of workshopping this sketch towards its final notational and performance realisation.

6.5.2 Action and Perception: The Deception of Aural and Kinaesthetic Senses

Approaching the miniature from the performance perspective, we decided to try out the sketch, make an initial recording, and assess what seemed physically feasible and

what required changes. Listening to the recording we had just made (Track 30), revealed significant interpretative limitations: the playing sounded extremely slow, disjointed, and lacking in direction. It became apparent that both the physical rendering and the content itself required serious considerations in regard to shaping, contrast, and architecturally-convincing form. The act of joint 'thinking-through-listening' (identified as Category 9, see Figure 11) served as the primary vehicle for assessing the merits and limitations of both the material and its physical realisation at the instrument. The insight that emerged from hearing the recording was that my temporal and aural perception of playing pizzicato on the piano strings was significantly skewed. While my physical experience was that of moving rapidly from string to string, maintaining a natural flow of the music, the reality reflected by the recording revealed significant unintended gaps between each melodic note, as is reflected in my journal entry below.

Listening back to the recording we had just made was a revelation: as much as I think of myself as a good listener at the instrument, my perception of the sound I was making as I plucked the strings was completely skewed! The constant motion of my body and arms, moving from string to string, and the feverish speed at which my brain and eyes were processing what came next, must have obliterated my sense of listening, creating a completely distorted aural image in my mind of what I was producing. While my body felt fluid and communing with the instrument, the sound moved at an excruciatingly slow and 'stuck' pace. Thank god for the recording technology!

September 2, 2012

Grappling with the mismatch between the physical 'feeling' and the aural reality of the playing, led to the realisation that the physical action of pizzicato playing, which involved finding the string, poised my fingertip in the right place to pluck it, performing the plucking action, following through with the arm movement (as a violinist playing pizzicato might), and moving to the next string, took significantly more time than I had realised. This had considerably influenced my perception of sound, as the gaps between the notes were effectively filled with physical gesture and thus 'masked' from my hearing. Hence, whilst the playing of the pizzicato notes felt completely 'natural' to me, the actual sound produced was far from satisfying. Without

acutely engaging in the ‘thinking-through-listening’ and ‘thinking-through-action’ modes of interacting with the musical material and the instrument itself, I doubt I would have a) realised the interpretative limitations of my playing; b) distilled its causes; and c) found eventual solutions to the problem. Critical reflection on these early explorative processes enabled identification of Codes 1, 2, 3 and 7 in Category 8 (Thinking-Through-Practice) and Codes 1, 2, 3, 4, 5, and 6 in Category 9 (Thinking-Through-Listening, see Figure 11).

Awareness of the deceptive relationship between the physical experience of plucking the strings and the aural reality produced by those movements enabled to modify my approach to pizzicato playing by staying closer to the strings and taking some of the lower notes with my left hand to enhance speed and fluency. In turn, this enabled me to explore possibilities of shaping both the individual melodic gestures and the overall relationships between the melodic phrases within the sketch, as reflected in Dialogue Extract 22.

Dialogue Extract 22

S.L.: What if we started faster and then it got slower?
A.L.: Maybe. I'm just trying to think of ways of trying to move it forward as well. I think it could happen with these last two, and maybe this is the one where it's like the climax line [line 4].
S.L.: Ok, ok. So: sparser [line 2]; a bit more moving [line 3]; really moving [line 4, climax]; sparser [line 5].
A.L.: Getting sparser again [meaning line 5]. So not like straight away, but just by the time you get through here [pointing at the last 2 melodic cells on line 5], and maybe dynamically it's same sort of thing [meaning dynamics reflecting this structure], and then this is getting little bit slower again [line 6]. Maybe. It's worth a try. I don't know, we'll just have to try some versions.

September 2, 2012

Implementing these ideas had an immediate impact on the quality of playing and the overall shape of the music, as can be seen on Track 31. Implicated in this exchange are Codes 2 and 7 in Category 8 (Thinking-Through-Action) and Codes 3 and 4 in Category 10 (Thinking-Through-Structure, see Figure 11). The marked change in the overall rendition of the sketch, occurring after only thirty minutes of joint work, supports the

findings in Chapters Four and Five that engaging with musical material through ‘embodied’ and ‘structural’ modes of thinking may considerably enhance the interpretation-building process.

6.5.3 The Recording Studio: In Search of Interpretation

Having completed the preliminary generative and explorative phases of content- and interpretation-finding, the remainder of our work on ‘Hiver’ took place in the recording studio (September 12–14, 2012, Federation Hall, VCA), where the piece was developed into its final form, recorded, and prepared for the live performance. The three days in the studio were spent exploring the miniature from both the compositional and interpretative angles, enabling a close observation of the co-creative processes involved in musical work-realisation.

While certain constraints, such as the miniature’s length (intended to be no longer than five to six minutes) and the logistics of live versus recorded environments were considered, there was an attitude of open-minded curiosity as to where the process might lead. Hence, most of the musical parameters remained flexible and open to change. Fortunately, Anthony and I shared an open-minded predisposition and the desire to probe deeply into the creative potentialities of the process without over-controlling or pre-determining the outcomes. Combined with unequivocal trust and respect for each others’ musicianship and the consistent mutual support, these shared aspirations resulted in a collaborative process that blurred the lines of demarcation between ‘construction’ and ‘interpretation’, gradually merging them into a symbiotic process.

Recording the existing version of the sketch (Example 42) and listening back to the result reinforced the earlier discovery that despite a marked improvement achieved in the previous session (see Section 6.5.2 and Track 31), the melodic line was still too ponderous and lacking direction, with persisting gaps between the notes. Identifying a possible interpretative direction to explore, the following exchange ensued:

Dialogue Extract 23

A.L.: *It's better to go for the energy than –. Like, yes, try to be consistent, that nice soft sound, but if I compress things a little bit it'll even the ones that jump out.*

S.L.: *And it's like you said, there needs to be time between the phrases but much more togetherness within the phrase, yeah? Because they kind of got –. Like you don't feel it, because you are in transition from string to string, but when I'm listening to it, there's so much time between the notes that phrase kind of falls apart.*

A.L.: *I think that would delineate the phrase more like that. I mean, I thought some of the actual phrases were quite nice but because there's the gaps it kind of breaks down the phrase structure.*

September 12, 2012

Deriving ideas by critically engaging with the recording (thinking-through-listening), I proposed doing a few more takes to experiment with different ways of approaching the pizzicato playing and assessing their viability via further listening. As Anthony was preparing to make another recording, I tried playing the melodic cells on the keys in order to explore how I might phrase the material were I to play it in a familiar context without the impediment of the pizzicato. As the sound emerged, reflecting a more natural and supple phrase, Anthony proposed we explore this as an alternative way of treating the melodic material, as the dialogue below reflects.

Dialogue Extract 24

A.L.: *We can even do a version just the notes as well, you know?*

[Meaning on the keys]

S.L.: *Yeah?*

A.L.: *Do you want to do one with notes now? Just to explore the phrase?*

S.L.: *Yeah. Just to kind of get the phrasing into my head when I'm not hindered by looking for the strings. Let's!*

A.L.: *OK.*

September 12, 2012

The dialogue and the idea that prompted it exemplify the inseparability of generative and interpretative/explorative steps when working collaboratively on co-constructing new composition. My spontaneous idea to explore the original pizzicato melody on the keys served as a stimulus for Anthony to consider incorporating it into the miniature.

Having just recorded a version of the melody on the keys (as seen on Track 32) Anthony and I expressed a shared excitement at this new development:

Dialogue Extract 25

A.L.: *Nice!*
S.L.: *Yes, it sounds nice, doesn't it?*
A.L.: *Yeah, well done! I loved the phrasing.*

September 12, 2012

Following this exchange, I asked Anthony if it was possible to listen to the take we had just made, “because it just always sounds so different listening back to how it is when I’m playing it. And I can just hear so much more!”.¹⁸⁶ The value of such critical engagement with the recorded material (i.e. thinking-through-listening), and the feedback it offered for further exploration (thinking-through-action and thinking-through-structure) is evidenced in Dialogue Extract 26.

Dialogue Extract 26

S.L.: *Somehow they [the notes] have to be much more uneven. They are so kind of 'pulsey'. I would love to make them a lot more elastic and unpredictable, 'cos it's really like [I sing, exaggerating the vertical quality of it] like it's just so predictable. And dynamically more, many more crescendos and diminuendos, like especially shape these more . . . and just much more dynamic variation and colour. It just sounds a little bit primitive at the moment.*
A.L.: *Yeah alright. I quite liked it. But yeah, it's worth trying those things. What do you think about –. That one went for about 6 minutes. What do you think of the idea of playing that and finishing right there, or there? [pointing to the last melodic cell on the 5th line, just before the pizzicato fifths].*
S.L.: *Yeah, just ditching this?*
A.L.: *Yeah, ditching this and ditching this [pointing to the pizzicato fifths on the 5th line and all of the 6th line]. They just make it drag a bit.*

September 12, 2012

¹⁸⁶ Personal communication, 12 September, 2012.

As this dialogue suggests, collaboratively engaging in ‘thinking-through-listening’ ‘thinking-through-action’ and ‘thinking-through-structure’ directly impacted both the interpretative and the compositional decision-making processes. It enabled me to identify tangible ways to improve my playing and prompted Anthony’s decision to discard a considerable chunk of the material to enhance the miniature’s compositional and structural integrity. Considering the interpretative directions I wanted to explore in relation to ‘sculpting’ the melodic line prompted the following exchange:

Dialogue Extract 27

S.L.: I would love to push it out much, much more, you know, in all kinds of directions. It just sounds really [I refrain from being too negative about my playing but I mean to say: “primitive”].

A.L.: I mean, I like the sparseness at the start. It’s not so much about the phrases, but maybe the chance to add more elastics on these.

S.L.: Almost a bit sweeping, so it’s not so predictable [I play to demonstrate]. Much more ebb and flow in the phrases and not so square.

September 12, 2012

Analysis of Dialogue Extracts 23–27 and the creative thinking processes implicated in them, led to the identification of Codes 1, 2, 3, 4, 5, 7 and 9 in Category 2 (Explorative Cycles in Creative Collaboration), Codes 1 and 6 in Category 6 (Collaboration and Creativity), Codes 1, 2, 3, 7 and 8 in Category 8 (Thinking-Through-Action), and Codes 1, 2, 3, 4, 5 and 6 in Category 9 (Thinking-Through-Listening, see Figure 11).

Looking for models to help frame and anchor the expressive direction I was interested in pursuing, I imagined what an African kora or a Japanese koto player (both instruments involve string plucking as the primary mode of sound production) might sound like playing this miniature. Invoking the recently heard recordings of kora and koto music and the compelling emotional intensity and freedom characterising these performances, I began to push the expressive envelope of the miniature in the diametrically opposite direction to that of the stilted, slow approach we began with. Having, moreover, discovered more technical control over the pizzicato playing by distributing the melodic notes between the two hands, we were interested in

exploring this new interpretative direction without imposing conceptual or aesthetic limitations on the unfolding process.

The subject of recently-activated knowledge and its impact on creative discovery (such as the impact of the recently heard performances of kora and koto music on my interpretation-building processes) has been addressed by creative cognition theorists. According to Ward et al., studies in structured imagination conclude that since “creative products can be influenced by features that are depicted in previously seen examples”, it is important to discern when such recently activated knowledge is beneficial to the creative process and when it may hinder innovation and originality.¹⁸⁷ The following data extracts shed light on both the benefits and limitations of using structured imagination modelled on recently activated aural and aesthetic experiences (such as my hearing Koto and, particularly, kora music). Building on my internalised sound-image of kora playing, I began exploring rhythmic and dynamic expansion/contraction within the phrases, aiming for greater variation and irregularity in note placements to achieve maximum feeling of improvised freedom and spontaneity, as seen on Track 33. Dialogue Extract 28 reveals the first significant breakthrough experience in the interpretation-finding process which resulted from this experiment.

Dialogue Extract 28

[Following my first run-through of the melodic gestures played with two hands]

A.L.: *Yeah! I loved it!*

S.L.: [Joking and laughing] *I mean, I'm a sassy, independent, black, Mozambique kora player!* A.L.: *I loved it. I loved it. It's great!*

S.L. *Was it too wild?*

A.L.: *No, I think it's good to have it. It's completely different to the one, two takes ago.*

September 12, 2012

¹⁸⁷ Ward, Smith and Finke, “Creative Cognition,” 200.

The video file (Track 33) and the dialogue transcript support the notion that drawing on aural imagery stimulated by recent experience can stimulate creativity and assist in the explorative/interpretative phases of creative cognition. Moreover, these examples reinforce that support, ease, and rapport established within a collaborative relationship can substantially enhance the creative process, tapping deeply into the inner artistic resources that might otherwise lie dormant in one's unconscious mind. The following journal entry further reveals the impact the collaboration was having on the unfolding interpretive process.

I'm amazed at how quickly things transform when working on them together with Anthony. All the laughter, silliness and hilarity, and the endless bouncing ideas off each other taps into a deep source of creativity and imagination in me which I often can't access on my own. From the work we've done this morning my feeling for the piece has totally changed: I'm imagining a Kora player, going for free, irregular phrasing, flexible, elastic shapes, floating sound timbre, and playing against the pulse, aiming for irregularity of note placements to blur a sense of rhythmic consistency. A diagonally opposite approach to where we started which feels like a real breakthrough so far!

September 12, 2012

Conceptualising the underlying implications of these data extracts on the collaborative processes of work-realisation enabled to identify Codes 1, 2, 3, 4 and 6 in Category 6 (Collaboration and Creativity) and Codes 1 and 2 in Category 7 (Collaboration and Communication, see Figure 11).

Additionally, impacting on this breakthrough experience was the continuous feedback loop between the aural and the physical experiences of playing, mediated by the thinking-through-listening and thinking-through-action modes of engagement (identified as Categories 8 and 9, see Figure 11), as reflected in my comment to Anthony:

The crazy thing is, is that if I hadn't listened to that recording [I mean the recording we made at the very beginning of the session], see, I would've thought that it was really good, that original one. You know, clean, atmospheric. It's amazing how untrustworthy this [aural-kinaesthetic] perception is! I think this listening back is just crucial, absolutely crucial.

September 12, 2012

Following extensive experimentation with rhythmic and dynamic expansion/contraction of the melodic cells and a significantly greater spectrum of expressive intensity, we recorded the miniature again to seek a more 'objective' feedback. Hearing my playing through the lens of the recording revealed further discoveries: having pushed the expressive and temporal boundaries of the piece, the playing was now becoming almost forceful, with huge fluctuations of tempo and emotional intensity, reflected in the following dialogue.

Dialogue Extract 29.

S.L.: [Laughing]Oh, there's so much angst and sorrow in this! . . . It's like wailing! It's gone from this totally amorphous, sort of post-frontal lobotomy Anglo-Saxon to this like totally impassioned, feverish Mozambican singing of his sorrows! [Much laughter]. I mean, it's interesting, this is captivating and keeps you listening. I mean, it completely changes the character of the music!
[We reflect on the extremes to which the expressive pendulum was now swinging, and discuss ways to bring more equilibrium into the playing without losing the overall character and elasticity we had discovered]
A.L.: I almost think, thinking about it, it's like a meditative, still line [line 2]; this is in-between [line 3]; and this is the one that, you know, lets it out [line 4]. This is, like, a kind of different idea each line.

September 12, 2012

Critically reflecting on the implications of Dialogue Extracts 28–29 and the journal entries above on the function of recently activated knowledge in creative thinking, it could be argued that while the allegory of kora player triggered the initial flight of imagination, precipitating an important interpretative breakthrough, when taken to extremes such (tacit) knowledge can obscure other possibilities from being discovered. In line with the creative cognition theories, it would appear that while activation of recent knowledge can have significant benefits in the early explorative stages of the

creative process, discretion should be exercised in deciding when modelling the existing, internalised exemplars is no longer useful to the process. Conversely, it can be argued that it was precisely the exploration of the extremes of expressive and rhythmic spectrum, precipitated by the fictional image of the 'Mozambican kora player' and the sound-image of the Japanese Koto player, that enabled Anthony and I to arrive at the optimal realisation of the material. As Dialogue Extract 30 reveals, this oscillation between the extremes of musical expression, which was gradually 'tamed' through systematic and increasingly sophisticated cycles of listening, discussion, and hands-on refinements, was the key to arriving at a well-balanced and convincing interpretation.

Dialogue Extract 30

S. L.: Isn't it interesting how you have to go from one extreme, swing all the way to the other extreme, until you can find something in the middle. It's almost like without just pushing it too far you just can't find exactly where it sits and where it belongs.

A.L.: Yeah, yeah.

S.L.: It's like what happened yesterday with the on the keys one. Like first just dead and then, like remember how it just went too kind of forceful and pushy. And it's just amazing how you just don't know until you explore every part of the continuum and push that envelope.

A.L.: Aha.

S.L.: So interesting how it happens, yeah?

September 13, 2012

From an analytical perspective, the data extracts above (Dialogue Extracts 23–30, video files on Tracks 32–33 and the journal entries) enabled to generate Codes 1, 2, 4, 5, 6 and 7 in Category 6 (Collaboration and Creativity), Codes 1, 3, 4, 5, 6, 7 and 8 in Category 8 (Thinking-Through-Action), Codes 1, 2, 3 and 6 in Category 9 (Thinking-Through-Listening, see Figure 11). Furthermore, tracing the interpretative trajectory discussed above points to the critical importance of the iterative cycles of experimentation, assessment, and re-invention when searching collaboratively for optimal realisation of musical ideas. Whilst spontaneity and intuition were integral to the explorative processes of discovering optimal interpretation, examination of the underlining mechanics behind our creative thinking reveals a systematic and structured activity. This search for a thoroughly considered interpretation, as further

documented in Dialogue Extract 30, exemplifies the type of joint 'thinking-through' process, which characterised much of this collaboration.

Dialogue Extract 30

A.L.: *It's so subtle isn't it? It's not necessarily wild and all dynamics, is it?*
It's creating that energy –
S.L.: *Without the –*
A.L.: *Yeah, how can I put it?*
S.L.: *Without so much volume and the effort.*
A.L. *'Cos what happens when you do that [makes a gesture to mimic a forceful plucking motion], it falls in a little bit like that [implying that it sounds very vertical] even though it's going quicker.*
S.L.: *Yeah, exactly. It's exactly like you say: it's much more contraction/expansion rather than –*
A.L.: *Yeah, it's interesting, isn't it? It's like expansion/contraction this way* [demonstrating a horizontal as opposed to vertical plane].
S.L.: *This way* [implying rhythmic, horizontal plane], *I was just about to say, exactly!*

September 12, 2012

As in the case of 'Diffraction', the explorative phases of the process became increasingly nuanced and structured. As the interpretative parameters narrowed, the process demanded greater sophistication in thinking and instrumental control. The extract above illustrates how an on-going bi-directional feedback between Anthony and me helped refine the interpretative treatment of the melodic structures. Furthermore, it demonstrates an increasingly more integrative nature of the collaboration, whereby Anthony was now working predominantly in the 'interpretive' domain, taking an equal part in the interpretative decision-making.

6.5.4 The Recording Studio: In Search of Structure

Resolving interpretative limitations and achieving a more satisfying expressive shape invariably triggered the desire to refine the structure and proportions of the miniature itself. Concerned that the material was at times too repetitive and stimulated by the possibilities discovered throughout the interpretation-finding process, Anthony proposed a number of melodic and harmonic variants of the original melody, shown in Example 43.

Example 43. Sketch 4, variations on the melody.



The sketch illustrates a vivid example of the conceptual expansion, whereby the original melodic cells have been subjected to variations in pitch (lines 1, 2 and 3) and harmony (line 4) as well as expanded in length and the number of cells per line. Presented with additional preinventive structures, an extensive explorative phase was required to utilise and integrate these ideas into the evolving composition, revealing a process of continual conceptual combination, expansion, and re-structuring.

Exploring ways in which these new melodic ideas could be woven into the existing sketch (Example 42) led to experimenting with a variety of structural possibilities, such as through-composed form, theme and variations form, and ternary form. As such, it can be noted that while seeking novel, original ideas and forms for 'Hiver', Anthony and I were consistently relying on our knowledge of Western art music to contextualise and assess the preinventive ideas for their compositional merits, function, and usability. Thus, an important aspect in the co-construction of 'Hiver', as perhaps of any creative work, was this bi-directional relationship between the knowledge of the established tradition and the search for innovative and unique

sounds, textures, and forms. Dialogue Extract 31 captures the first attempts to integrate the new material into the existing sketch.

Dialogue Extract 31

S.L.: *I mean, alternatively, what we could do is we could do one line of the original, then, you know, it could go say, even through to this.*
A.L.: *It's true. Or have the original, yeah, have this as the middle line, or part of it, and have the original where it is? Or?*
S.L.: *Maybe just three verses? You know, like the original [line 2 from Example 42], second [melodic variation 2], third [line 5 from Example 42]. Then come back, like finish with a few of these [implying short melodic cells comprised of Eb–D motif as it appears at the end of line 5 in the original sketch, Example 42]*
A.L.: *Yeah!*
S.L.: *I mean there are so many possibilities we could do!*
A.L.: *Or do you want to try the acoustic version? [i.e. on the keys, not pizzicato].*
S.L.: *Yeah, it means in a way that the piece becomes longer and it's almost like through-composed. Like to have the original as it was and treat this [melodic variation 2] as a second stanza. Or, like a set of variations. It would be like a miniature set of variations, you know?! This could be the theme [line 2 from Example 42].*

September 13, 2012

As was characteristic of our collaborative dynamic, Anthony was open to exploring my idea of the theme and variation form as it offered the opportunity to incorporate most of the ideas we had generated without having to discard any of them. Adopting the theme and variation form as a working structure for the miniature, I searched for various ways in which the variations might fit together, as demonstrated on Track 34. Several cycles of re-structuring and re-conceptualising the formal organisation of the material resulted in a large number of variants, including one seen on Track 35 and in Table 9.

Table 9. Exploring ‘theme and variation’ form.

Introduction	Ostinato pattern; looped
‘Theme’	Original melody with fifths as it appears in line 4 of the original sketch (Example 42) up to parallel fifths motif; played on the keys
Link	As appears at the end of line 2 of the original sketch (Example 42, circled in red)
Variation 1	Original melody as it appears in line 2 of the original sketch (Example 42) up to the link motif; played pizzicato
Variation 2	Melody variation 2 from Sketch 4 (Example 43); played pizzicato
Variation 3	Melody variation 4 (in chords) from Sketch 4 (Example 43); played on the keys
Variation 4	Melody variation 3 from Sketch 4 (Example 43); played pizzicato
Coda	Last two melodic cells as they appear in line 5 of the original sketch (Example 42), repeated 3 times; played pizzicato

Generating numerous versions of theme and variations structure and working out the possible ordering of the material, as seen in Tracks 34 and 35, I had essentially taken on a ‘constructionist’ role within the creative process, moving beyond the interpretative domain. As such, the constructionist and the interpretive roles in our collaboration were effectively merging, reflecting an important transition from the Complimentarity model towards more Integrative pattern of work. Recording thoughts on the evolving process in my journal I wrote:

Then there was endless re-jigging and restructuring things in every possible way and listening back for feedback and comparison between different variants. At some point I commented that the piece was turning into something entirely different and we were both marvelling at how within a day of collaborative exploration we ended up, once again, just like in the case of ‘Diffraction’ with an almost entirely different composition!

September 13, 2012

Critical reflection on the data extracts comprised of Dialogue Extract 31, video files on Tracks 34–35 and the journal entry above led to Codes 1, 2, 4, 5 and 7 in Category 2 (Explorative Cycles in Creative Collaboration), Codes 1, 7 and 8 in Category 8 (Thinking-

Through-Action), and Codes 1, 2 and 6 in Category 10 (Thinking-Through-Structure, see Figure 11).

Critically reviewing the variants generated thus far revealed various conceptual and structural limitations. Whilst the idea of theme and variations remained appealing, we struggled to achieve a well-proportioned form and contain the miniature within its pre-determined length of five to five and a half minutes. However, unwilling to abandon the new ideas generated in Example 43, we decided to explore the option of the 'three stanza' structure. Such tripartite (or ternary) form would enable us to retain the original thematic material and the fifths motifs while incorporating the new melodic variation (from Sketch 4, Example 43) as the middle 'stanza'. The dialogue extract below reflects further modifications to both the individual ideas and the overall form of the miniature, resulting from the processes of conceptual combination and expansion.

Dialogue Extract 32

A.L.: *So even if we do the original concept with the electronics and so on, ah, it could be the original theme forwards [as in line 2 in Example 42], this variation melody second time through [melody variation 3, Example 43], than back to the theme forwards again.*

S.L.: *Yeah, yeah. All plucked?*

A.L.: *Could be all plucked. Or, we could still work in the fifths somehow.*

S.L.: *And ditch altogether the reversal of the theme as a second layer?* [Implying the retrograde version of the 'theme' as appears in line 3 of the original sketch, Example 42].

A.L.: *Yeah. So, it's three layers [i.e. lines] and yeah, the fifths could still –*

S.L.: *We can work them in, yeah?*

A.L.: *That's like an in-between these two ideas.*

S.L.: *Yeah, we get to incorporate this variation on the melody. That could be our amalgam of everything we've done. Yeah, I like it!*

September 14, 2012

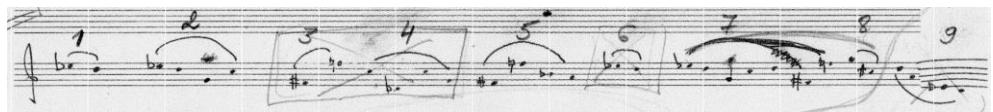
Further experimentation with and re-conceptualisation of the structure and the treatment of its individual elements, triggered by the dialogue above, resulted in the following variant, featuring the 'strummed' version of the fifths motif placed at the beginning of the miniature, as seen on Track 36 and in Table 10.

Table 10. 'Hiver'. Exploring ternary form.

Introduction	Strummed fifths; then ostinato pattern looped
Line 1	Original melody ('theme') played pizzicato with fifths played on the keys, as it appears in line 4 of the original sketch (Example 42), including the parallel fifths motif
Line 2	Melody variation 3 from Sketch 4 (Example 43); played pizzicato
Line 3	Original melody ('theme') modified: melodic cells played pizzicato interspersed with strummed fifths
Coda	Last two melodic cells as they appear in line 5 of the original sketch (Example 42), last cell repeated 3 times; played pizzicato

The process of stripping back layers of material and distilling the essential components of the composition, as seen in Table 10, closely reflects the interpretative trajectory discussed earlier in the chapter. As with the interpretation-building process, cycles of feedback derived from listening and refining the structures accordingly, lead to further distillation of ideas as they approached their final form. Specifically, listening to the version in Table 10 (Track 36), I realised that the second 'stanza' comprised of melody variation 3 (Sketch 4, Example 43) was disproportionately long in relation to lines 1 and 3, suggesting to condense it accordingly. Trialling possible options at the piano (working in the 'thinking-through-action' mode), I proposed discarding cells 3, 4, and 6 from the original (Example 43, melody variation 3) and combining cells 7 and 8 into one longer phrase, as shown in Examples 44 and 45.

Example 44. Melody variation 3, original version.



Example 45. Melody variation 3, modified version.



As time was running out and this was our last scheduled day in the studio, with live performance of *Trace Elements* just over two weeks away (September 30, 2012), it became imperative that we finalise the structure and content of the miniature and curb subsequent generative/explorative cycles, save minor adjustments. Distilling the structure further, facilitated by condensing melody variation 3 and deciding definitively on the 'three stanza' form, resulted in the following version, as seen on Track 38 and presented in Table 11.

Table 11. Distilling the structure: ‘three stanza’ form.

Introduction	Ostinato pattern looped
Line 1	Original melody (‘theme’) as it appears in line 4 of the original sketch (Example 42) played pizzicato, followed by parallel fifths motif played on the keys
Line 2	Melody variation 3 (Example 43) condensed (as in Example 45); played pizzicato
Line 3	Original melody (‘theme’) as it appears in line 4 of the original sketch (Example 42) played pizzicato with some fifths interspersed between the cells, played on the keys
Coda	Last two melodic cells as they appear in line 5 of the original sketch (Example 42), last cell repeated 3 times; played pizzicato

As the miniature began to crystallise into its final form (Table 11), we decided to try out some experimental ideas in relation to colour and timbre by incorporating EBows (battery-powered electronic bows, as seen on the photograph in Figure 15) to produce a harmonic bed for the acoustic material, swirling rubber balls on the upper register strings for a ‘shimmering’ effect, and using a mallet with a rubber ball attached to its end to strike the low notes of the gestures, as seen on Track 37 and pictured in Figures 15–17.

Figure 15. Rehearsing 'Hiver'. Experimenting with EBows, Federation Hall, Victorian College of the Arts, September 13, 2012.



Figure 16. Rehearsing 'Hiver'. Experimenting with rubber balls, Federation Hall, Victorian College of the Arts, September 13, 2012.

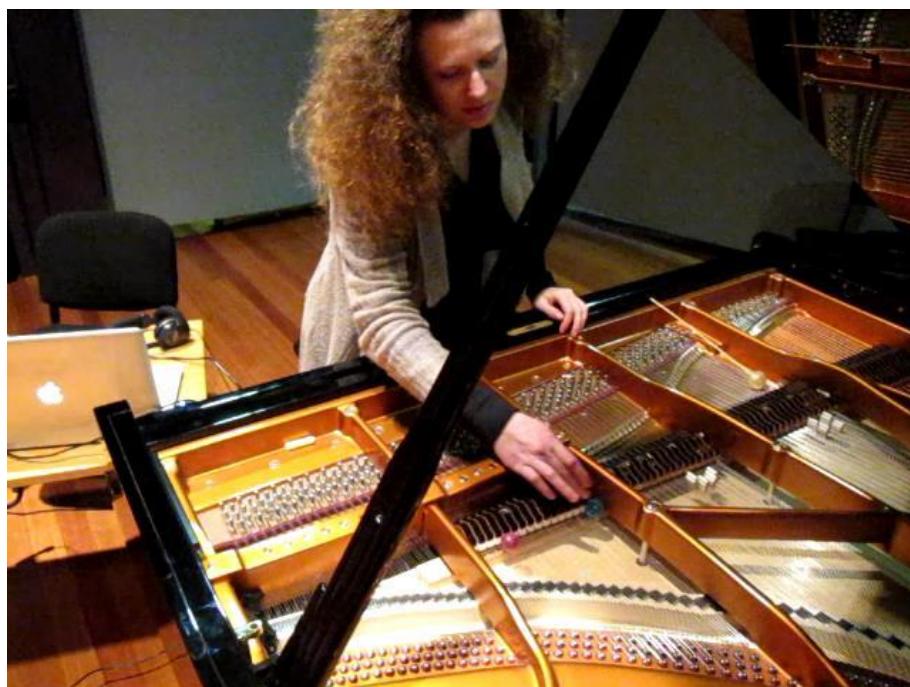


Figure 17. Rehearsing 'Hiver'. Experimenting with a mallet, Federation Hall, Victorian College of the Arts, September 13, 2012.



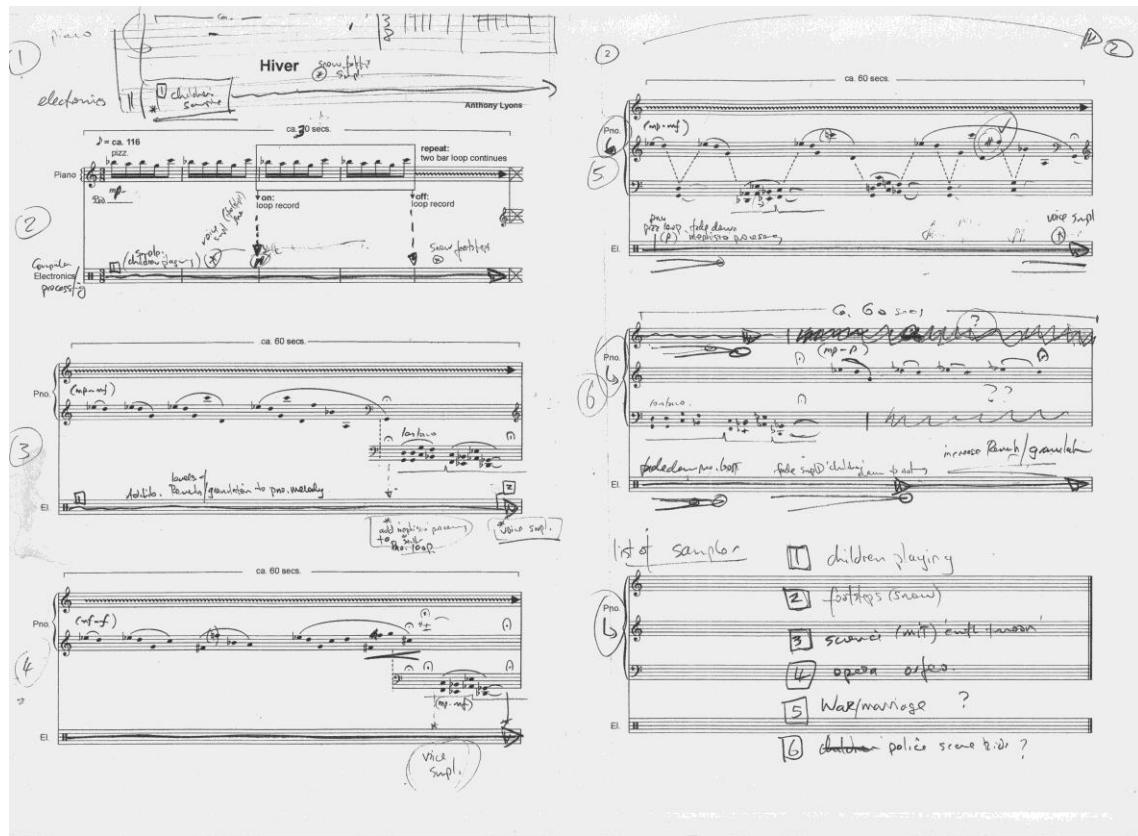
Whilst attracted to the tonal and colouristic possibilities afforded by the use of EBows, rubber balls and a mallet, we decided to discard these ideas for the live performance, as manipulating these objects tended to impede the natural shape and flow of the music as rehearsed. Hence, the final version of 'Hiver', as it was presented at the live performance and recorded for the performance folio in this thesis, reflects the simplicity, balance and clarity of texture and form, distilled from continuous generative and explorative cycles, as shown in Table 12 and Example 46.

Table 12. 'Hiver'. Final version.

Introduction	Ostinato pattern looped
Line 1	Original melody (Example 42) with fifths removed within and between the cells, played pizzicato; followed by the parallel fifths motif played on the keys
Line 2	Melody variation 3 (Example 43) condensed (as in Example 45) played pizzicato, followed by short fifths interlude played on the keys
Line 3	Original melody (Example 42) modified: melodic cells played pizzicato interspersed with short fifths motifs played on the keys
Coda	Last two melodic cells as they appear in line 5 of the original sketch (Example 42), repeated 3 times, played pizzicato

The structure outlined in Table 12 is evident in the score shown in Example 46.

Example 46. 'Hiver'. Final score.



6.6 SUMMARY OF THE COLLABORATIVE SESSIONS

Perhaps the most appropriate summary of the extensive and rich collaborative journey discussed in this chapter can be gleaned through the journal entry I made on the final day of our time together in the studio, reflecting the many lessons and discoveries afforded by this project.

We are now at the end of these remarkable three days. This is the closest I have ever come to sharing in the creation of a piece – what a privileged experience! The fascination of the entire process for me comes from observing the trajectory of ‘creation’ – be it creating interpretation or creating the content itself. The remarkable thing is that after hours and hours and hours of work we came back almost to where we had started, but, and this is a huge BUT, each time with subtle, yet crucial and utterly essential modifications. And it’s PRECISELY these modifications that really made the pieces, both in the playing and in the music! And most remarkably, we could never have made these discoveries had we not explored a whole galaxy of possibilities, ideas, version, pushed the material around, stretched it to extremes, inflated it to the point of saturation, and then stripped it back, again and again, distilling the most elegant, well-structured, balanced, and well-proportioned version of the music. The same with my playing and interpretation. I still can’t wrap my mind around how it started with something completely grotesque and unrefined, then all the permutations it went through, nudging at the edges of the extremes, listening, reflecting, engaging our collective imaginations, musical sensibilities, skills, and musicianship to arrive at the most satisfying and artistically ripe outcome. And I am utterly convinced that it could only have happened in that collective, collaborative space. It is this sense of ‘inter-being’, of merging of minds and ears, the two-way energy-transfer, bouncing off each other, supporting, encouraging and laughing our heads off, that kept us searching and reaching and trying relentlessly, until something that could appease our perfectionist selves emerged and revealed itself to us. And now, back to work!

September 13, 2012

This journal extract reflects the many benefits afforded by the collaboration, and the Complementarity and Integrative models specifically, for the artistic practice of the composer and the performer. Specifically, this extract illustrates the impact of collaborative practice on both the generative and interpretive processes of work-realisation and the role of artistic interdependence in stimulating creativity, imagination, and satisfaction in artistic work.

Furthermore, the project demonstrated how the Geneplore model of creative cognition can be employed to facilitate a detailed and structured analysis of the creative process nascent within the construction and realisation of new musical composition.

The following chapter draws together the findings from the three collaborations, highlighting the similarities and differences between them, and offers suggestions for possible future research in the area of creative collaboration in composer–performer contexts.

CHAPTER SEVEN

FINDINGS AND CONCLUSIONS

7.1 INTRODUCTION

This chapter presents a discussion of the original findings that emerged from the three composer–performer collaborations examined in this study. The chapter begins with a summary of research aims and procedures (Section 7.2) followed by a brief summary of the methodological approaches employed in this study (Section 7.3). Section 7.4 presents a summary of the core themes and their constituent categories identified within the three case studies and provides a detailed discussion and comparison on how each of the core themes was expressed within and across the three collaborations. The key findings from the study are then drawn together into an expanded model of musical work production (first developed in Chapter Two, Section 2.5). Finally, Section 7.5 outlines the contribution of this study to the disciplinary knowledge and provides suggestions for further research in the field of collaborative creativity in composer–performer contexts.

7.2 SUMMARY OF RESEARCH AIMS AND PROCEDURES

This research project sought to investigate the nature and impact of collaborative creativity in composer–performer dyads engaged in joint realisation of new musical works. Specifically, the overarching question governing this research was to identify “how collaboration between composers and performers impact on content-generation, notational realisation, interpretation-building, transmission and identity of new musical work”. For this purpose, four collaborations were set up, involving me as performer and composers Kate Neal, Damian Barbeler, Anthony Lyons, and Steve Adam. Three of these collaborations (Neal, Barbeler, and Lyons) were closely examined to identify and elucidate the creative processes involved in content-generation, notational representation, interpretation-building and transmission of new work.

Taking the collaborative creativity theories espoused by Vera John-Steiner and the Geneplore model of creative cognition proposed by Thomas Ward, Steven Smith, and Ronald Finke as a point of departure, this study aimed to articulate the tacit, intuitive, and often concealed processes the composers and performers engage in within the context of collaborative work-realisation. The complex web of interactions between the composers and myself (and pianist Stephen Emmerson in the Barbeler collaboration) leading to the co-construction and performance of the new compositions were closely documented (via audio and video recording of collaborative sessions, reflective journals, email exchanges, and score sketches) and rigorously analysed using the method of Thematic Analysis. This enabled identification of recurring, underlying patterns (distilled through cycles of coding and categorisation of raw data) within and across the three case studies and facilitated the construction of a conceptual model (referred to as 'thematic maps') through which to explain and compare the core aspects of each collaboration and relate them to the research aims and questions. The data collected throughout my collaboration with Neal was coded and interpreted first and thus informed (both conceptually and pragmatically) the analysis of Barbeler–Emmerson–Lifschitz and Lyons–Lifschitz case studies. However, while bearing conceptual and thematic commonalities, the analysis of the latter two case studies revealed new codes and hence, new categories and themes specific and unique to these collaborations, as was demonstrated in Chapters Five and Six.

7.3 APPROACHES TO METHODOLOGICAL DESIGN

This study employed a variety of methodological approaches including Action Research and Practice-led/Creative-practice-as-research models. The epistemology (social constructionism) and the theoretical paradigm (interpretivism) framing this research and its methods were chosen in line with the primary enquiry of this study, namely to understand and explain the phenomenology of human and social reality as it was constructed through the lived, subjective experience of the three collaborative case studies. Hence, the findings from this research are suggestive rather than definitive in nature and, as such, do not attempt at objective postulating. However, recognising that my role as a full-participant in the study, deeply involved in the project from the

emotional, artistic, professional, and aesthetic perspectives, may have impacted on the way the interactions and experiences within the collaborations were conceptualised and interpreted, all reasonable effort was made to provide as honest and pragmatic an account of the collaborations as possible through the extensive and carefully-considered use of pertinent data extracts and a detailed explanation and examples of how raw data was coded and analysed.

7.4 DISCUSSION

This section examines the core themes distilled within and across the three collaborations in light of the questions posed in this research. Furthermore, drawing on the underlying creative processes through which these themes (and their constituent codes and categories) have been identified, the discussion presents an expanded model of musical work co-construction (first developed in Chapter Two, Section 2.5) as it was revealed through the three collaborations examined in this study.

Table 13 provides a summary of core themes and related conceptual categories.

Table 13. Core themes and their constituent categories distilled in the three collaboration.

Project	Themes	Conceptual Categories
Neal-Lifschitz	Theme 1: Structural understanding in collaboration (thinking-through-structure)	Understanding implied structure and interpretation (1); Understanding implied structure and notation (2)
	Theme 2: Embodied thinking in collaboration	Bi-directional feedback loop: negotiating notation together (3); Co-constructing work-identity: 'completing' notation (4)
	Theme 3: Co-constructing performance practice in collaboration	Building shared language (5); making informed assumptions (6); structural and embodied understanding help build 'performance practice' (7)
	Theme 4: Complementarity model in collaboration	Collaboration and creativity (8); collaboration and confidence (9); collaboration and communication (10)
Barbeler-Emmerson-Lifschitz	Theme 1: Structural understanding and performance practice	Implied structure and interpretation (1); implied structure and notation (2)
	Theme 2: Notation and 'permanent plasticity' – negotiating notation through embodied thinking and metaphor in collaboration	Bi-directional action/feedback loop: translating from the inner to the outer (3); thinking-through-language: metaphor in embodied thinking (4); co-constructing work identity: scores and permanent plasticity (5)
	Theme 3: Performance practice in regulating notation	Building shared language (6); Making informed decisions (7); Structural and embodied understanding help build 'performance practice' (8)
	Theme 4: applied Complementarity in collaboration	Collaboration and creative output (9); collaboration and confidence (10); collaboration and communication (11)
Lyons-Lifschitz	Theme 1: Creative cognition in co-construction of musical work	Generativity in creative collaboration (1); explorative cycles in creative collaboration (2); abstract vs systematised modes of creative thinking in collaboration (3)
	Theme 2: Integrative model in co-construction of new work	Collaboration and musical content (4); collaboration and notation: reconciling performance traditions (5); collaboration and creativity (6)
	Theme 3: Embodied and structural thinking in collaboration	Thinking-through-action (8); thinking-through-listening (9); thinking-through-structure (10)

Whilst each project yielded a unique thematic map used to draw meaningful implications from the data, the analysis revealed significant thematic overlap across the three collaborations.¹⁸⁸ Thus, for the purposes of discussion, the themes bearing conceptual commonalities are grouped together to avoid unnecessary repetition, as shown in Table 14.

Table 14. Collating conceptually related themes into four thematic groups.

Thematic Groups	Neal-Lifschitz Themes	Barbeler-Emmerson-Lifschitz Themes	Lyons-Lifschitz Themes
Group 1: Structural Understanding through Collaboration	Structural understanding in collaboration (Thinking-through structure)	Structural understanding and performance practice	Embodied and structural thinking in co-construction of new work
Group 2: 'Embodied' Understanding through Collaboration	Embodied thinking (realisational interpretation) in collaboration	Notation and 'permanent plasticity' – negotiating notation through embodied thinking and metaphor in collaboration	Creative cognition in co-construction of new work
Group 3: Performance Practice in Collaboration	Co-constructing performance practice in collaboration	Performance practice in regulating notation	
Group 4: Models of Collaborative Practice	Complementarity model in collaboration	Applied Complementarity in collaboration	Integrative practice in co-construction of new work

The four thematic categories presented in this table and their implications for the research questions and aims are discussed below.

7.4.1 Thematic Group 1: Structural Understanding through Collaboration

This section summarises ways in which understanding of the implied structural elements in the music revealed through collaboration with the three composers impacted on content-generation, notational realisation, interpretation-building, and hence the identity of three new works.

¹⁸⁸ As to be expected, given the fairly narrow parameters of the case studies, i.e. composer and performer interacting in the process of negotiating musical ideas and notation through performance.

As demonstrated through my collaborations with Kate Neal and Damian Barbeler, musical notation proved inadequate to communicate the full structural detail of their compositions. Hence, workshopping the material with the composers in the room was crucial to understanding the structural implications left unspecified in the scores. Particularly, Kate left much of the phrase structure un-notated, leaving the performer to negotiate a largely abstract set of instructions. In fact, at times the written notation contradicted Kate's verbal instructions regarding phrasing expressed in the collaborative sessions. Moreover, the thematic material in *Particle Zoo II* as verbally explained by Kate, could not have been discerned from the notation alone and hence could not be given the prominence within the texture it warranted. Conversely, as the implied structural detail emerged during our workshops, elements of playing such as phrasing, dynamics, articulation, agogic nuance and clarity of expressive gesture were significantly enhanced, leading to various additions to the score (in the form of handwritten notes and annotations). In comparison, collectively discussing the structural patterning within Damian's score led to modifications to the musical content itself, resulting in significant cuts, re-writes, and changes in pitch, rhythm, tempo and expressive markings. Gleaning the rhythmic and thematic organisation implied within the thick and complex textures of Damian's writing was crucial to 'translating' the nuanced detail of his inner hearing into physical performance. Specifically, learning to recognise the implied layering, counterpoint, perspective, and thematic hierarchy within the textures directly impacted on aspects of pedalling, dynamics, articulation, balance, ensemble playing, and rhythmic organisation of the material, as expressed in both the performance and the additional annotations to the original score.

As became apparent, Damian was often interested in obliterating meter, pulse, and ensemble precision in the playing despite the notation indicating strict rhythm and alignment of the piano parts. Instead, he consistently encouraged the performers to treat the notation with a degree of flexibility and aim for larger gestures and 'emotional shapes', intrinsic to the aesthetic of his compositional language.

Considerations of structure also played a crucial role in my collaboration with Anthony in respect of content-generation, notation and interpretation. However, in contrast to my work with Kate and Damian, where the modifications were made to an already

existing score, in this collaboration structural organisation determined much of the musical content itself. For instance, in the co-construction of 'Hiver', determining structural parameters led to discarding many of the ideas collaboratively generated for this miniature, and substantially re-working and re-organising the ideas which were retained. Furthermore, considering the overall structural shape of 'Hiver' informed many of the interpretative choices regarding character, intensity, tempi, shaping, and dynamics for each line of this miniature.

In summary, it can be said that one of the core advantages afforded by the three collaborations was the enhanced understanding of the implied structural patterning left un-notated in the scores. Mediated through the physical and oral processes of communication, such as gesturing, conducting, singing, and verbalising music through association and metaphor, this understanding contributed substantially to a more successful transmission of musical ideas and intent from the composer to the performer and hence, from the performer to the audience.

7.4.2 Thematic Group 2: 'Embodied' Understanding through Collaboration

This section summarises how 'work-realisation' was impacted by collaboratively workshopping the three compositions through the 'embodied' modes of 'thinking-through-action', 'thinking-through-listening' and 'thinking-through-language' – concepts developed from Stefan Östersjö's notion of 'thinking-through-practice' as a species of musical interpretation.

The bi-directional action/response feedback loop established between the composers and performers in this study enabled ample experimentation with the musical material through direct physical engagement with the instrument and exploration of ideas through language and physical and vocal gesture. Hearing the scores translated into live sound led to significant changes in the composers' perspectives, resulting in substantial re-conceptualisation of dynamics, pedalling, articulation, character, tonal colour, tempi, and in the case of Damian and Anthony, the musical content and structure.

For Kate, hearing me experiment with numerous interpretative variants of a given passage was instrumental to making decisions regarding pedalling, phrasing, articulation, agogic emphasis, and dynamics, which generally tended to be under-represented in her score and kept open to various possibilities. For Damian, hearing his music realised in the specific acoustic of a physical space led to more substantial revisions of sections in the score, such as changing pitched material to clusters and written out rhythms to textural effects, such as 'shimmer' or 'explosion', whereby pitch and rhythmic precision was de-emphasised in favour of desired colour or sonority in performance. Moreover, collectively experimenting with balance and perspective, dramatic gesture, and temporal organisation resulted in Damian discarding large blocks of musical material, altering the relationship between the piano parts, and modifying rhythm, articulation, pedalling and dynamic markings, contributing to greater congruity between his inner conception of the music and my and Stephen's ability to express that in performance.

Similarly, physically interacting with the instrument through improvisation and experimentation and assessing the emerging musical ideas and interpretative possibilities through recording and the critical feedback it offered was central to my work with Anthony. In fact, much of the musical content generated for 'Diffraction' and 'Hiver' resulted from continuously iterated cycles of generation, exploration, and refining of ideas through the 'embodied' modes of musical thinking. Equally, the interpretation-building process in both miniatures was largely informed by jointly exploring the extremes of rhythmic freedom, emotional intensity, dynamic range, and elasticity of phrasing, which was gradually honed into optimum performative realisation. In this collaboration, changes in interpretation prompted by 'thinking-through-action' and 'thinking-through-listening' resulted in significant revisions and re-organisation of musical content and structure, reflecting the inseparability of embodied and structural modes of thinking in work-realisation.

All three case studies demonstrated that metaphor and imagination, as well as non-verbal modes of communication, such as physical gesture and singing, were effective tools for conveying the otherwise elusive and intangible aspects of musical expression not readily quantifiable by notation. In the context of Kate, imaginative and

unorthodox use of otherwise conventional words played a large role in defining the exact nuances of articulation, tone-colour and expression. With Damian, extensive use of metaphor and references to shapes and textures in nature were an important agency in conveying subtleties of the music's poetic intent. Similarly, drawing on the sound-images of kora and koto music helped Anthony and me define the expressive approach to shaping the melodic gestures in 'Hiver' and establish appropriate character for the music.

In summary, engaging with Kate's, Damian's and Anthony's compositions through the 'embodied' modes of thinking had significantly altered my relationship to the notated score. Witnessing all three composers substantially modify their ideas as a result of collaboration facilitated greater freedom to take artistic liberties and risks when interpreting other compositions from both the established canon and the contemporary repertoire. Conversely, jointly experimenting at the instrument gave the composers the opportunity to hear their music rendered in sound again and again, enabling them to articulate ideas beyond what the notation alone could transmit and to adapt their scores in ways that conveyed these ideas with more precision and accuracy. Accordingly, the joint work collaboratively undertaken in this study was mutually beneficial to the composers and the performers.

7.4.3 Thematic Group 3: 'Performance Practice' in Collaboration

Close familiarisation with notational patterns within the compositional languages of the three composers enabled by collaboration, afforded an opportunity to develop a 'common understanding', which informed the interpretation and the performances of each of the three works under study. This shared musical-aesthetic vocabulary (or 'performance practice'), cultivated through modes of structural and embodied thinking, enabled the recognition of the deeper layers of musical meaning implied in the notation and enhanced the transmission of the musical ideas within the composer–performer–audience continuum. Specifically, recognising Kate's general tendency to under-notate musical detail and learning to understand her idiosyncratic use of certain notational symbols, such as 'small slurs' (discussed at length in Chapter Four) had important implications for my interpretative decision-making regarding

aspects of articulation, phrasing, pedalling, agogic emphasis and structural organisation of various passages in *Particle Zoo II*.

Similarly, understanding notational characteristics unique to Damian's compositional language was crucial to the interpretation-building process of *Bright Birds*. In contrast to Kate, Damian's tendency was to over-annotate the dynamic, pedalling, articulation, expressive and tempo markings, resulting in occasional seeming contradictions in the score's instructions. Collaboratively workshopping the score revealed that literal adherence to the notational markings tended to result in excessive accumulation of resonance and thickness of texture in specific sections, compromising rhythmic integrity, individual character of the two piano parts, and structural and thematic cohesion. Hence, a shared understanding was reached that pedalling, dynamics and articulation instructions in the score generally benefited from 'under-playing', enabling the resonance to be contained and allowing enough transparency for the structural, rhythmic, and textural detail to emerge in performance. This was an important lesson for both Stephen and me as performers, specifically in the context of two-piano chamber music, where over-accumulation of resonance and texture can pose significant interpretative impediments, and for Damian as a composer writing for this medium.

The notion of 'performance practice' did not emerge as a core theme in my collaboration with Anthony, as much of the musical content in *Trace Elements*, and particularly 'Diffraction' and 'Hiver' was workshopped jointly from its inception. However, there were instances in this collaboration where our markedly different approaches to musical notation (informed by our distinct performance backgrounds) necessitated extensive workshopping, as in the case of notating polymeters and rhythmic asymmetry. Specifically, while Anthony preferred a 'short-hand' approach to notating polymeters, I, as a performer accustomed to the notational precision of Western art music, required a more accurate and specific notational representation of these rhythmic structures to realise them in performance. Similarly, working with various modes of unorthodox sound-production, such as rapidly running fingernails on the keys; plucking and strumming the piano strings; using mallets, rubber balls, and EBows inside the piano; all required a systematised notational/visual representation of

these techniques to ensure that these compositions would be accessible and understandable to other performers wishing to include these pieces in their repertoire.

7.4.4 Thematic Group 4: Models of Collaborative Practice

Complementarity and aspects of the Integrative patterns of collaboration, as explained by John-Steiner, were vividly expressed in each of the three case studies. Whilst my collaboration with Kate and Damian/Stephen tended to align primarily with the Complementarity model, characterised by clear division of roles, complementarity of skills, and shared artistic goals, my project with Anthony (in the case of 'Diffraction' and 'Hiver') reflected elements of the Integrative model, whereby aspects of composition, interpretation, and performance gradually merged into a seamless process. As John-Steiner suggests, collaboration is a dynamic and malleable process in which a particular collaborative pattern can change over time. As the collaboration with Anthony evolved over several years, what began as a Complementarity pattern gradually transformed into a more Integrative artistic process. However, despite a certain merging of roles and creative processes, it would be an over-statement to propose that this collaboration belonged entirely within the Integrative paradigm. A fully integrated mode of collaboration would have required a more developed improvisational and compositional ability on my part as well as a much greater knowledge of the computer processing techniques. Nevertheless, the mutual appropriation of skills and the emotional, artistic, and logistical interdependence developed throughout this collaboration, as well as an increasingly merged artistic and aesthetic vision characterising this creative partnership enabled Anthony and me to move beyond Complementarity and glimpse what a more Integrative pattern of work might yield in terms of personal creativity and artistic output.

An important feature of all three case studies was the ease of rapport and communication, as well as genuine support, respect, encouragement and excitement about the projects and their outcomes. As John-Steiner proposed, the discipline-based, intellectual/creative exchange between artistic partners is only a part of what takes place in the collaborative setting. The three projects in this research revealed how interdependence and capacity to meet each participant's emotional needs was

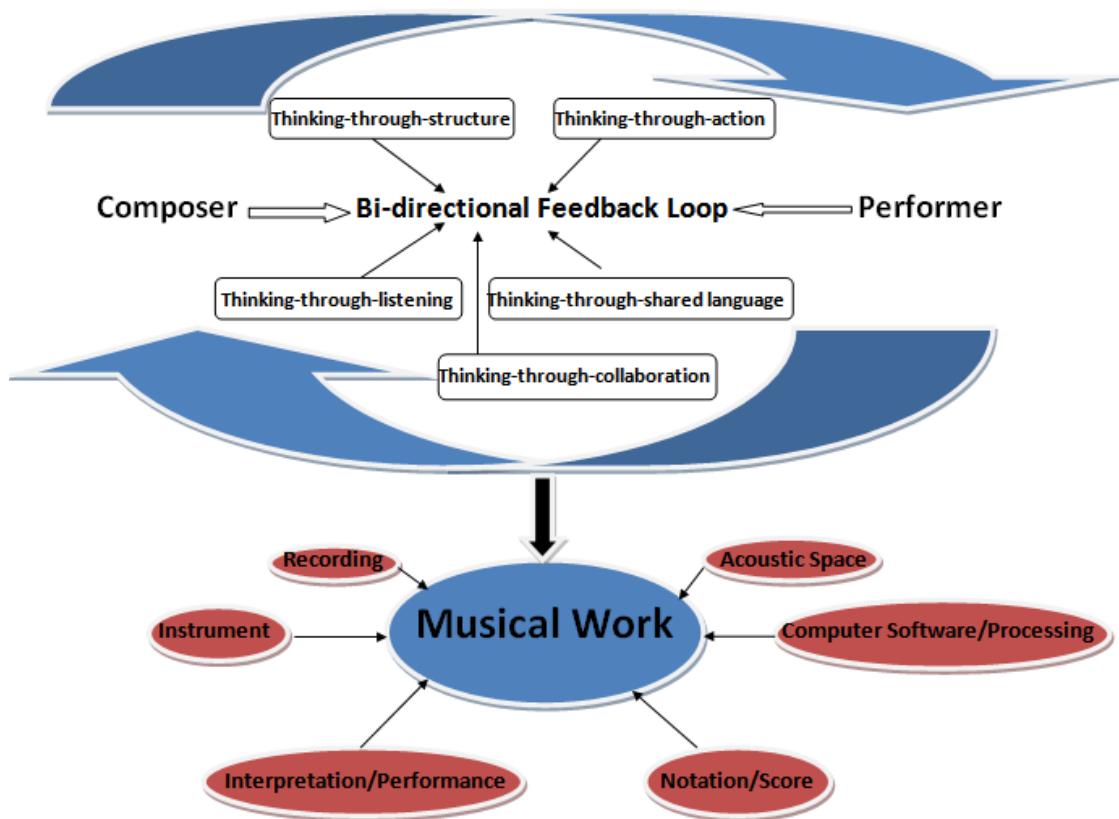
gradually developed through collaboration, leading to an increased ability to take artistic risks, go beyond the familiar boundaries, and face challenges and new directions in one's artistic practice.

In all three case studies collaboration offered a safe and stimulating professional environment in which to challenge, negotiate and resolve all aspects of work-realisation. The 'alchemy' of collaboration discussed in Chapter Five enabled a synthesis between the composer's *inner* hearing and the actuality of sound produced by the performers' bodies interacting with the instruments, and conversely, the performers' *perception* (or 'reading') of the score with the composer's *actual* intentions (which at times proved challenging to discern from the notation alone). This alchemy, experienced in all three collaborations, led to significant modifications to both the instructions in the score and the interpretation, resulting in performances reflecting greater structural clarity, musical cohesion, technical ease, and expressive potency.

7.4.5 Towards Integration: Expanded Model of Musical Work Co-Construction

The findings from the three collaborative case studies support the argument presented in Chapter Two (Conceptual Framework) that the performer plays a significant role in the co-construction of musical works and their identity. Specifically, this research has highlighted that collaborative engagement between composers and performers enhances the processes of work-realisation, resulting in optimised notational and performative outcomes. Addressing the apparent schism between the practices of composers and performers, this research project afforded a laboratory-like environment in which to identify the creative processes and the multiple agencies involved in musical work-realisation and to test and subsequently expand the hypothetical model of work co-construction laid out in Chapter Two (Section 2.5). In light of the findings presented above, the model (shown in Figure 18) is expanded to reflect the confluence of factors that impacted and fed into the realisation of the three new works under study.

Figure 18. The expanded model of musical work co-construction reflecting the findings of this research.



This model demonstrates that the lines of demarcation between the processes of composition and performance in collaborative composer–performer contexts are significantly more blurred than has traditionally been acknowledged. In this model, work-realisation (through musical content, notation and performance) is contingent on the composer and performer jointly engaging in modes of thinking-through-action, thinking-through-structure, thinking-through-shared language (or ‘performance practice’), and thinking-through-collaboration, aided by the agencies of the instrument, computer software (when used), the recording technology and the actual acoustic space in which the composer and the performer interact. This model may offer contemporary musicians an alternative way of thinking about musical work-

construction and transmission in the twenty-first century, leading to more cohesive, integrated, and creatively rich professional practice.

The following section summarises the contribution of this study to the new and quickly growing field of distributed creativity in composer–performer contexts and suggests possible avenues for future research.

7.5 CONTRIBUTION TO DISCIPLINARY KNOWLEDGE AND SUGGESTIONS FOR FUTURE RESEARCH

The possible contribution of this research to music scholarship is related to both its creative output and its method and content. The thesis yielded a substantial body of new works, including a piano concerto (*Practice Zoo II*), a two-piano work (*Bright Birds*), and two suites for piano and computer (Lyon's *Trace Elements* and Adam's *Chance-Ion-Avion-Star*). The works have been publicly acknowledged within the Australian music community as reflected in *Bright Birds* being chosen as a finalist in the 2013 APRA awards for the 'Best instrumental work of the year' category and *Practice Zoo II* having been publicly performed subsequent to its premiere by Melbourne new music ensembles. The scores for both these works are now available through the Australian Music Centre with *Trace Elements* and *Chance-Ion-Avion-Star* to follow shortly. It is my belief that all four works will have a life beyond their premieres, becoming a part of new music ensembles' and performing pianists' repertoire. As such, these musical artefacts make an important contribution to the field of contemporary music and related research, as these works and recordings can now be analysed and studied.

While creative-practice-as-research is increasingly gaining recognition within music academia, there still exists a great deal of uncertainty regarding appropriate methodologies, analytical tools, and suitable formats for presentation of findings and creative outcomes. Hence, this thesis may serve as a reference for possible approaches to research design, fieldwork, methods of analysis and presentation for other practitioner-researchers in the field. Furthermore, the extensive Thematic Analysis carried out in this thesis may provide a useful model for researchers in the performing

arts seeking robust and rigorous analytical tools through which to interpret their findings and extrapolate their implications.

This thesis built upon several theoretical models pertaining to collaborative creativity and creative cognition. These models and their application within the context of this research may be of interest to practitioner-researchers investigating the creative processes nascent in artistic work, specifically in collaborative settings. Examples of the application of the Geneplore model in this research to systematise the observation and subsequent analysis and interpretation of work-realisation processes in a collaborative setting may assist future researchers interested in bridging the theories emerging in the fields of psychology with their discipline of practice.

Finally, the subject matter of this thesis is of significant importance to the contemporary musical milieu in that it calls for composers and performers to come into close artistic and professional relationships, healing the rupture caused by the binary opposition between the practices of composition and performance since the Romantic age. Art music today is in a precarious position and has increasingly been so over the past decades, unaided by the insistence by both the academics and the composers of the recent past on the categorical faithfulness to the scores at the expense of individual expression (as discussed in Chapter Two). As was demonstrated throughout the three case studies, the music came to life most fully when the literal adherence to the written 'text', encouraged by the three composers, was de-prioritised in comparison with the qualities of imagination, colour, shape, and expressive gesture. Drawing on the words of contemporary percussionist Steve Schick:

If one takes the attitude that representing a composer's score is the ultimate responsibility, then performers feel their own personality should not intervene between the score and the audience. Unfortunately this often invites the bloodless, almost anonymous performances that have so characterized the performance of recent contemporary music.¹⁸⁹

¹⁸⁹ Steve Schick, 'A Percussionist's Search for Models', *Contemporary Music Review* 21 (2002), quoted in Roe, "A Phenomenology of Collaboration", 204.

Thus, the interpretations developed through joint efforts of both the composer and performer within a supportive, nurturing, and stimulating collaborative environment may lead to more engaging, vibrant and communicative performances of new music, resulting in greater enjoyment and satisfaction for both the performers and the audiences.

7.5.1 Suggestions for Future Research

As the physicist and Nobel prize-winner Murray Gell-Mann proposed, *problem-formulation* may play a greater role in the creative discovery, innovation, and knowledge construction than *problem-solving*.¹⁹⁰ Accordingly, in addition to the questions answered by this research, the study raised many new questions to be considered for future research in the field of composer–performer collaborations. Specifically, the area of electro-acoustic music created within collaborative partnerships could provide a thought-provoking investigation and discussion for researchers knowledgeable in this field. My collaboration with Steve Adam (which resulted in substantial creative output included in the performance folio), although not examined in the dissertation, raised many important questions regarding computer-assisted modes of generating musical content, using computer files in place of musical scores, and the unpredictability of performance outcomes due to live processing techniques. Hence issues of work-identity, creative agency, work-realisation, authorship, and technology as interface between the composer, performer and audience could provide potent areas for future investigation.

Furthermore, most of the existing doctoral studies into collaborative creativity in composer–performer dyads have been conceived and written from the perspective of the performer. Research conducted in this field by the composers could add a rich and fascinating dimension to the understanding of how collaboration with performers may impact their practice. As outlined in the Literature Review, several ongoing composer–performer projects, specifically within the context of the Orpheus Institute (Belgium)

¹⁹⁰ Murray Gell-Mann, ‘On Getting Creative Ideas’, Google Tech Talks, 2007, <http://www.youtube.com/watch?v=3fSB6ut-cT0> (accessed 23 March 2012).

and the Research Centre for Musical Performance as Creative Practice (United Kingdom), are continually yielding new and exciting findings into the impact of distributed creativity on the musicians' practice and the resulting artistic outcomes. However, it is my hope that many more practising musicians will consider collaboration as both a viable model of artistic practice and a stimulating area for scholarly research, thus fostering bridges and dialogues between various artistic disciplines to promote innovation, creativity, and aesthetic diversity in contemporary music.

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APPENDIX A

COMPOSER AND PERFORMER BIOGRAPHIES



Kate Neal, composer

Kate Neal studied early music at the Victorian College of the Arts, graduating with a Bachelor of Performance (Early Music Instruments) in 1996. During this time she also studied composition with Mary Finsterer, Mark Pollard and Brenton Broadstock.

She received a NUFFIC scholarship from the Dutch Government in 1998 and moved to the Netherlands to study composition with Louis Andriessen, Martijn Padding and Gilius van Bergeijk at the Koninklijk Conservatory, and CMTNWT (contemporary music through non-western techniques) with Rafael Raina at the Sweelink Conservatory, Amsterdam.

She returned to Melbourne, Australia in 2003, establishing her events company Dead Horse Productions. In August 2005 Kate Neal received a scholarship from the Accademia Musicale Chigiana, Siena, Italy, and, in 2006, she was the recipient of the Hepzibah Tintner Fellowship, affiliated with the Australian Ballet, Sydney Dance Company and Sydney Symphony Orchestra.

Kate Neal is the recipient of various awards and fellowships. She has enjoyed working as an orchestrator and arranger for many pop and rock bands as well as feature and independent films, choreographers and dance companies. At the Victorian College of the Arts in Melbourne, Neal worked as a sessional composition teacher in the Music Department and also lectured in Music and Image at the Centre for Ideas in 2004-2007.

In 2008 Neal received a post-grad diploma from the Royal Northern College of Music, Manchester (under Paul Patterson and Gary Carpenter) and in 2009 Neal moved to the US to begin a PhD in composition at Princeton University.

In 2012 Neal continues as a Graduate Fellow at Princeton University. In January 2011 premiered two short animations with live score accompaniment in Melbourne, as part of the 2009 Albert Maggs composition award. In 2010 Neal premiered her piano concerto, commissioned by Sonya Lifschitz, in America and Australia. In July 2010 she undertook a Culture Lab residency at the Arts House Meat Market, developing her large scale music/dance work *Semaphore*. She continues her work with notated and scored physical gesture, presenting regularly at the Composers concerts at Princeton University.



Damian Barbeler, composer

Damian Barbeler's award-winning compositions have been performed and broadcast around the world, sung and played by leading Australian and international soloists and ensembles. He is widely recognised for his highly idiosyncratic compositional style and especially his lush, emotional sound worlds inspired by textures and patterns from nature. He is an enthusiastic collaborator often working with creative types from diverse fields like architecture, software design, media arts, dance and more. A distinctive part of Damian's expertise has been his ability to inspire amateur and especially young musicians to excel in professional settings. His wide-ranging career has taken him to a diverse range of places from famous concert halls to biscuit factories, boardrooms and far-flung parts of regional Australia. Acting out the precept that an artist should also teach, Damian is just as happy in the exquisite, rarefied atmosphere of art music, as he is in the invigorating world of beginners, students and music-loving amateurs.

In July this year, Damian's AILAN KORES project was premiered at the Queensland Music Festival. The culmination of two year's work with communities from the Torres Strait Islands, this remarkable project brought together a 40-voice choir from six islands, the Queensland Youth Orchestra, and professional soloists. The concert, which featured Damian's new work *The Temptation of Christ*, was critically acclaimed as one of the highlights of this year's Festival.

In March 2011, Saltstream was premiered at the Sydney Opera House. Students from the MLC School, along with award-winning Australian pianist Michael Kieran Harvey performed this highly avant-garde work, for two pianos and six violins. Saltstream showcased Damian's innovative and immersive approach to the concert experience. It featured fully integrated elements from other art forms, including live sound-reactive video from international media artist Tim Gruchy and spectacular silk-trained dresses for the violinists, designed by Akira Isogawa. In March 2010, Damian's Silk Panels (inspired by the exquisite Japanese painted silk or paper folding screens and doors) was premiered by Ironwood Chamber Ensemble in concerts in Sydney and Melbourne. In October, a new work, *Seven Shades of Sorrow* will be premiered by the Seven Harps Ensemble and Damian will also undertake a commission residency at Four Winds Festival in Bermagui for which he will create a work for two pianos inspired by the landscape of the far south coast of NSW. Damian is also one of the featured "characters" in Bob Connolly and Sophie Raymond's highly successful documentary feature *Mrs Carey's Concert*, which will be released on DVD later this year. Damian has twice received the 'Recommended Work' award at the UNESCO International Rostrum of Composers and was a finalist in the renowned Toru Takemitsu Prize 2008. He recently received a PhD from the Sydney Conservatorium, holds a lectureship with Wollongong University, where is working with students from the education faculty on the "Children's Opera Project", and is resident composer at MLC and SCEGGS Secondary Colleges in Sydney. He was awarded the sought-after Ian

Potter Emerging Composer Fellowship to compose seven works during 2006-2007. Including commissions for recorder player Genevieve Lacey, and a chamber opera (with librettist Rodney Hall) for Southern Cross Soloists.



Anthony Lyons, composer

Anthony Lyons is an Australian composer and performer whose diverse output includes work for orchestra, chamber ensemble, installation and multi-media based projects. Much of his work is particularly focused towards hybrid-arts collaborations. He studied composition under composers Mark Pollard, Julian Yu and Stuart Greenbaum at the Victorian College of the Arts and Melbourne Conservatorium of Music at the University of Melbourne. He has also spent time at IRCAM (Institut de Recherche et Coordination Acoustique / Musique) in Paris studying electronic music.

Anthony has had compositions performed, recorded and broadcast in Australia and internationally. His compositional style tends to pursue beauty of line, sonority and site-specific context, drawing from both popular and art music traditions. Electronic and sampled elements are also a feature of many of his compositions and reveal an interest in pulse, loop-based structures, glitch and micro-sound aesthetics.

Performance highlights of his work have included the orchestral piece *The Surge*, *The Sounds*, *The Pull* by the Melbourne Symphony Orchestra, as well as a suite of electro-acoustic compositions performed at the Electundra Audio-Visual Festival and the Melbourne International Film Festival with his project *Vela*. A new work for orchestra, *Quelques Cercles* was premiered recently at the Melbourne Recital Centre. Anthony has been a contributor and reviewer for the Australian Music Centre's on-line journal *Resonate*. He is involved in collaborations with Danish composer Anders Bach and the Bach/Lyons Project, Australian electronic artist Aimee Chapman, pianist Sonya Lifschitz and the award-winning poet Nathan Curnow. He is a Lecturer in Interactive Composition at the VCA School of Contemporary Music, the University of Melbourne.

Steve Stelios Adam, composer



Steve (Stelios) Adam has harboured a long-term fascination with music, sound and its associated technologies. After studying electronics and establishing a career in broadcasting, he returned to study at La Trobe University in Melbourne and continued as a postgraduate student in electroacoustic composition and computer music under the guidance of David Hirst and Jeff Pressing. He has taught music composition and technology at various institutions in Australia and in 1995 he established the new programs and technical facilities in composition and music technology at Monash University. As a composer and sound designer, Steve has created works for a variety of media, installations and live productions and performed with instrumentalists, ensembles,

choirs and interactive music systems of his own design. His electro-acoustic works have been broadcast nationally and performed in Europe, the US and Asia and Australasia and appear in recordings by Move Records, ANU and ABC Classics. Informed by the requirements and technical challenges of these and other recent projects, he occasionally consults for other artists and groups to develop software designs for specialised media-based projects.

Selected recent activities: Creation/composition of live and electroacoustic works Waves and Sea to C for the 60th Anniversary concert series (Apr -Jun 2011). Development of real-time sound playback system for Andrew Byrne and Tom Nicholson's Lines Towards a New Century - Shanghai Biennale (October 2010). Stage 2 development of the RMIT SIAL sound studio multi-channel spatialization system. (Feb - Sept 2010). Contribution of sound materials to En Masse a multimedia performance featuring live performance by Genevieve Lacey, video by Marc Silver and sound curation/diffusion by Lawrence English (late 2009). Sound and Music design for the documentary Behind The News by Nicholas Hansen/Mutiny Media (July 2009). Curation and development of example files for Ross Bencina's AudioMulch 2 interactive music studio www.audiomulch.com (April-June 2009). Technical realization of "Fuguestate" an installation, with Jason Maling, Briele Hansen and Joe Giovanazzo (March 2009). Design and implementation of sound playback system for Wavelength – an installation by Duke Albada for the artwork cove of The Gold Coast Convention and Exhibition Centre. (January 2009). Soundtrack to Experimental Documentary Film "Freedragging" by Nicholas Hansen - October (2008). Software development of Trace, an interactive video installation/artwork for Visionary Images (April-May 2008). Development of Bimanual Co-ordinated Drawing (BCD) software for the creation of real-time sound and musical works based on Artist's gesture (2007) Composition of short work for choir and electroacoustic-accompaniment for Yallourn Madrigal Singers 50th anniversary at the 2006 WaterWater festival (Nov 2006). Composition and software development of Et Døgn, a portable, real-time work for recorder soloist and computer commissioned by Genevieve Lacey through Arts Victoria, (June-Sept 2006).



Stephen Emmerson, piano

Stephen is one of the most respected and sought after musicians in Australia. He is in demand both as a pianist, pedagogue and scholar, performing regularly with orchestras and chamber ensembles as well as giving lectures and masterclasses both in Australia and abroad. Stephen studied piano with Pamela Page at University of Queensland and later in London with Peter Wallfisch of the Royal College of Music. At the completion of his undergraduate degree, a Commonwealth Scholarship enabled him to study at New College Oxford where he graduated with a Master of Philosophy and Doctor of Philosophy degrees. He has been on full-time staff at the Queensland Conservatorium since 1987 where he teaches various music history and performance-related courses. As a pianist, he has performed widely around Australia, New Zealand, Asia and the Pacific.

In addition to solo performances on piano and fortepiano, the focus of his performance career in recent years has been within various chamber ensembles including the Griffith Trio and Dean–Emmerson–Dean, with whom he has toured internationally. Recordings of his playing in collaboration with a variety of performers have been released by ABC Classics, Move Records, The Anthology of Australian Music on Disc, CPO, Tall Poppies, Contact and Melba. His performances and recordings are broadcast regularly on local and national radio.



Sonya Lifschitz, piano

Praised for her artistic integrity, technical prowess, and the depth and sophistication of her interpretations, Ukrainian-Australian pianist Sonya is increasingly becoming recognised as one of Australia's most innovative and exciting musical voices. A sought after soloist, chamber musician, and pedagogue, Sonya's interests are increasingly growing in the direction of aesthetic diversification in respect to performance and concert culture in Australia. In recent years she has commissioned and premiered numerous large-scale works including Kate Neal's piano concerto *Particle Zoo II* premiered in 2010 at Princeton University (USA) and Damian Barbeler's *Bright Birds* premiered with pianist Stephen Emmerson in 2012 at the prestigious *Four Winds Festival* in NSW, and has co-devised two major electro-acoustic works for piano in collaboration with composers Anthony Lyons and Steve Adam premiered in 2012 as part of the ASTRA Chamber Music Society season.

At age eighteen, Sonya made her debut with the Melbourne Symphony Orchestra and the performance was broadcast on ABC classic FM and on SBS National Television. She has also been a soloist with the Israel Symphony, Johns Hopkins Symphony, Western Australia Youth Symphony, Melbourne Youth Symphony, Melbourne Symphonia, and the Maroondah Symphony orchestras. She has performed widely in Australia, United States, Italy, Switzerland, England and Israel, and has been a featured performer on ABC Classic FM and 3MBS classic FM. Recently, together with pianist Stephen Emmerson, Sonya has recorded Bach's Goldberg Variations transcribed by Stephen for two pianos and Barbeler's *Bright Birds* for the ABC radio. She is currently recording several CDs of music by J. Brahms coupled with electro-acoustic works for piano and computer by composers Steve Adam and Anthony Lyons. Other recent collaborations include composers Gerard Brophy, Peter de Jager, Tim Brady, Rob Davidson, and performers Stephen Emmerson, Miwako Abe, members of the Flinders Quartet and Speak Percussion, and the jazz legend Joe Chindamo amongst others. Sonya has appeared in music festivals both in Australia and abroad and has been a guest artist with Topology Ensemble, Arcko Symphonic Project, Astra Chamber Music Society, Collusion Ensemble, and the Zurich Trio.

In 2007, as a recipient of the prestigious Fulbright Scholarship, Sonya completed five years of intensive post-graduate performance studies at the Peabody Conservatory of Music (Baltimore, USA) under the tutelage of the legendary pianist and conductor Leon Fleisher. Other awards include American-Australian Foundation Dame Joan Sutherland Award, the Peabody Dean's Grant, Peabody Merit Scholarship, three Peabody Career

Development Grants, and the Peabody Chamber Music Prize. As well as that, Sonya received several Australia Council and Arts Victoria grants, the Ian Potter Cultural Trust Scholarship, the Lord Mayor of Brisbane Performing Arts Fellowship and was a fellow at the Australian National Academy of Music Program.

APPENDIX B

SUPPORTING MATERIAL DVD 3

Kate Neal and Sonya Lifschitz Collaboration, Princeton, USA, May, 2010 (Audio Files)

Track 1 May 5, 2010 (Princeton)

Track 2 May 5, 2010 (Princeton)

Track 3 May 5, 2010 (Princeton)

Track 4 May 9, 2010 (Princeton)

Track 5 May 9, 2010 (Princeton)

Track 6 May 5, 2010 (Princeton)

Track 7 May 9, 2010 (Princeton)

Damian Barbeler, Stephen Emmerson and Sonya Lifschitz Collaboration, Brisbane, March 2012 (Video Files)

Track 8 March 28, 2012 (Brisbane)

Track 9 March 28, 2012 (Brisbane)

Track 10 March 28, 2012 (Brisbane)

Track 11 March 28, 2012 (Brisbane)

Track 12 March 29, 2012 (Brisbane)

Track 13 March 29, 2012 (Brisbane)

Track 14 March 29, 2012 (Brisbane)

Track 15 March 28, 2012 (Brisbane)

Track 16 March 28, 2012 (Brisbane)

Track 17 March 28, 2012 (Brisbane)

Track 18 March 28, 2012 (Brisbane)

Track 19 March 28, 2012 (Brisbane)

Track 20 March 29, 2012 (Brisbane)

Track 21 March 29, 2012 (Brisbane)

Track 22 March 28, 2012 (Brisbane)

Track 23 March 28, 2012 (Brisbane)

Anthony Lyons and Sonya Lifschitz Collaboration, Melbourne 2010–2012 (Audio and Video Files)

Track 24 (Audio) February 24, 2011 (Melbourne)

Track 25 (Audio) March 02, 2011 (Melbourne)

Track 26 (Audio) June 08, 2011 (Melbourne)

Track 27 (Video) July 02, 2011 (Melbourne)

Track 28 (Video) July 12, 2011 (Melbourne)

Track 29 (Audio) July 12, 2011 (Melbourne)

Track 30 (Video) September 02, 2012 (Melbourne)

Track 31 (Video) September 02, 2012 (Melbourne)

Track 32 (Video) September 12, 2012 (Melbourne)

Track 33 (Video) September 13, 2012 (Melbourne)

Track 34 (Video) September 13, 2012 (Melbourne)

Track 35 (Video) September 13, 2012 (Melbourne)

Track 36 (Video) September 13, 2012 (Melbourne)

Track 37 (Video) September 14, 2012 (Melbourne)

Track 38 (Video) September 13, 2012 (Melbourne)

APPENDIX C

REFLECTIVE JOURNAL EXAMPLES

Reflective notes from Lyons–Lifschitz Collaboration, July 13, 2011.

What happened?

For our session today, building on the discussion we had the week before on the role of notation, Anthony wrote out more of the syncopated rhythm section plus the additional bass line we've discussed the previous week. We talked some more about the possible directions for the piece and ways in which it can develop. The previous week's idea didn't seem to really have a long life-span – the notion of building the middle section into a frenzied, mad, violent waltz didn't seem to stick or yield further material. This made me think of the creative cognition theory and the way the generative phase of the creative process is characterised by accumulating a large number of pre-inventive structures/germ ideas of which many will later be modified, discarded, synthesised, changed or actually used. Well, clearly this one seems to have been discarded (although we will see whether this idea finds its way back into this miniature in some metamorphosised way and how it'll feed into the theoretical considerations of the creative process).

We experimented with on/off delay and with different modes of looping within the middle section. I felt somewhat frustrated with the process of looping, especially the 'reversal' effect which sounded to me quite messy and distorted. Perhaps that was the idea behind it, but to my ear it sounded jarring and strange... At this point I began thinking about the differences in the aesthetic, aural sensibilities of a classically trained musician predominantly exposed to Western art music and that of a more contemporary, improvising musician, shaped by the influences of modern, pop and avant-garde music. How can these two ways of hearing be reconciled, synthesised, accommodated? Are they complimentary? Do we influence each other through our process of collaborating and will our ways of hearing/perceiving change over time through this exposure?

We talked about the piece centring around exploring the notions of textural background, foreground and middle-ground. I think Anthony finds this concept fascinating as a compositional device and as a point of departure. The middle section material, through the use of the delay and looping, could morph from being initially the foreground of the piece, into the middle ground, giving way to the semi-improvised melodic lines in the bass and the soprano, and then transforming into the background layer (not quite sure how yet). We also played around with the idea of conceiving of the miniature as an arc, or palindrome by gradually stopping the loop and the melodic lines, returning back to the original syncopated 'waltz' music and then

exiting back out of it into the static material of the opening in reversed order. (I need to insert a sketch here so it is clearer to me after a while what I am referring to). We decided that we needed to further work out a way to exit out of the syncopated section and A said that he will insert several bars of transition material there before our next session.

I thought that returning to the opening material (the repeated, static unison notes with the delay) at the end of the piece could serve as a metaphor for the journey and the subsequent return where one hears/experiences the opening material from a different perspective, through the prism of the journey undertaken. It is not a novel concept and I think it permeates much of the western classical cannon to larger or smaller degree (take sonata form for instance!) but taken say in a context of a piece like the Goldberg Variations it takes on a whole new significance . This idea really fascinates me, the cyclical nature of journeys and returns, the ability to perceive the same material completely differently through having been on a sonic and emotional journey of the piece, and almost as a symbol of eternity and eternal recurrence in all life. So, I would like to experiment with this notion in this miniature and perhaps throughout a larger/broader structure of our piece. Perhaps I might suggest to A that we repeat the opening miniature at the end of the piece, with some modifications to include the effects explored in the intermittent pieces.

Both trouble and richness of this session really started with the 'improvising'. What a can of proverbial worms.... With the loop set on the reversal effect, I felt I had nothing to play into and nothing to respond to – the only way in which i can let go enough to give improvisation a chance. With the normal loop i felt really distracted by the syncopated beat and also couldn't feel any freedom to improvise as everything felt 'caught' and 'stuck' in between the beats. Hence, I got quite upset and irritated from the whole' improvisation' experience. It triggered familiar patterns of perfectionism and subsequent dissatisfaction with the results. A on the other hand, seemed to like what I was doing and was quite encouraging and supportive of my efforts (which to me seemed inadequate and unskilled). This in turn instigated a long and heated discussion between A and I about the aesthetics in music performance, the parameters for perceiving and evaluating musical performance, the notions of improvised vs notated music, music education models that train performers of classical music, and ultimately my feelings of inadequacy when it comes to playing without relying on the score. We talked about what it means to us to be a real musician, how that might be honed, developed, and encouraged, how the notion of elite performance/technical skills fits into it and is at the core of the dilemma of training multi-skilled musicians. I proposed that due to the fact that elite performance skills take such a long time – decades indeed – to develop, it hugely impacts on the way music education functions and subsequently limits the scope of the musician's exposure due to endless hours required in the practice room to achieve the necessary skills.

Further, we discussed questions of performance practice and concert culture and how a classically trained musician fits into the contemporary cultural milieu. Anthony raised the notion that contemporary composers face similar challenges – 'how many people what to come and hear a new work?', he said.' Especially by an unknown composer?'. That raised questions of curation, funding, networking and all sorts of other factors

that go into a life of an active, performing musician. This discussion resonated powerfully with the reading I've been doing, particularly Becker's *Art World*, and Csikszentmihalyi's Systems Perspective Approach where both the arts sociologist and a psychologist argue that art exists within a complex and multi-layered interplay between the individual and the socio-cultural context in which he operates, where the interdependence of multiple agencies is integral to creation and creativity.

Throughout the discussion and in response to my misgivings about improvisation and my lack of ability with it, A raised the notion of music simply being *sound* organised in time and space and that the rest is superimposed on it by our perceptions – the *baggage* as he playfully calls my 'Classically' instilled musical pre-conceptions. When I asked him about what he looks for in a performance of improvised, non-western classical music, he said it was primarily the way he is touched or moved by the performance/performer that matters most to him. I argued that the same criteria and parameters could equally be applied to the traditional classical music performance. So, ultimately, there is no clear division between the two in terms of what lies at the essence of the performance and the way we, as listeners respond to music. A also said that if he really had to think about what makes an improvised performance successful, he would consider whether the improvisation utilised the available textural, rhythmic, dynamic, structural means within the material, was stylistically appropriate, and was authentically performed. Again, we came to the agreement that these parameters are completely transferable to the domain of western art music performance/interpretation.

We decided that the best way for me to proceed with expanding my ability to better realise the semi-structured improvisation required by this miniature, would be to record the loop on a Cd and practice with it at home to explore possibilities of adding layers in the bass and soprano drawing on the notes from the 'waltz' material – f#, a#, g#, d#, c#.

An interesting observation came to both mine and A's awareness during this session – my impatience and tendency to conjure up and project all sorts of creative ideas and possibilities to do with performance concept, performance space, context, interdisciplinary possibilities for realising the work, etc, etc, without actually having the basic ground material worked out. Anthony used a great metaphor of 'building a house first, then decorating it and painting the walls'. Still, I wish the house was being built a little faster!

What did I think?

In the session I was thinking that we need to intentionally and consciously brainstorm more effective strategies for working and conducting our sessions. I suggested that to Anthony but didn't express myself clearly and I don't think he understood exactly what I meant. He wondered whether I wanted to discuss strategies of working on this particular piece –Ray 2 – which was exactly what we were doing anyway, or overall ways of working together. Somehow I lost the thread in my thinking in that moment

which might have happened from feeling a certain guilt by unintentionally implying that our current ways of working might not be the most efficient. I think I am getting anxious about getting this project done and worried that it won't get there in time. However, now I am again thinking that it would be a really good idea to workshop ideas and strategies we might employ for our future sessions, like for instance making a little plan of what we want to get through in a session, how much material we want to cover, what we want the outcome to be, what techniques and sound effects we want to try out, etc. Whether we set that up before the session or at the beginning of the session is probably something we can discuss as well.

The counter-argument to all this however is that we have an incredibly easy, natural, enjoyable and exciting dynamic between us; we have great fun, we enjoy each others' company, we create a rich and comfortable emotional space in which we work. So, whether formalizing the process more will add or detract from the process and the result is not clear. I would be very apprehensive to interfere, let alone spoil the dynamic we currently have, but on the other hand can see that we need to spend our sessions more productively and with more focus. It's a difficult dilemma and I recognise so many of the issues I'm grappling with in John-Steiner's writings on creative collaboration and the long trajectory of working together that it takes to work out the optimal way to collaborate and make new work together. Yet, I am once again thinking that if we are actually talking about creativity in the process of realization/facilitation of the new work, then there is plenty that happens in our sessions that provides a rich insight into that. Again, I think what's becoming clear is that I am too goal-oriented and not enough engaged and settled in the process of unfolding and am not trusting that process enough. A true metaphor for life and the way I go about things in my life. So, again, this collaborative dynamic is, in a way, a real microcosm of the larger canvas of life, of collaborative work, of human interactions and of creative process.

What did I feel?

I felt frustration and disappointment in myself because improvisation felt so foreign. I felt frustrated by the way my musical sensibilities have been shaped and limited by education and the general tradition to which I belong where skills of improvisation and general freedom with the material one deals with is practically non-existent. I felt musically dislocated, out of the comfort zone of the written score and into the murky territory of having to make not just interpretative decisions but to actually determine what the notes that I'm going to play will be. This brought up a rich and insight-yielding conversation which I have already described above. I felt how clearly my discomfort with having to improvise against an unfamiliar and uncomfortable background reflected and fed into my usual discomfort with playing anything that didn't feel 100% prepared, honed and how restricting and limiting that was, how much it impeded on my enjoyment and pleasure of playing. I thought that overcoming this impediment in the safety of our collaboration could yield huge outcomes for my playing of the more traditional, notated repertoire, and the risks and freedoms I would feel encouraged to take.

I felt quite anxious and worried about how slowly the piece is progressing and how much more material and decisions about performance aesthetic, context, concept, etc still need to be generated/made. I think my general anxiety about the PhD, gathering enough valuable data and getting it done on time is beginning to translate into my sessions with Anthony. I felt very aware and mindful of not projecting my anxiety onto him, because I still feel that he is doing the project on purely altruistic basis, which I find amazing, but not sure that I've succeeded. It's such a delicate dynamic, collaboration! And I have such enormous appreciation and respect for Anthony.

I also caught myself beginning to project an imagined ideal onto our work together and the piece itself and measuring what is actually happening against it, frustrating, I think, both myself and A. I felt guilty for inwardly demanding more of A and implicitly expressing frustration with the material and what I was hearing. In contrast to our previous session, where I felt elated, excited and certainly experienced a heightened flow of creativity, I presently sensed inside me a doubt whether there is true artistic value to this whole process and whether playing first-rate music and going about it in the usual solitary manner was not a superior way of working. This recurring thought torments me as it stands in diagonal opposition to my proposition that collaborativity is a superior modality for generating creativity. However, while writing this, I am realising that again, I am judging the process by its end result (which is not even an 'end' result at all, but only the initial, generative phases of the final musical result) and that I'm not focused enough on what is the primary value of this experience- the process of engaging in a music-forming, music-generating conversation. Writing reflectively really clarifies this for me- it is something I wouldn't have understood and seen so clearly if I wasn't sitting writing this and chewing on this thoughtfully.

What did I learn?

The main thing that I've learnt from reflecting on the last session is that I need to shift all my focus and attention from inwardly demanding a satisfactory end-result to engaging deeper with the process of working out and teasing out the material itself and the way I realise/interpret it. Because it is exactly this process that I am trying to investigate – the process of creative patterns in thinking that occurs in the dialogue the composer and performer are having. It is not the end result that will help me understand and glean deeper into this process – because the end result is not necessarily at all a reflection of the process itself. The process is rich, multifaceted, complex, yielding at times, resistant at others, demanding and rewarding, engaging, frustrating at times, and illuminating. Whereas the result – the piece of music that will emerge out of it – is just a snapshot of the particular choices and decisions made along this journey. I think this is a very important insight to have gleaned and I can see that its implications are far-reaching not only for this project and for my PhD, but for my music practice at large and my life as a whole. I am also learning from this the need to let the process unfold on its own and trust in that natural unfolding of ideas, decisions and insights. Perhaps trying a more structured approach might be helpful, but I don't need to impose urgency and stringency on it.

At another level, I have thought a lot about the notion of improvisation, my frustration at not being able to improvise freely and the way I express it in the session. Firstly, I need to realise that improvisation, like any other complex and highly demanding skill, requires experience and practice, and that it is unreasonable to expect myself to be good at it from the first attempt. From this I can see that a better way to go about employing the structured improvisation that we tried in Ray 2 would be to actually try it out together with Anthony, where perhaps he plays the right have and I left, or vice versa. Or perhaps asking him, what sort of sound, image, atmosphere, rhythmic feel he has in mind for it. So that I'm actually responding to something – whether a concept or a sonic image – rather than trying to pluck the notes out randomly and feeling angry and embarrassed at what comes out. Following on this, I think that generally it would be a great idea to begin any attempt at playing/shaping the material with asking A what he would like it to sound like, to communicate, to represent. From the previous session I can see that once we open up this kind of conversation, my ability to mould the music expands manyfold and brings about that feeling of 'flow' that is characterised by ease, excitement, engagement and heightened creativity. I am also learning from all this that I have a lot of unanswered questions about music education in our tertiary institutions and prior to that. Following our session, I pondered a lot – how is it that a musician of my level, with such a highly developed kinaesthetic and aural sensitivity to the instrument and sound is rendered completely incompetent and skill-less when there isn't a printed page in front (or at best memorised). The rapture between the compositional, improvisational skills and performance skills in our classical music culture is quite devastating and tragic I think.

What I can do in the future with what I have learnt?

From having thus reflected on my last session with Anthony, I am certainly in a better position to apply myself more fully to the process of teasing the piece out in our next session next week . By consistently engaging A in a dialogue and explorative conversation about his ideas not just for the actual material (content) but the sound and gesture that he is imagining/looking for, we can deepen and hone our collaborative dynamic and creative thinking. Also, I think that I impose too much of my thinking and ideas in the sessions without allowing A enough space and time to tease out his own thinking process during our time together. This brings me to thinking about all the elements that constitute successful collaboration that John-Steiner talks about - the emotional and personal aspects of it, the intellectual exchange between us, the support and safety we provide (or at least try to) for each other to enable explore more vulnerable aspects of our practice (like improve for me or inability to lock in with the delay as A would like me to). While John-Steiner talks about the paradigmatic shifts that occur through successful collaboration or at least significant insights, and at the moment I might not anticipate such outcomes from our collaboration, I am nevertheless, more and more, through reflecting on our practice, realising what a rich environment this collaboration is for studying creativity in the context of interpretation-building and actually content-building as well.

What are the main identifiable themes that emerged from this session and how do they relate to the previous sessions?

- The main theme seems to me to be *process vs product* where the richness and value lies in studying the process of creative thinking. In other words *thinking-through-practice*.
- Perhaps the most important theme still remains - questioning to what extend the work is shaped by the composer and the performer and how the traditional composition/reproduction model can be re-conceptualised to yield greater creativity and freedom on the part of the performer.
- The other theme is the notion of a dialogue that needs to be consciously instigated. It is in the dialogue that creativity is heightened and new ideas/insights/ impulses are born
- The theme of notation and the way it impacts interpretative response
- The concept of imposing an expectation, judgment, demand on the process vs trust and flexibility to experiment, to feel vulnerable and inadequate as an inevitable part of the creative process.
- The broader considerations of what a successful collaboration entails – the emotional, intellectual, personal, inter-personal qualities that shape this complex and rich dynamic and other contingencies on which collaborative creativity depends.
- The other recurring theme is the parallels and contradictions between contemporary/experimental/electro-acoustic performance practices and the more traditional art music practices. What can be learnt from the contemporary practice and transferred to traditional repertoire performance. And vice versa?
- The topic of music education and the way classical musicians are taught to think and practice – where the composers and the performers operate in completely separate domains, with the composer (i.e. the score) being at the top of the musical hierarchy and the performer being subservient to the score – *serving the music or serving the composer* – a phrase intimately known to any classically trained musician. Through this collaboration and hopefully others too, and throughout this project in general, I am discovering more and more that this binary opposition between *creation* and *reproduction* is an unnecessary imposition on the practice of music. It does not reflect what really takes place in music-making, where, as I'm learning, the lines and boundaries between where composition ends and interpretation/reproduction begins are much more ambiguous and complex than the traditional model would have us believe.

What's next?

Begin identifying recurring themes/patterns and begin to sort information emerging through the reflective writing into broader categories. Perhaps the bulk of the thesis could be Identifying a theme – theorising on it then providing personal reflections on it from documented practice, both in writing and video.

Reflective notes from Adam–Lifschitz Collaboration, October 31, 2011.

Our session consisted of three parts:

1. Going over the harmonic analysis I'd done on the 3 Brahms pieces – critical/analytical interpretation:
 - Delineating the skeleton structure
 - Looking at the chord by chord structure
 - Looking at broader harmonic scaffold
 - Looking at the harmonic interpolations/tonicisations of relative or implied keys within the primary harmonic structure
 - Looking at how the variations followed the harmonic structure/shape outlined in the there
2. We went through a number of electronic effects that will most likely be employed in the pieces and Steve demonstrated and explained how each one works, what the premise of it is and how it actually sounds:
 - Delay
 - Reverse
 - Granulation
 - Spectralisation effects
 - Looping
 - Bending
 - Gliss
 - Many more that I will identify from the MP3 of the session

3. We had a brief discussion in regards the content and the approach to beginning to write
 - We discussed the possibility of playing the original Brahms pieces and distorting them through the effects to see what remains and if that would help distil some essential harmonic or textural kernels of the piece
 - We discussed the helpfulness of considering the initial idea of 'sound pieces' as responses to Brahms, as it was initially conceived. I thought that approaching the compositional process as an extension of that idea only now involving the piano as well could be a good way to get around creating connection between the Brahms and Adam. An idea of chamber music where the computer/sound piece is a direct response to piano piece – a 21st century chamber music practice
 - I also commented on the fact that 'beauty' and aesthetical 'lusciousness' would be of high priority for me despite wanting originality, uniqueness of voice in the music and 'newness' of it. Steve agreed and expressed that for him 'beauty' is quite native too and that in that regard we are very much on a similar wavelength.
 - I felt that what is needed in the pieces – and this thought evolved from thinking of Gen's piece and the way Steve's piece really extracted the very nature and essence of the instrument with its bird-like quality and hence the bird sounds – is to find the soul, the essential nature of the piano as an instrument and expand and draw that out through electronic manipulations.
 - I promised to generate more material using the insides of the piano and working with a sparser textures, gestures and timbres
 - Steve said that he will have an approx 5-10 mins of music, primarily gestures. For me to try at our next meeting
 - We agreed that if it's a two-sided tunnel it will probably work best; i.e. if he brings some gestures and I use them to prompt my own responses to them
 - Steve expressed his concerns about working within traditional harmony and I expressed mine about 'improvising' using trad harmony

Further Reflections:

The process so far seems to fit very well into the broad Geneplore outline where I can trace a clear process of generating the pre-inventive structures/ideas/possibilities until they reach a 'tipping point' when they begin to catalyse into more concrete ideas. It will be interesting to see how these ideas begin to grow and gradually be explored,

synthesised, selected, discarded, interpreted and finally put together to create a new sound work.

The idea of improvisation deserves a separate reflective entry. In this I can see that the most prominent 'thread' is the idea of prior knowledge as a springboard for creativity (Geneplore). Most of what seems to emerge when I 'improvise' is a quasi-Bartokian/Stravinskian/Scriabinian/ Messiaenian/Kurtagian types of sonorities, rhythms, textures. As well as a kind of pseudo-MKHesque gestures and ways of being at the piano.

The question that seems to recur over and over again in my mind is how is that classical musicians after 30 years of playing their instruments are incapable of playing a single phrase of music without someone else writing the music for them. This thought is preoccupying me more and more and I can see the tremendous disadvantage of that for a performer trying to 'interpret' someone else's music.

The idea of the piano as a sound generator came up with Steve too. I raised the question of why have composers before 20th century not explored its tremendous possibilities for colours, textures, sonic kaleidoscope. Steve and I thought about the tradition, performance practice and boundaries. Again, the concept of selection from the existing vocabulary available to composers comes to the core (Benson).

APPENDIX D

EMAIL EXCHANGE EXAMPLES

Email Communication, Neal–Lifschitz Collaboration, 2010.

Re: Sonyas Piece

Thursday, 7 January, 2010 1:10 PM

From: "kate neal" katelneal@googlemail.com

To: "Sonya Lifschitz" sonyalifschitz@yahoo.com

Sonya!

My dear! Happy New year – hope 2010 see's great things for you in all ways, and am excited at the prospect of spending some of it with you.

OK, so a hard copy is in the post to you. I can for-see lots of things that will need changes / tweaking etc. (And the perc and harp parts I am still working on).

But! For the most part, I see the creative work as done.

It sits at around 20min, in one movement. I do need to do a lot of editing, but am sending it in the hope that there are things you will come back to me with – some of the gestures are potentially not even possible at tempo – all things we can work on as the process unfolds.

It is very exciting! I have thoroughly and utterly enjoyed working on it.

So, attached to this email is a piano part, score in A3, and a midi-computer realisation. The midi-mp3 is of course silly, but may help in the understanding of it.

And so we begin the fun part! I have some questions about how to write some of the gestures properly, (as in hands and crossings). I also feel some of the 'solo' like passages may be too fast and / or too many notes.

Those things we can clean together. I will need your help and take your council on those things. Nothing is notated to be adhered to in a notation way – all things should be approached to be with ease (so, change the hands etc for playability if I have made errors of judgement).

Please see this as a draft, and not set in stone. And the hard copies are on their way to you (the score is almost 60 A3 pages so probably painful to print.). But you can always make a start on, at least a look through the piano part, until the hard copies arrive.

Re: Sonyas Piece

29/3/10 6:46 AM

From: "Sonya Lifschitz" <sonyalifschitz@yahoo.com>

To: "kate neal" <katelneal@googlemail.com>

Hi my lovely friend Kate,

am listening to your MP3 as I write. I have started working on your piece - its stunning. I am really beginning to relate to it, care for it and love it, now that I've managed to read through it enough times to establish some familiarity.

Must be brief, as I want to do some work on it tonight and its getting late. I am predicting that getting it up to $J=110$ will probably be near impossible.

I think I can pretty much negotiate all its challenges - found some good fingerings and uncrossings of hands where needed - but at a slower speed.

Because some of the passages are written in an unusual range on the keyboard with swift changes of register (eg. both hands really high up, followed by a low passage in the L.H., or hands spread really far apart) it makes it harder to work up real speed.

I will aim to get close to 110, but as I said, it's very unlikely. The part is super virtuosic, which I love, and I can see (or suppose) that some sections are meant to sound totally like a free improvisation (the 32nd note passages. They are amazing, I can almost hear a mad, long-haired- rock- star-electric-guitar dude playing them), which will probably be less achievable at a slower tempo, but I am sadly limited by a mere mortal's body and brain.

I am becoming very attached to each and every note in this awesome creation so am not sure if you would prefer to keep the notes and accept a slower tempo, or aim for the tempo and cut some notes.

I'm Going to start a reflective journal on my work on the piece as of today - really curious how that's going to affect my practice and the whole trajectory of learning it. I'm really excited that it's going to be the centre focus for my PhD. Which is another whole story.....

Re: Sonya's Piece

Tuesday, 30 March, 2010 9:11 AM

From: "kate neal" <katelneal@googlemail.com>

To: "Sonya Lifschitz" <sonyalifschitz@yahoo.com>

Hi Sonya !

Thanks for your email! Great to hear from you.

That all sounds great, re Tim and Particle.

Hmm, tempo and notes. I expected to have to edit your part once you'd had a look. I know there are more notes than possible, well at least, I thought some of it might be impossible.

My idea is that you really make this piece yours – by that I mean you can change, rework, alter fast passages. My first instinct is to keep the tempo and change the notes, but then again, maybe some bits are ok slower. I'd be wary of things dragging, but as always these things can be surprising, ie – it may work slower. Maybe if you tell me bar numbers, sections that are too hard at tempo I have a look – at least for the Princeton gig we should look at those things soon. Let's try and keep the tempo and change the notes, I'm sure the ideas can transcend to easier things.

Email Communication, Barbeler–Emmerson–Lifschitz Collaboration, 2012.

On 20/02/2012, at 12:31 PM, Stephen Emmerson wrote:

Hi Damian

Thanks for that. Yes I'm sure the festival can get me their address.

And thanks for the links to Saltstream - yes i remember you talking about that and I will look forward to checking it out.

In fact, while I've "got you", I was back working on your piece on the weekend and have in fact reworked the distribution of hands again, now primarily diving into groups of twos (usually fifths) rather than groupings of 4-5 notes. I had originally thought that the longer groupings would make more fluent but now think the 2s will not only be easier up to speed, but also facilitate the bright sound quality you are after.

Anyway, given that you are open to reconsidering things, I just thought I would mention one bit that is giving me particular difficulty - bars 83-88. I know you want that bit to be fluent and for the rubato to allow fast gestures as well as breathing spaces. But i am finding that the sorts of lines with big leaps and changes of direction (that can be negotiated elsewhere with 2 hands) are really difficult to negotiate with 1 hand (eg bar 85 in RH and 86-87 in LH). I recall that many of the changes you made were in fact taking out notes, so if any reworking of those bars was possible without losing the effect you are after, I'd be happier. But you are welcome to just tell me to just work at it harder if you'd prefer to leave it as is!

Cheers

Stephen

On 21/02/2012, at 6:29 PM, Damian Barbeler wrote:

Hi Stephen

I reworked those bars you asked for. This is a more "physically responsible" solution, and perhaps clearer musically even. Sorry for the previous insanity... imagination is a dangerous thing.

Don't hesitate to ask for any other fixes (you too Sonya).

Cheers

D

p.s. Did you see the ABC vid. Pretty snazzy. Can't believe he made my incoherent ramblings into a clear story :-)

APPENDIX E

DETAILS OF ADAM–LIFSCHITZ

COLLABORATION, MELBOURNE, 2011–2012.

The collaboration with Melbourne composer/sound artist Steve Adam took place between October 2011 and October 2012. This project was supported by an Australia Council Development Grant. The collaboration resulted in a new work for piano and computer, an electro-acoustic suite of four pieces: *Ion–Chance–Star–Avion*. The premiere of this work took place in Melbourne at the Eleventh Hour Theatre as part of the Astra Chamber Music Society concert series on 30 September 2012. The work was recorded at the BlackPearl Studio in Melbourne in July 2012.

APPENDIX F

BRIGHT BIRDS (BY DAMIAN BARBELER)

SCORE EXCERPTS

Example 1. Section S-U, bars 289–323.

289

P.1

P.2

8^{ub}

294

P.1

p *pp* *mf*

ad lib Ped. (sonoro)

297

P.1

mf *p* *pp* *mf*

300

P.1

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

ad lib Ped. (sonoro)

emotional shapes

hold or long or you can then release it

or you can then stop it

PART IV - Shifting Light

S *Largo (J=50 ca.)*

S *Rubato (independent), molto espressivo*

303

T *MANTRA RESONANCE*

P.1 *f* *pp* *ppp*

24' (0.3) *Largo, shifting light* (♩=50 ca.)

going for emotional shape

P.2 *mp* *ad lib Ped. (sonoro)* *much less* *softer (ignore sonoro)*

process of "let go"
waiting to let go
"looking for
"click in the
armchair" that
refreshes the
forthcoming
collaboration.

307

P.1 *pp* *ppp*

23' 50 (0.3)

ALEATORIC COUNTERPOINT

P.2

310

P.2

313

P.1

315

P.1

"SELF-ESSEMBLING"
"SIMULTANEOUS SOUNDWORLDS" 27'40 (0.3)

no alignment b/n parts necessary

316

P.1

P.2

merge resonance not all loud.

318

P.1

P.2

30' (0.3). pedal issues. (ignore mark)

sos

35

319

P.1

P.2

5

driest bushy

fff

2

3

5

20.

320

P.1

P.2

5

ff

fff

3

3

A lot

321

P.1

P.2

323

rall.

P.1

P.2

Example 2. Section Q, bars 230–262.

230 **Q**

P.1 *pp* 25

P.2 *ff pp sub.*

8va

8va

Brutale

P.1 234 (8) 1

P.2 (8) 1

8va 1

8va

237 *Ab* *G*

P.1 (8) *mp* *sfz* *ped.*

P.2

239

P.1 *sfz* *ped.* 3

P.2 3

P.1

245

P.1

246

P.2

247

248

P.1

249

P.2

250

251

P.1

251

P.2

252

254

P.1

P.2

257

P.1

P.2

260

P.1

P.2

Example 3. Section F–H, bars 133–157.

F Rubato, con moto

133

P.1 { 
 P.2 { 

136 *poco*

P.2 { 

139 *mf esp.*

P.2 { 

142 (8) *mf*

P.2 { 

145 *mf*

P.1 { 

(15) *pp*

P.2 { 

G a tempo (♩= 136) Glistening

15^{mo} *mf*

not strict to rubato slightly rush

TPP *pp*

make rhythm alphabetical

b (in p.1) & 2. diff. tempo

pianissimo

loose shape, make

(mf)

148

P.1 (45) rit.

P.2

(8)

150

P.1 *tempo pressin'* Building towards big climax. *loc*

P.2 *Ped. sempre*

(8)

P.1 *Ped. sempre*

P.2 *Ped. sempre*

H Fanfare

154

P.1 *wf (bit more)*

P.2