FLOW IN COLLABORATIVE MUSIC PERFORMANCE: AN AUTOETHNOGRAPHIC STUDY OF THE PHENOMENON OF FLOW FOR A PIANO ACCOMPANIST

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ABSTRACT

This thesis uses an autoethnographic process to answer the research question: How is the phenomenon of flow manifest in my collaborative music performances as a piano accompanist? Flow was first studied by the American psychologist Mihalyi Csikszentmihalyi in the late 1970s and refers to an experience of highly focused attention when one is engaged in a challenging activity that requires the application of skills that match the challenge. The experience of flow provided a sense of enjoyment and satisfaction to his research participants that Csikszentmihalyi describes as an 'autotelic' or optimal experience.

Due to the highly subjective nature of the phenomenon of flow in collaborative music performance, I have chosen to use autoethnography, a methodology that embraces subjectivity and allows the researcher to explore an experience from the perspective of the 'insider.' The data for the study is an autobiographical narrative that describes my experiences of flow during collaborative performance as a piano accompanist. Presented as a separate volume in this thesis, it can be read at any time as part of the thesis, and salient points from the narrative are used to illustrate the theory that has resulted from the analysis of this data.

The analysis has used an iterative approach to develop a concept map, which outlines the theory for understanding that has been developed to answer the research question. The analysis also draws upon other relevant literature in the field to further contextualise these themes and concepts in the light of the proposed theory.

My analysis of the narrative data found that the balance between challenge and skills is an important theme in understanding flow for a piano accompanist, and it identified four related concepts: the acquisition of motor skill development for a pianist, aural acuity, music reading, and sight-reading and quick learning. The concept of attention also appeared as a pertinent theme. Separating the theme of attention into the concepts of external and internal attention, I have been able to identify specific concepts relating to attention that affect my

experiences of flow during collaborative performance, including the effect of the physical environment, the communication with my collaborative performers during performance as well as the strategies I have used to modulate and control music performance anxiety as a piano accompanist. The analysis also reveals the importance of controlling attention, through strategies linked to mindfulness and vigilance and found that my long-term memory and working memory contribute to the various music-reading, sight-reading and quick-learning variables that constitute the challenge-skills balance in collaborative performance.

The final part of the analysis focuses on the 'autotelic' experience of flow during collaborative performance and the key concepts that affect this experience as a piano accompanist: the importance of identifying clear goals and receiving feedback from my collaborative partners as part of the performance process; being in control of my actions and experiencing a sense of immersion in the performance with a loss of self-consciousness resulting in flow. The transformation of time was a concept that emerged from the data analysis but rather than being an influence on flow, was often the result of the flow experience itself. Similarly, the concepts of transcendence and emotional engagement with music were also a product of the 'autotelic' experience of flow during collaborative music performance as a piano accompanist.

The thesis concludes by outlining the limitations of the study and suggesting future avenues of research arising from this study.

Flow in collaborative music performance: An autoethnographic study of the phenomenon of flow for a piano accompanist

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DECLARATION

The work contained in this thesis has not been previously submitted either in whole or in part for a degree at Central Queensland University or any other tertiary institution. To the best of my knowledge and belief, the material presented in this thesis is original except where due reference is made in the text.

Judith Elizabeth Brown

Signed:_____

Date: _____

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Judith Elizabeth Brown

Signed:_____

Date: _____

Chapter 1: Overview of the study

The purpose of the study

The purpose of this dissertation is to explore the phenomenon of flow during collaborative performance as a piano accompanist. First described by the American psychologist Csikszentmihalyi (1975), flow is a subjective psychological phenomenon experienced by individuals when they are totally focused on a challenging activity that occupies all of their attention, such that nothing else seems to matter as they pursue this activity. It is often described as an 'optimal experience' or 'being in the zone' (Jackson & Csikszentmihalyi, 1999) and has been associated with a diverse range of activities that require the individual to use all of their skills to meet the challenges presented in these activities (Csikszentmihalyi & Csikszentmihalyi, 1988b). My experiences as a piano accompanist have been diverse in aspects of styles and genres, as well as collaborative partners, providing me with a rich source of information to explore the psychological aspects of music performance, and particularly flow, from a personal perspective. The research design for this study uses autoethnography, an autobiographical genre that connects the personal to the cultural, social and political (Bartleet & Ellis, 2009b) and, by writing in the first person, allows me to reflect on the experience of flow from an intimate view-point. Autoethnography is a very appropriate methodology for examining flow as it opens the door on what is an 'inner experience' (C. Smith, 2005) that then enables an intimate and in depth investigation.

The research question

My study examines the phenomenon of flow and asks the question: How is the phenomenon of flow manifest in my collaborative music performances as a piano accompanist? Flow is a "state of joy, creativity and total involvement with life" (Csikszentmihalyi, 2002, p. 213), that can be experienced when individuals are totally absorbed in a challenging activity. Emanating from the field of positive psychology (Csikszentmihalyi & Csikszentmihalyi, 2006), flow has been studied in numerous

contexts and with people of all ages, genders and races. The common factor among all people who experience flow is that it is associated with those moments in life when their whole being was absorbed in an activity that challenged them to use all of their available skills and abilities. It was always recalled as an immensely enjoyable experience that motivated them to continue in the activity without searching for any extrinsic reward. The research participants felt that they could engage effortlessly in the activity because they knew exactly what they had to do to (they had clear goals) and knew when they had achieved this (there was clear feedback about their success in the activity). Csikszentmihalyi (2002, p. 68) asserts that "Most enjoyable activities are not natural; they demand an effort that initially one is reluctant to make. But once the interaction starts to provide feedback to the person's skills, it usually begins to be intrinsically rewarding." Furthermore, the activity was so absorbing that many times they were not even aware of personal discomfort or the passing of time. By comparing the significant features of my flow experiences as a piano accompanist with the general dimensions of flow as proposed by Csikszentmihalyi, this study will provide an insight into collaborative music performance as a piano accompanist and the factors that need to be in place to facilitate an experience of flow.

Background to the study

Piano accompaniment has been an important part of my musical activity for many years. I began accompanying as a teenager and I learnt much about the art of performance by working with a range of instrumentalists, singers, instrumental and vocal ensembles, and amateur and semi-professional music theatre companies. Reflecting on these diverse experiences as a piano accompanist has allowed me to consider the interplay between the physical demands of playing the piano in a collaborative partnership, the cognitive challenges of understanding style and interpretation, as well as the psychological processes that shape the performance experience itself. My fascination with the psychological dimensions of music performance, particularly in collaborative music making such as piano accompaniment, has focused this study and led to the positing of the research question.

My fascination was fed through reflection on questions such as: what are the characteristics of a 'good' performance? What makes a 'great' performance? Why do some performances stand out in the memory so clearly, almost as epiphanies or life-changing moments? Why does the memory of some performances continue to cause personal pain, embarrassment and fear? Why are some performances just frankly boring? What can I learn from my past performance experiences and apply to future performance experiences?

This process of critical reflection on the psychological dimensions of collaborative performance as a piano accompanist, acknowledges a number of key researchers in the field of qualitative research. Gergen and Gergen (1991) suggest that reflexive practice provides deeper insights for qualitative research. Schön (1983, 1987) has also written extensively on the place of reflection in the education of professionals, while Clandinin and Connelly (1991) confirm that personal reflective methods provide unique insights for qualitative researchers. Denzin and Lincoln (2005) note that there has been a growth of experimental ethnographic writing in the late twentieth century that has blurred the boundaries between the social sciences and humanities. They describe this as the sixth moment of qualitative research, acknowledging the emergence of a range of methodologies that rely on critical reflection to explore the lived experience.

I know from personal experience that the act of collaborative music performance can often be intoxicating. As a performer, the rush of adrenalin that often characterises this experience draws you in. Such experiences have much in common with the characteristics of flow and also with other concepts related to flow such as peak performance and peak experience (Bakker, 2005; Privette, 1983; Williams, 1986). Flow has been studied in many diverse settings (Csikszentmihalyi & Csikszentmihalyi, 1988b) and this study builds on this knowledge to explore the phenomenon of flow for a piano accompanist and those factors that need to be in place to facilitate an experience of flow.

The data for this study consists of an autobiographical narrative that presents chronologically organised vignettes that enable the reader to gain an understanding of the subjective phenomenon of flow in my experience as a piano accompanist. This type of writing, with its use of descriptive narrative mingled with direct speech, brings to the foreground subjective experiences that would otherwise remain hidden. Flow is

itself a subjective phenomenon and while many researchers have used quantitative methods to try to understand this phenomenon (Jackson & Marsh, 1996; Jaros, 2008) and others have used qualitative methods that rely on observation and interview to describe flow (Custodero, 2005; Custodero & Stamou, 2006; St. John, 2006), my study will explore this phenomenon using autoethnography to recreate and analyse my most memorable experiences as a piano accompanist and to develop a theory to understand my research question.

The significance of the study

Csikszentmihalyi (1990, 2002) acknowledged in his work that flow is a subjective experience and in his response to various studies on the phenomenon of flow in sport (Jackson, 1992; Kimiecik & Stein, 1992), he notes that "in order to understand the consequences of sport, one must consider subjective factors. The bottom line of sport activity is the feelings it provides. Winning or record-setting are important only to the extent that they make athletes and spectators feel elated" (Csikszentmihalyi, 1992, p. 181). In response to Kimiecik and Stein (1992) and also Jackson (1992) whose qualitative study used in-depth interviews to gain understanding of the flow phenomenon of elite figure skaters, Csikszentmihalyi brings a note of caution to researchers who attempt to measure something as subjective as flow.

> All through the roughly twenty years since I have been doing research on this phenomenon, I have been very ambivalent about coming out with a hard and fast measure of flow. It would have been easy to develop a test, or checklist, or questionnaire that would make it possible to assign some score to a person's intensity and frequency of experiencing flow. But I have always resisted the urge of doing so, because the history of psychology is replete with examples of how barren important ideas become as soon as they are precisely "measured" (we need only remember what happened to the idea of intelligence once it was identified with the IQ score) (Csikszentmihalyi, 1992, p. 182).

He goes on to note that flow is a complex psychological phenomenon that resists exact qualification and definition. His model of the flow experience (Jackson & Csikszentmihalyi, 1999) suggests that flow occurs when there is a balance between

challenges and skills, but he is wary of studies that state flow is a score of 'x' on a flow questionnaire. He concludes by stating "my impression is that the experience of flow is on a continuum between almost imperceptible micro-flow events, and the truly memorable occasions of deep flow" (Csikszentmihalyi, 1992, p. 183) and encourages research into this phenomenon to continue vigorously.

This particular study uses autoethnography to focus on my subjective experience of the phenomenon of flow as a piano accompanist. Consistent with case study methodology, this study "concentrates on experiential knowledge of the case" (Stake, 2005, p. 444). The type of experiential knowledge expounded in this study is subjective, and Stake acknowledges that this is common in case study research. "Case researchers greatly rely on subjective data, such as the testimony of participants and the judgement of witnesses. Many critical observations and interview data are subjective" (Stake, 2005, p. 454). Even though the flow phenomenon is a personal and subjective experience, it has rarely been studied using autoethnography as the research design. While not exactly an autoethnography, Bernard (2009) studied her graduate students' autobiographical accounts of their experiences making music and, by examining their narrative accounts written over a four year period, was able to describe her students' subjective experiences of flow and music making. Many of the flow studies reported in the literature have used quantitative designs to build a set of empirical data for the flow experience and have largely been successful in advocating for its consideration in the psychological preparation of athletes. The qualitative studies have attempted to explore the experience using interviews, observation, focus groups and grounded theory. My study adds an important strand to this literature as it uses autoethnography to examine the subjective phenomenon of flow for a piano accompanist, allowing the phenomenon to be studied from a personal perspective.

The broad areas of inquiry that inform this study

Flow has been studied in many settings including music performance (Alberici, 2004; Bernard, 2009; B. N. Kraus, 2003; MacDonald, Byrne, & Carlton, 2006), theatrical performance (Hefferon & Ollis, 2006; C. L. Levine, 2006; Martin & Cutler, 2002), sport (Cosma, 1999; Jackson, 1992; Jackson & Csikszentmihalyi, 1999),

leisure activities (Hall, Smith, & Nelson, 2007; Sato, 1988), and work environments (Bryce & Haworth, 2002; Ramsland, 1989). This literature, together with many other related studies on the phenomenon of flow, will provide the background for a discussion on the concept of flow and its characteristics in music performance for a piano accompanist.

In order to more fully understand my flow experiences of music performance as a piano accompanist, and to begin to address the research question, I will also examine the literature pertaining to the role of the piano accompanist in music performance (Berenson, 2008; Davis, 2005; Katz, 2009; Mansell, 1996; Moore, 1962; Newton, 1966; White, 2010). As it is a collaborative activity, research studies that have investigated the way music ensembles operate and collaborate in performance (Davidson, 2005; Kokotsaki, 2007; B. N. Kraus, 2003; Sutton, 2004) will also inform my investigation of the phenomenon of flow while accompanying. Since music performance is primarily an artistic activity, and flow is linked to the psychological aspects of music performance, it will be important to follow this with a brief consideration of the literature pertaining to the aesthetics of music (A. Hamilton & Scruton, 1999; Hargreaves, 1986; Hargreaves & North, 2010; Scruton, 1997) and the power of music to effect human behaviour (Carr, 2004; Gabrielsson, 2010; Juslin & Laukka, 2003). Flow is also informed by theory pertaining to motivation and self-efficacy, and the particular literature that looks at motivational factors for music performance (Bailey, 2006; Bakker, 2005; Kowal & Fortier, 1999; Whipple, Koestner, & Lacaille, 2005; Woody & McPherson, 2010), and practice strategies that work for the achievement of excellence in music performance (M. H. Berg, 2006; Ericsson, Krampe, & Tesch-Römer, 1993; Gruson, 1988; McPherson, 2005; Zhukov, 2009), will be useful in shedding more light on my flow experience as a piano accompanist.

The large body of literature exploring music performance anxiety (Kenny, 2010; Kenny, Davis, & Oates, 2004; Kirchner, Bloom, & Skutnick-Henley, 2008; McGinnis & Milling, 2005; Schneiderman, 1991; Wesner, Noyes, & Davis, 1990) will also be important in addressing the research question. This is an expanding field in psychology and the literature indicates that many researchers are looking at ways to minimise its impact for performing artists. The literature also suggests that there are a number of important concepts relating to flow such as peak experience (Bakker, 2005;

B. N. Kraus, 2003; Privette, 1983), peak performance (Haberl, 2001; Jackson & Roberts, 1992; Sutton, 2004) and mindfulness (Livingston, 1989; Walsh, Balint, Smolira, Fredericksen, & Madsen, 2009; Wright, Sadlo, & Stew, 2006) that also impact the analysis of the data of this study.

The broad investigation into the literature surrounding the topic of flow adds depth to my understanding of the phenomenon of flow and forms the basis of the autoethnographic process of analysis and critical reflection on my experiences of flow as a piano accompanist.

The research design

Ellis and Bochner (2000) describe autoethnography as a methodology where researchers reflexively examine their own experiences and self-other interactions within their culture. This type of research allows the autoethnographer to gain deeper insights into their experience from an 'insider's' perspective (Naples, 1997; C. Smith, 2005). Autoethnography is therefore a useful methodology for the examination of the subjective phenomenon of flow during collaborative performance as a piano accompanist.

The data collection

The data for this study appears in Volume 2 of this thesis. It is written in a narrative style and includes description and scene setting, as well as direct speech to create an evocative narrative, thus drawing the reader into my experiences. The narrative takes a chronological approach but uses vignettes that Humphreys (2005) suggests provides a way of creating an autobiographical narrative that focuses on particular experiences rather than the whole of a life. Many autoethnographers incorporate narrative as part of their research (Bartleet, 2009; Bartleet & Ellis, 2009b; Bartleet & Hultgren, 2008; Bochner & Ellis, 1996; de Vries, 1999, 2000, 2006; C. Ellis, 2004, 2009; Gergen & Gergen, 1997; Strong-Wilson, 2005) allowing both the researcher and the subject of the research to merge in the autoethnographic analysis. Consistent with the approach taken by many of these researchers, I have used significant document artefacts including personal diaries, audio and video recordings of concerts, and personal scrapbooks of memorabilia including press cuttings, photos,

and programs of concerts to create my narrative. Through the narrative writing my subjective experiences of collaborative performance as a piano accompanist have been brought to the foreground allowing me to answer the research question of this study.

During the course of this study the process of analysing my flow experiences in collaborative performance has created for me an increased awareness of the phenomenon as I continue to perform as a piano accompanist. Flow is such a subjective phenomenon that to try to analyse one's own psychological experiences while in the process of music performance has decreased the likelihood of actually experiencing flow. Therefore, this narrative has deliberately focused on events in my past creating data that is free of formal psychological jargon, but using narrative devices to describe experiences that are later analysed and compared to the formal characteristics of flow in order to answer the research question.

Constructing believable data

The data for this autoethnographic study has been verified in a number of ways. The document artefacts provide multiple sources for me to check the details of the narrative. Furthermore, while studying these documents, other events are revealed and more details are added to my recollections for the narrative. Lincoln and Guba (1985) promote the idea of 'member checking' for qualitative studies of this type and I have had numerous professional conversations (Healy, Ehrich, Hansford, & Stewart, 2001; Orland-Barak, 2006; Tillema & Orland-Barak, 2006) with many of the performers with whom I have collaborated over the years. Their insights and recollections have also informed the substance of this narrative. Muncey (2005) makes it clear that the issues surrounding the use of memory in the data collection phase can be minimised through careful attention to the subsequent analysis process. When the detailed analysis is conducted and used to identify themes that contribute to the development of the theory, the narrative is seen to gain more veracity for the reader. Her own autoethnography demonstrates that "although memories are fragmentary, elusive and sometimes 'altered' by experience, the timing and sequencing of them is presented more powerfully in this juxtaposition of themes than if they were presented sequentially or alone" (Muncey, 2005, p. 11). The writing of this narrative has allowed me to organise my recollections in a way that has meaning and can be useful in the autoethnographic analysis of this study.

Analysis of the data

The analysis of this data takes an iterative approach as suggested by Chang (2008) and other autoethnographers (Humphreys, 2006; Kidd & Finlayson, 2009; Muncey, 2005). Muncey (2005, p. 3) comments that while the "iterative nature of any research is a messy business belied by the neat conception of it in its written form," through careful analysis and interpretation of the data, important research themes can be identified and used to develop a theory for understanding the research question. By reading and re-reading the data, Chang's approach has enabled me to compare and contrast my experiences of flow with the literature in the field and gain a deeper understanding of the phenomenon.

The subsequent analysis of the data enabled me to develop a theory to understand the research question. Fawcett and Downs (1992) suggest that theory can fall into a number of different categories including descriptive, explanatory, predictive or propositional but autoethnography, as a case study of the self, provides the opportunity to develop theory for understanding. Gregor (2002, p. 7) describes this as theory that "explains 'how' and 'why' something occurred." As with case study research, the theory that results from the analysis of this type of data can be used to inform practice (Bartleet & Ellis, 2009a; Duncan, 2004) or provide new and interesting insights into a particular problem or phenomena (Diller, 1980; Matthews, 2003; Schindler, 2009; Wall, 2006, 2008).

Ethical considerations

All autoethnographers acknowledge that while an autoethnography is a case study of the self, there are still ethical considerations that the researcher must be aware of when conducting this type of research (Bochner, 2001; Campbell, Fenwick, Gibb, Hamdon, & Jamal, 2008; Delamont, 2009; C. Ellis, 2004, 2009; C. Ellis, et al., 2008; Scott-Hoy, 2009; Wall, 2008) due to the fact most autoethnographies acknowledge the input of others in the research and analysis process. This study highlights my collaborative experiences as a piano accompanist and the interactions with my musical collaborators are an important part of the narrative as well as the subsequent analysis. When writing the narrative I was careful to represent these

interactions honestly and fairly, yet in a way that is respectful of the contributions of my musical collaborators to my experiences of music performance.

To provide further protection from harm or embarrassment, the names of all characters have been changed in accordance with the ethics approval granted by the Human Research Ethics Committee of CQUniversity (Approval H10/01-011). The place names have remained unchanged, as per the ethics approval, as these places do not directly identify any of the characters referred to in the narrative.

Outline of the thesis

Volume 2 presents the full narrative that is the data for this study. It makes use of footnotes to explain musical terms that may not be familiar to the reader and to add further contextual detail regarding the characters and places mentioned in the narrative. The footnotes are also used to give further background detail on some of the pieces of music discussed in the narrative. Citations from reputable music books (Burkholder, Grout, & Palisca, 2006; Covach, 2006; Kobbe, 1989; McLamore, 2004; Scholes, 1970; Turek, 1996) within these footnotes and the narrative itself serve to add a scholarly overtone to the narrative, positioning it as data within the research study rather than just memoir or autobiography. DeVault (1997, p. 226) suggests that "personal writing is useful for exploring the unexpected and thus for bringing to light aspects of the 'ordinary' experience that are typically obscured."

Chapter 2 is a review of the literature positioning my research within the field of study broadly described as 'flow'. The important areas of concern relate directly to the research inquiry and the specific research question posited. Therefore, in order to understand the phenomenon of flow for music performers, and in particular to myself as a piano accompanist, the theoretical constructs of flow are examined in the literature, as well as the literature describing various psychological insights that have contributed to the theory of flow. Those studies that have examined the flow phenomenon in other performance settings, not necessarily related to music performance, are discussed to bring greater breadth of understanding to the research topic.

Chapter 3 opens with a discussion of the research methodology, the data collection and process of analysis that was used to create a theory for understanding the phenomenon of flow for a piano accompanist. In order to fully understand this research process, I have also included a review of the literature in the field of autoethnography and other research methods that take similar approaches. Reed-Danahay (1997) describes various ways that researchers approach autoethnography and this is teased out even further by Ellis (2004). This has provided me with many options in the pursuit of answers to my research question. My approach has been to draw from the field of narrative inquiry (Barrett & Stauffer, 2009; Brettell, 1997; Clandinin, 2009; Clandinin & Connelly, 2000; Gergen & Gergen, 1997) to create tangible data, in the form of an autobiographical narrative that was analysed and critically reflected upon to answer the research question.

Chapter 4 provides an overview of the theory that was developed during the analysis process of this study. This theory and analysis is then expounded in Chapters 5, 6 and 7. Each chapter discusses a group of related concepts and relationships from the theory. To assist the reader and provide greater clarity, where excerpts from the narrative are included in the analysis chapters to support the theoretical concept under discussion, they have been written in italics. Direct quotes from the published literature remain in the regular font.

Chapter 8 concludes the study, summing up the significant features of my flow experiences as a piano accompanist and how they compare to the general dimensions of flow proposed by Csikszentmihalyi, together with an analysis of the factors that contribute to flow and inhibit flow. By understanding more fully the phenomenon of flow as a personal performance experience, this personal case study adds to knowledge about the role piano accompanists play in the creative process of collaborative music performance. The chapter concludes by outlining some future research opportunities that have become evident on the completion of this study.

Summary of Chapter 1

Chapter 1 has provided for the reader an overview of this thesis, beginning with the purpose of the study, the research question, together with the background and the

significance of the study. A brief overview of the literature that informs this study has been included as well as a summary of the methodology that has been utilised in this thesis. The reader is also provided with a brief discussion on the ethical issues inherent in this research project. An overview of the thesis is provided so that the reader can clearly identify the research process and outcomes.

The next chapter is a review of the literature that informs this study into the nature of the phenomenon of flow in the collaborative performance experience of a piano accompanist. The chapter considers the literature related to flow as well as the literature that informs the music performance experience for a piano accompanist.

Chapter 2: Review of the literature

This chapter contains a review of the literature pertinent to this research study, thereby building a theoretical foundation for the thesis and the response to the research question. In order to understand the concept of flow in collaborative music performance for a piano accompanist, the chapter begins with an introduction to the role of the piano accompanist in various music making activities, citing the small body of literature that focuses on the characteristics of the role of the piano accompanist. In order to explore fully the experience of music performance from the point of view of the accompanist, it is necessary to broaden the discussion to include an overview of the literature regarding the aesthetics of music and the effect of music on human experience, with particular reference to the way music interacts with the emotions. The psychological construct of 'flow' defined by Csikszentmihalyi (2002) as an 'optimal experience' links the studies of flow and the human experience with studies that are concerned with the connections between emotion and music. The literature is investigated to clarify the characteristics of flow and also the inhibitors to flow, making reference to the four and eight channel flow models that have arisen from Csikszentmihalyi's work. The chapter concludes with a discussion on concepts related to flow, including the concepts of peak experience and peak performance, and the literature related to mindfulness and flow.

The piano accompanist as collaborative artist

The term 'accompanist' has been used for centuries to describe the person who provides musical accompaniment, usually on piano, for a singer or instrumentalist (Burkholder, et al., 2006). Over the last thirty to forty years the nomenclature has changed and the term 'collaborative pianist' or 'associate artist' has come into use (Graves, 2009; Katz, 2009), especially when one considers that the work undertaken by a pianist in the performance of a violin sonata of Brahms or Beethoven, for example, is far from the conventional understanding of 'accompanying'. Music

making in groups and ensembles is a musically challenging activity (Mills, 2003) as well as being intensely social (Schmuckler, 1997; Sutton, 2004). Schmuckler (1997, p. 266) asserts that "music has a significant, and somewhat unique, social context." The corporate act of making music as a group transcends the individual with the value of the whole far exceeding the sum of its parts. Twardzicki (2008) reports on a program where a group activity in the performing arts was used to reduce the stigma and promote social inclusion for people with mental illness, and Clift and Hancox (2001, p. 253) relate that singing in a choir can have considerable benefits for health and well-being: "singing was widely perceived as emotionally arousing and providing opportunities for emotional expression. It was also commonly experienced as energizing." The combined emotional, physical and psychological connection that occurs between members of a music ensemble can provide intense joy and personal satisfaction (Berenson, 2008; Kennedy, 2007; Rybak, 1995).

Piano playing, however, is a largely solitary pursuit (Nielsen, 1999). Pianists, whether soloists or accompanists, need to spend a lot of time practicing alone to gain the necessary skills to achieve even a moderate level of competence (Wiest, 2004). Hallam's study (1998) confirms that musical expertise was determined not only by the time spent practicing, but also by the time spent learning. The study reinforced the fact in predicting if a student would continue with instrumental music lessons "the child's personal motivation appears central, with musical and more general cognitive factors also important" (Hallam, 1998, p. 127). The data gathered also confirmed that playing in music ensembles such as orchestras, bands and chamber music groups "rehearses the skills necessary for the development of musical expertise. Some skills, for instance, sight-reading or listening, may be better developed in those circumstances than through individual practice" (Hallam, 1998, p. 127). There are many studies that have attempted to tease out what makes an expert musician and how deliberate practice and the self-regulation of learning strategies assists in attaining musical expertise (M. H. Berg, 2006; McPherson, 2005; McPherson & Zimmerman, 2002). Sloboda (1985) argues that the performance skill level is determined by the amount of direct practice undertaken. Rostron (2000, p. 43) states that "Sloboda's comments suggest that the option of being a skilled performer is open to the majority of the population provided they have sufficient motivation and have access to adequate teaching." Grusen (1988) contrasts this assertion by stating that "good

performance skills are not only dependent upon practice but also require some particular aptitude for which no amount of determination and expert teaching can substitute" (as cited in Rostron, 2000, p. 43). Rostron highlights the debate regarding whether performance skills can be attributed to hard work or talent, and his study confirms that of Ericsson and Charness (1994) that "expert performers may need to have some unique talents that provide them with the innate capacities to exercise their particular expertise" (Rostron, 2000, p. 43). Despite these varied points of view Ericsson, Krampe and Tesch-Römer's widely cited study (1993) asserts that it takes no less than ten years to move from novice to expert performance in any discipline. This is achieved through deliberate practice and the findings of my thesis support their results.

The literature on collaborative music performance and piano accompaniment bears out my own personal experience as a piano accompanist in that there is still a shortage of pianists who are interested in becoming accompanists and involving themselves in ensemble activities such as accompanying choirs, solo instrumentalists and singers (Röscher, 2003; Wiest, 2004). Wristen (1999, p. 27) comments that "traditionally, piano students are trained as soloists, which is somewhat ironic considering the reality that opportunities for solo playing are limited but there are many accompanying jobs available." Wiest (2004, p. 91) warns that while choral conductors and singers place high value on having an accompanist with whom they can work well, "not all solo pianists have experience in accompanying. There is an art to being a good accompanist." Mansell (1996, p. 19) adds to this view stating that "there is a common misconception that accompanists are second-rate pianists who couldn't make it as soloists. As an accompanist, you must have good pianistic technique – at least as good as any concert pianist." This is borne out by Sheldon, Reese and Grashel (1999) who found that the accompanist plays a vital role in performance quality. Graves' (2009) biographical article about professional accompanist Margo Garrett brings to light the excitement of this profession and the important collaborative work that is piano accompaniment. Berenson (2008) also writes of the joy of collaborative music making and the excitement of being part of the performance of great musical works. Emmerson (2009, p. 118) describes a similar joy with the study and performance of the work of Franz Schubert: "This is why we

return to experience some music many times, as it seems to be eternally regenerating."

The aesthetics of music

Music is an art form that draws upon and appeals to the physical, cognitive, emotional and spiritual dimensions of human kind. Music is central to the lives of billions of people "yet it has no concepts, makes no propositions; it lacks images, symbols, the stuff of language. It has no power of representation. It has no necessary relation to the world" (Sacks, 2008, p. ix). Music has the power to change our lives, shape cultures and change the course of history. During the 1960s, music was tied to social change (Rodnitzky, 1999) and it was music that gave voice to the concerns of the civil rights movement that engulfed America and the world during the 1950s and 1960s (Covach, 2006). The political and social movements that shape the history of the world continue to be defined by patriotic songs and music that can stir ordinary citizens to great acts of heroism (Burkholder, et al., 2006).

The aesthetic characteristics of great music and great performances of music are often intangible. Is it possible to know great music when one hears it? Davies suggests that great music "seems to speak to deep human feelings and experiences so that some works appear to possess not just content but profound content" (Davies, 1994, p. ix). Schmuckler (1997, p. 266) notes that "music provides a window into issues of aesthetic preference and emotional responses." What aesthetic qualities make 'great' music? Is a description of great music also defined by one's cultural background or education, or can great music transcend issues of personal taste and social milieu and stand objectively as 'great' music without the subjective analysis of social positioning and cultural definition? Gracyk (1999, p. 217) provides an answer:

> Music's aesthetic value emerges when one experiences it, yet its rewards are only accessible to persons who possess appropriate cultural capital and to whom such music personally matters. Music's value is therefore a function of the continuation of a musical culture.

Scruton (1997) argues that to understand what makes music beautiful and aesthetically pleasing requires a deep understanding of the component parts of pitch,

rhythm, tempo, timbre and form. Through critical reflection of music, he argues that music is more than just a mere collection of sounds. "The grouping of sounds is not dictated by their real relations, but is completed by us, in an act that is subject to the will" (Scruton, 1997, p. 29). The human interaction with sound is vital in the act of creating and appreciating 'great' music. While Scruton's work is based on the assumption that the classical tradition provides the only underpinning for an aesthetic of music, Gracyk (1999, p. 217) defends the position that "rock has a stronger claim on contemporary taste than classical" as it is the nearly omnipresent soundtrack to modern consumer culture. In an earlier article, Baugh (1993) asks his readers to consider that rock music demands an aesthetic response completely different to classical music. "Rock music involves a set of practices and a history quite different from those of the European concert hall tradition upon which traditional musical aesthetics have been based" (Baugh, 1993, p. 23). At a basic level, Davies (1999, p. 193) supports this view and reiterates Baugh's assumptions.

> Classical works are appreciated primarily for their forms, and the focus of attention in this music falls more on the work than the performance. The performer is subservient to the score she follows. By contrast, in rock music the performance is the object of attention and it is enjoyed and valued for its non-formal properties. The musicians usually have no score to direct them, and the sonic effects at which they aim are not ones that could be notated easily.

Davies (1999) argues that at a high level, there is very little difference in the aesthetics of rock music and Western art music. Gracyk (1999, p. 211) adds to the debate on the value of rock music by demanding that "we try to come to grips with the music on its own terms, that is, as belonging to one musical tradition rather than another." While both rock music and Western art music have many different sub-sets and sub-genres, all musical styles make demands on their performers according to the stylistic conventions of the genre.

Heinrich Schenker (1868 – 1935) was an Austrian musician, philosopher and theorist (Cook, 1989) whose analysis of tonal music has shaped the way modern musicians think about the structure of music and this, in turn, has shaped the way performers approach their preparation for performance. "Schenker's method suppresses foreground contrast so as to stress the large-scale continuity of the music" (Cook, 1989, p. 417). Schenker believed that performers at the end of the nineteenth

century lacked basic musicianship. "Performers played everything as it came, without projecting the large-scale structure which gave significance to the details" (Cook, 1989, p. 417). Music theorists who have built on the work of Schenker have created a culture of analysis that "leads to a heightened awareness of, to use Schenker's term, the particularities of the music" (Cook, 1989, p. 437). Performers today rarely present a performance of music without having spent time in research and analysis to fully understand the large and small-scale structures of the music that they are preparing to perform. In doing so, they are putting into practice the particular aesthetics relevant to their genre and responding to the expressiveness and emotions inherent in the music being performed (S. Davies, 1999). However, it is the balance between authenticity and order, and deeply felt emotional experience that is the hallmark of a great performer.

> Someone who hammers away enthusiastically at the piano keys without any discipline or sense of order is unlikely to produce music; the player whose fingering and technique are perfect but who lacks all feeling sounds dry and academic. To some extent, at least, we must learn to integrate our feelings and our technique; our discipline and our sense of musical freedom (Green & Gallwey, 1986, p. 195).

Since music often provides a strong aesthetic experience for both the performer and the listener, the literature in the field of aesthetics and music provides important context my study. Csikszentmihalyi (2002, p. 111) acknowledges that while flow can be achieved through in-depth listening to music, "even greater rewards are open to those who learn to make music." The 'optimal experiences' recalled by Csikszentmihalyi's (2002) research participants were often described as great moments of their lives and the diverse literature pertaining to the aesthetic and emotive qualities of music, for both listeners and performers, helps to contextualise this study on the characteristics of flow in collaborative performance for a piano accompanist.

Music performance and emotion

Our enjoyment of music is often linked to our emotions, and studies have shown that the more we understand the music we listen to, the more intense that emotional connection can be (Kreutz, Ott, Teichmann, Oswana, & Vaitl, 2008). Many studies have looked at how music can add to the emotional impact of film (Boltz, Schulkind, & Kantras, 1991; Cohen, 2001; R. J. Ellis & Simons, 2005) and in children's television, music can be used to manipulate emotion, visual and aural attention, as well as physical interaction (Buller, 2003). The emotive properties of music have also been exploited in advertising where music is used to enhance brand awareness (Zander, 2006). Zander's (2006, p. 478) study has implications for the advertising industry, for he states that music is capable of more than just mood enhancement: "It can convey information about the brand that words cannot – and not least in thirty seconds. In association with spoken words, music can give a notional sharpness that is head and shoulders above speech itself."

Other studies in the use of music as a marketing tool to enhance the retail experience for shoppers (Chebat, Chebat, & Vaillant, 2001; Dubé & Morin, 2001; Garlin & Owen, 2006; Spangenberg, Grohmann, & Sprott, 2005) point to music's ability to modify the emotions and even manipulate thoughts and behaviours. Music has also been used by athletes to deliberately manipulate their emotional state before a sporting event. "Participants consciously selected music to elicit various emotional states and frequently reported consequences of music listening included improved mood, increased arousal, and visual and auditory imagery" (D. T. Bishop, Karageorghis, & Loizou, 2007, p. 584). The use of music, and the deliberate manipulation of the characteristics of the music, especially the tempi, to enhance physical performance during sport and exercise, is also documented in other sport psychology literature (Karageorghis, Jones, & Stuart, 2008; Priest & Karageorghis, 2008; Vlachopoulos, Karageorghis, & Terry, 2000).

The power of music to affect human behaviour has not gone unnoticed in the field of medical science, and music as a therapy continues to grow in importance and influence (M. J. Silverman, 2006). Silverman's cataloguing of music therapy case studies over forty years serves as a useful tool for appreciating the impact of music in

various therapeutic situations. Clark et al. (2006) have shown that patients undergoing radiation therapy for the treatment of cancer reported some lowering of anxiety and treatment-related distress after listening to self-selected music. "The more participants used music, however, the greater was the reduction in treatment-related distress. This finding suggests that the 'dose' of music may have affected at least one emotional outcome" (M. Clark, et al., 2006, p. 262). Music therapy now plays an important role in the care of persons with dementia (Belgrave, 2009; Bruer, Spitznagel, & Cloninger, 2007) and has increasing roles to play with young people, such as the study by Katagiri (2009, p. 15) where it was shown that "background music can be an effective tool to increase emotional understanding in children with autism, which is crucial to their social interactions."

Music performance can express the deepest of human emotions, even though the "music itself is inanimate and cannot be said to have emotions" (Trivedi, 2001, p. 411). Carr (2004, p. 266) adds to this debate by stating that "music has emotional significance, not merely because it causally arouses feelings (which we may nevertheless admit that it does) but by virtue of its intrinsic emotional character." It is not the origin of sound itself that is of interest, but "the intentional identity of what we hear in sounds when we hear them as music" (A. Hamilton & Scruton, 1999, p. 158). Cook (1989) explains that in seeking to understand the significance of music in a modern society, we focus on the effects of music on the listener. In seeking to shed further light on the role of the music listener, Hargreaves (1986, p. 108), notes that there are three distinct responses to music that can be identified – (1) *mood/emotional* responses that listeners exert little control over, (2) *taste* responses, which "reflect long-term predilections, and are reflected in activities such as concert-going and record buying" and (3) *preference* responses, which are seen as responses that are less committed than responses dictated by taste. Hargreaves argues that people prefer music that is moderately familiar to them, but after listening to new styles of music repeatedly, can grow to like a new style and hence change their musical preferences. Flowers & Murphy (2001, p. 31) found that music preference was often affected by early experiences in music education as "what was learned in music education classes (general music, ensembles, and private instruction) had a lasting effect, both in subsequent activities that were selected and in the opinions and attitudes that were formed."

The complexities of musical stimuli do not allow for a definitive understanding of musical taste and preference, but the role of music as a tool for engaging with the depth of emotions that we experience as humans, demands a closer investigation using the tools and techniques developed in the field of experiential psychology. One such psychologist is Mihaly Csikszentmihalyi and his work on the concept of 'flow' provides further insight into the psychological dimensions of the experience of music performance.

The concept of 'flow'

The term 'flow' was first defined by the American psychologist Mihaly Csikszentmihalyi. His earliest work focused on the phenomenon of optimal experience (Csikszentmihalyi, 1975), those best moments in our lives when we feel in control of our actions and we feel a deep sense of exhilaration and enjoyment that becomes a landmark in memory for what life should be like. He was fascinated by the fact that visual artists could become so absorbed in their creation of a painting that they "persisted single-mindedly, disregarding hunger, fatigue and discomfort" (Nakamura & Csikszentmihalyi, 2002, p. 89). Csikszentmihalyi's flow research began with a study of the phenomenon of this intrinsically motivated activity, through which he came to develop a model that could explain the multi-faceted nature of these artists' experiences (Csikszentmihalyi, 2002). His first book to describe what he called the 'flow' experience *Beyond Boredom and Anxiety,* was published in 1975 (Csikszentmihalyi, 1975).

Jackson and Eklund (2002, p. 133) have described flow as a psychological state that "represents those moments when everything comes together for the performer; it is often associated with high levels of performance and a very positive human experience." These positive human experiences or optimal moments in our lives are not those associated with mere pleasure-seeking behaviours but these "best moments usually occur when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile" (Csikszentmihalyi, 2002, p. 70). Csikszentmihalyi suggests that by achieving control over the contents of our consciousness, we are able to "turn even the most humdrum moments of everyday lives into events that help the self to grow" (Csikszentmihalyi, 2002, p. 70).

The phenomenon of flow "drives individuals to creativity and outstanding achievement" (Csikszentmihalyi, 2002, p. 213). The experience is so intense and absorbing that nothing else seems to matter, time seems to stand still and the experience itself is so enjoyable that people will continue to do it for the sheer sake of experiencing the enjoyment, no matter what the cost. "It is a state of consciousness where one becomes totally absorbed in what one is doing, to the exclusion of all other thoughts and emotions" (Jackson & Csikszentmihalyi, 1999, p. 5). In fact, Csikszentmihalyi suggests that the flow experience refers to "a self-contained activity, one that is done not with the expectation of some future benefit, but simply because the doing itself is the reward" (Csikszentmihalyi, 2002, p. 67). Surprisingly, it did not matter whether the enjoyable activity was physical or something more sedentary; participants all reported the phenomenon of the experience in similar ways. "The combination of all these elements causes a sense of deep enjoyment that is so rewarding people feel that expending a great deal of energy is worthwhile simply to be able to feel it" (Csikszentmihalyi, 2002, p. 49).

While Csikszentmihalyi and Robinson (1990) investigated the links between flow and the aesthetic experience of looking at art, Swanwick (1999) in his book on music education with particular reference to the nature of musical experience and its implications for music education, links the flow phenomenon to aesthetic experience in music.

> "Flow" is really just one more attempt to describe and evaluate those experiences which seem to lift us out of the ruts of life and which have been variously called transcendental, spiritual, uplifting, "epiphanies", yes and "aesthetic" (Swanwick, 1999, p. 18).

He goes on to comment that the aesthetic experience of music is common across all cultures, providing the participants, including performers and audiences, with opportunities to engage in this aesthetic experience or flow, thus giving rise to a strong sense of the value of music in all cultures (see also Gabrielsson, 2010; Swanwick, 1999).

Csikszentmihalyi first described flow as an 'autotelic' experience with the term itself based on the Greek words *auto* (self) and *telos* (goal) (Nakamura & Csikszentmihalyi, 2002). Describing an experience that is intrinsically rewarding, the

'autotelic' experience or flow experience, came to be associated with those times when one has total involvement in an activity, often leading to peak experience. The construct for flow links closely to Maslow's theory of motivation (Maslow, 1970), which provides a model to explain how humans are driven by a hierarchy of needs: physiological, safety, social, esteem and self-actualisation needs. Maslow's model firstly assumes "that the needs are activated in a sequential manner with a need at a higher level emerging only when the next lower-level need has been satisfied" (I. T. Robertson, Smith, & Cooper, 1994, p. 20) and secondly states that "when a need is satisfied, it decreases in strength and ceases to dominate behaviour" (I. T. Robertson, et al., 1994, p. 20). Furthermore, the model helps to clarify the concept of the higher needs: esteem (associated with the need for achievement, challenge and responsibility) and self-actualisation (associated with the needs for meaning and sense of purpose, personal development and stimulation), lead to an immediate desire for more 'higher' experiences (I. T. Robertson, et al., 1994). The experience of flow, with its 'autotelic' characteristics, fulfils the higher needs of esteem and self-actualisation as it is associated with those activities that provide a sense of achievement and personal challenge thereby providing a sense of meaning and purpose for life.

Csikszentmihalyi has also suggested that certain types of people are more likely to experience flow due to their personality type. He describes the 'autotelic self' as "one that easily translates potential threats into enjoyable challenges" (Csikszentmihalyi, 2002, p. 209). Such people do not allow outside forces to determine their enjoyment of life. They are never bored, seldom anxious; involved in what goes on, and in flow most of the time. They have learned to set clear goals for themselves, become totally immersed in whatever activity they are doing, know how to concentrate on the task at hand and thus learn how to enjoy the immediate experience, so that literally anything that happens can be a source of joy. Several important characteristics of the 'autotelic self' have been identified such as desire for challenge and superior concentration skills (Jackson & Eklund, 2002, p.136) as well as a general curiosity and interest in life, diligence and high self-esteem, resulting in the ability to be motivated by intrinsic rewards (Nakamura & Csikszentmihalyi, 2002).

Nakamura and Csikszentmihalyi (2002) emphasize that the flow state has been confirmed in a wide range of experiential domains including art and science, aesthetic

experience, sport and literary writing. Furthermore, the characteristics of the flow phenomenon are the same regardless of gender, class, age or activity. A given individual can experience flow in almost any activity with highly organised goal and feedback structures. But even these activities can be boring or create anxiety and stress. "It is the subjective challenges and subjective skills, not objective ones, that influence the quality of a person's experience" (Nakamura & Csikszentmihalyi, 2002, p. 91).

> Being "in flow" is the way that some interviewees described the subjective experience of engaging just-manageable challenges by tackling a series of goals, continuously processing feedback about progress, and adjusting action based on this feedback (Nakamura & Csikszentmihalyi, 2002, p. 90).

The subjectivity of the flow experience recalls the ability of human consciousness to order and make sense of the vast amounts of information that confront us as sentient beings during every day of our lives. Each waking moment of our day, information is processed by the investment of our attention (Chun, Golomb, & Turk-Browne, 2011) and we become aware of this information as it enters our consciousness through thinking, willing and feeling about this information (Nakamura & Csikszentmihalyi, 2002). However, it is the level of attention that plays a key role in the phenomenon of flow. An intense concentration on a task often results in the merging of action and awareness and the resulting loss of self-consciousness results in the passage of time becoming distorted because attention is so fully focused on the task and not the surroundings (Nakamura & Csikszentmihalyi, 2002).

Privette (1983) deepens the understanding of the flow phenomenon by explaining that flow can exist on a continuum. Flow can be experienced as 'microflow' such as when listening to music or even chewing gum, to 'macroflow' when the level of skills and challenge are high and in balance.

> Flow ranges from repetitive, almost automatic, behavior that provides a small increment of enjoyment to very complex behavior. Microflow, for example, may be as inconsequential as chewing gum, whereas deep flow or macroflow has a full range and depth of potential, which may be accompanied by ecstasy (Privette, 1983, p. 1362).

The findings of my study into the characteristics of flow for a piano accompanist also

suggest that flow can exist on a continuum across a range of music performance situations. While the phenomenon has been shown to have many common characteristics across these performance events, the duration and intensity of the flow experience can vary depending on the circumstances, supporting Privette's findings. Whatever form the flow experience might take, one of its key characteristics is that it is fun. The narrative that forms the data for this study recalls those collaborative performance experiences that were memorable, with many of them including intensely enjoyable elements of collaborative music performance as part of the experience.

The characteristics of flow

The research undertaken by Csikszentmihalyi in the 1970s indicated that when participants described an intensely enjoyable activity, they mention at least one of nine major components for this activity: a challenging activity requiring specific skills, a merging of action and awareness, clear goals, immediate feedback, focused attention, a sense of personal control over actions, a loss of self-consciousness, the transformation of time and an 'autotelic' experience (Csikszentmihalyi, 2002). "Delineating the characteristics of flow has aided researchers in understanding the phenomenology of this psychological state, although it has only provided clues as to how flow states actually occur" (Kowal & Fortier, 1999, p. 356). As a whole, these elements represent the optimal experience now known as flow (Jackson, Martin, & Eklund, 2008) and a study of the literature that underpins the formulation of Csikszentmihalyi's nine components of flow will provide a basis for the development of a theory for understanding the research question of this thesis: How is the phenomenon of flow manifest in my collaborative music performances as a piano accompanist?

The balance between challenge and skills

From the earliest research (Csikszentmihalyi, 1975), a balance between challenges and skills was recognised as one of the central conditions of the flow experience. Optimal experiences and flow are strongly linked to activities where the participant is faced with a graded set of challenges that are able to accommodate a

person's continued and intensifying enjoyment as his or her skills grow (Nakamura & Csikszentmihalyi, 2002).

In order to understand this more fully, the terms 'challenge' and 'skill' need to be perceived quite broadly. 'Challenge' refers to the circumstances that someone may find himself or herself in at any particular time. 'Skill' refers to our ability to meet the demands of these circumstances (Jackson & Csikszentmihalyi, 1999). Early studies by Csikszentmihalyi (1975) indicated that challenges that provided an optimal level of enjoyment were also those that required a concentration of attention and a clear set of goals, and as such, were often bounded by rules. Games, sporting activities, and artistic pursuits such as playing music or dancing often provided these types of challenges and skills. This is further borne out by subsequent studies that include, for example, the challenge of partaking in a sporting activity, either as a member of a team or as a solo participant (Jackson & Roberts, 1992); the challenge of ballet dancing (C. L. Levine, 2006) or the challenge of participating in a musical ensemble (B. N. Kraus, 2003).

However, Csikszentmihalyi (2002) also noted that solitary pursuits, such as reading, also provide this level of challenge and focused attention, as it requires its participants to possess a range of appropriate literary skills, thus leading to many people experiencing enjoyment and the phenomenon of flow while engaged in this activity. McQuillan and Conde (1996) further explored the flow experience for readers. They discovered through two studies of optimal experience while reading that there were strong links between the personal interest in a book, the enjoyment of reading and the experience of flow. Intense conversation in a social setting can also provide flow experience when the challenge of the subject matter and the social skills are matched (Csikszentmihalyi, 2002). This is also borne out in studies of the phenomenon of flow in daily experience by Massimini and Carli (1988). Their subjects, all teenage students of a classical lyceum in Milan, supported the view that at times "every activity can be boring, anxiety producing, or apathy producing, as well as being a context for optimal experience" (Massimini & Carli, 1988, p. 277). The students reported being in flow most often when they were engaged in class work or studying, closely followed by situations where they were socialising with their peers.

The distinguishing factor in Csikszentmihalyi's studies is that the level of challenge and skill has to be finely balanced in order to achieve enjoyment and

optimal experience. His studies provided evidence that the challenge-skills balance is a crucial pre-condition for the phenomenon of flow. Jackson and Csikszentmihalyi (1999, p. 16) further refine this by stating that "to experience flow, it is not enough for challenges to equal skills; both factors need to be extending the person, stretching them to new levels." Furthermore, just as challenges are perceived differently for each person, skills are also defined individually and are not an objective set of abilities. Rather, each individual is responsible for their own perception of the challenges they face and the skills they use to meet these challenges. This highly personal experience of flow also relies heavily on the participant having a high level of self-confidence. "It is important to realise that what you *believe* you can do will determine your experience more than will your actual abilities" (Jackson & Csikszentmihalyi, 1999, p. 17).
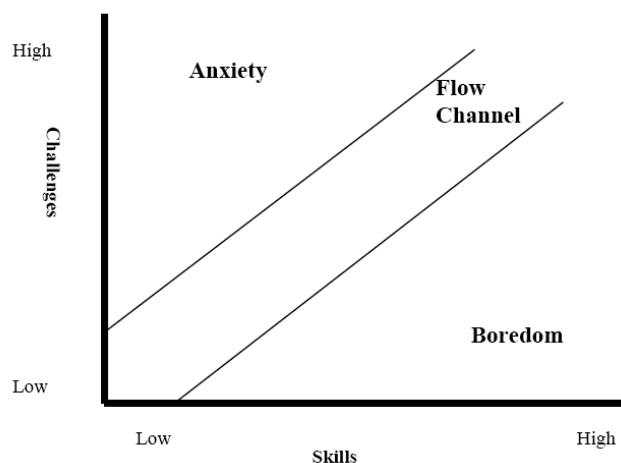
Figure 1: Flow model developed by Csikszentmihalyi (2002, p. 74)

The figure above was developed by Csikszentmihalyi (2002) to outline the relationship between challenges and skills that, when appropriately balanced, can facilitate the phenomenon of flow. Wright, Sadlo and Stew (2006) used a qualitative study to further analyse this challenge-skill experience as it relates to flow by interviewing an artist, a musician and a horticulturalist.

The artist cited examples of flow experiences when painting, and the musician

when she was conducting a choir. The horticulturist had no experiences of flow

while working within horticulture during the period of the study, but

experienced challenge-skills when writing a letter (Wright, et al., 2006, p. 29).

In each case, the participants could facilitate a flow experience by getting into an environment where there were no distractions or interruptions; they made a conscious decision to start what they were doing; and gradually became more focused on the activity so that time seemed to go very fast. "A challenge-skills experience appears to lead to feelings of joy and elation, increased levels of volition, and a feeling of being more able to cope with life's stresses" (Wright, et al., 2006, p. 30). The study was inconclusive regarding the reasons for the horticulturist not experiencing flow but suggested that it could have related to the period of time the study was undertaken. It was during the winter and this is a "less pleasurable time of year to work in the garden because there are many practical tasks to be done such as delivering manure" (Wright, et al., 2006, p. 31).

The challenge-skills balance is such an important factor in the flow experience that Jackson and Csikszentmihalyi (1999) give many examples on how one can modify both the challenges and skills to maximise the potential for the phenomenon of flow in sport. During sporting activities the challenges include physical (strength, endurance, flexibility, speed, agility) and mental challenges (concentration, self-talk, imagery, strategy planning, goal-setting, persistence, cognitive understanding). Furthermore, challenges in sport can be increased by understanding and refining the technique and equipment used for the activity and as well building more knowledge in areas such as nutritional and energy requirements (Jackson & Csikszentmihalyi, 1999, p. 49). In music the challenges include the manipulation of the harmonic, melodic and rhythmic elements of music when engaged in music composition tasks (MacDonald, et al., 2006; Preston, 2009) as well as the technical demands of playing an instrument either as a soloist or in a music ensemble (Alberici, 2004; Bernard, 2009; Steckel, 2006). Skills can also be modified and improved to maintain a flow experience, but these usually take more time. Jackson and Csikszentmihalyi (1999) explain that athletes need to have confidence in their skills to meet the challenges that they encounter in their sport. While skills are often high, it is confidence that can fluctuate between various challenge situations. "When asked about what is the most important for flow, one of the factors elite athletes cite most frequently is confidence. As one

competitor put it, 'confidence encompasses everything'" (Jackson & Csikszentmihalyi, 1999, p. 59). Similarly, in music and theatrical performance, confidence in one's skills plays an important role in achieving flow during performance (Gregg, Clark, & Hall, 2008; Hanrahan, 2005; T. C. Murphy, 2004; Talbot-Honeck & Orlick, 1998; J. Taylor & Taylor, 1995).

Jackson and Csikszentmihalyi (1999, p. 37) purport that sport is an ideal activity to provide challenges that can facilitate the flow experience: "for many people, physical activity provides the clearest and most concrete experiences of overcoming challenges." Similarly, music performance is highly adept at providing opportunities for overcoming challenges. Talbot-Honeck and Orlick (1998, p. 66) found in their study of the mental skills of top classical musicians that they "greatly enjoyed learning and looked for opportunities to grow in their music and other areas of their lives." For some of the performers interviewed, they enjoyed music even more than in their early years of learning.

> For a majority of musicians, years of work had not in any way diminished their enjoyment of music; on the contrary, it had increased and intensified over the years as their levels of expertise has risen. They felt that they knew and understood more and loved it even more (Talbot-Honeck & Orlick, 1998, p. 69).

These classical musicians actively sought out new challenges so that their skills could increase over the years, helping to maintain a high level of intrinsic motivation for their work. Their reported levels of enjoyment seem to indicate that their experiences had the same characteristics of the high challenge – high skills balance of flow as described by Csikszentmihalyi.

Custodero's (2005, p. 187) work indicates that even young children are adept at remaining in a flow experience as they "strive to keep skills and challenges balanced through mastering tasks." Her studies of young children participating in various musical activities in the classroom indicate that infants and toddlers engage in challenge-seeking behaviours (purposeful activity initiated by the child, rather than by the adult) and challenge-monitoring behaviours (making the presented material more challenging by transforming it in some way) (Custodero, 2005). Their experience while engaged in these musical activities was measured by observing their behaviour

in familiar musical settings, taking into account their developmental state. Custodero's methodology of observation is used to measure the flow experiences, and the types of behaviour observed support her hypothesis that young children can experience flow and can also balance their challenges and skills to remain in the flow state. As a result of this study, she hopes to encourage teachers to "assess the pedagogical milieu and adjust their delivery and feedback to be responsive to demonstrations of the learner's engagement with the musical task" (Custodero, 2005, p. 205).

Similarly, St. John (2006) found that flow could be observed in a *Kindermusik* classroom with children aged four and five years. While the flow state is a subjective experience, she observed the children engaged in specific flow-related behaviours so that their challenges and skills could remain in balance and facilitate the flow state. "If the child's perceived challenge and skill is not quite in balance, she may look for a model to assist with engagement and/or to discover ways to manipulate the material, making it more challenging" (St. John, 2006, p. 1656).

In striving for the optimal balance between skills and challenges, the musician, like the sportsperson, faces an on-going task of maintaining and developing the skills needed for expert performance. The level of skills required for successful music performance has been studied extensively (Ericsson & Charness, 1994; Ericsson, et al., 1993). MacDonald, Byrne and Carlton (2006) comment on the importance of finding the right balance between skills and challenges. Their study of creativity and flow in music composition emphasised the need to provide classroom tasks that are achievable and near the students' current level of skill and experience so that they have no fear of failure within the music composition activity. They found that fear and anxiety can be detrimental to the flow experience and subsequently can inhibit the creativity needed in compositional tasks.

Csikszentmihalyi (2002) constantly refers to the 'psychic energy' required to maintain the flow state. Psychic energy describes the "processes that take place in the consciousness and include thoughts, emotions, will and memory" (Csikszentmihalyi, 2002, p. 248). The 'autotelic' personality actively seeks out situations where the challenges and skills are brought into balance. No matter what the situation, whether it be at work, engaging in a hobby, learning task or social activity, the experience can provide a sense of deep enjoyment and satisfaction when the challenges are perceived

to be within one's grasp, pushing the skills to higher levels of achievement and building on the self-confidence and self-determination to produce the experience of flow. Flow can occur while engaged in any number of challenging activities, but all these experiences have this in common:

> It provided a sense of discovery, a creative feeling of transporting the person into a new reality. It pushed the person to higher levels of performance, and led to previously undreamed-of states of consciousness. In short, it transformed the self by making it more complex. In this growth of the self lies the key to flow activities (Csikszentmihalyi, 2002, p. 74).

Action-awareness merging

When the skills and challenges are finely balanced so that one experiences a sense of enjoyment in stretching the skills to meet these new challenges, the experience can become so focused that "there is no excess psychic energy left over to process any information but what the activity offers. All the attention is concentrated on the relevant stimuli" (Csikszentmihalyi, 2002, p. 53). Csikszentmihalyi provides a useful description of this phenomenon of action and awareness merging from the point of view of a ballet dancer:

> Your concentration is very complete. Your mind isn't wandering, you are not thinking of something else; you are totally involved in what you are doing… Your energy is flowing very smoothly. You feel relaxed, comfortable, and energetic (Csikszentmihalyi, 2002, p. 53).

This dimension of flow has been linked with the idea that things seem to happen automatically (Kowal & Fortier, 1999). In a quantitative study conducted by Jackson, Thomas, Marsh and Smethurst (2001) examining the relationships between flow, self-concept, psychological skills, and performance, they included a study of the role of automaticity in athletes' mental and physical performance. Moors and De Houwer (2006) discuss several concepts associated with automaticity linking it with unintentional, uncontrolled, autonomous or unconscious actions. In Jackson, Thomas, Marsh and Smethurst's study (2001, p. 146) their participants' description of automaticity reads: "During competition, I don't think about performing much – I just let it happen." They concluded that there was not a strong relationship between automaticity and flow, but they also felt their findings were unclear due to the

misunderstanding of the athletes regarding this experience and its effect for their mental and physical performance. Pace's study (2004), which adopted a grounded theory methodology, was able to add some breadth to this phenomenon. His participants reported that when the actions or skills were relevant to the task at hand, some of the awareness did not disappear from the consciousness. For instance, while playing football, the awareness of the physical surroundings seems to be heightened. "It is a bit different in sport as well because you are consciously aware of your environment. If someone's coming to tap you, that's the thing you have to be aware of" (Informant 7 as cited in Pace, 2004, p. 353).

Informants in the study by Pace into the flow experience of Web users generally report having a reduced awareness of their physical surroundings, interactions with other people and even their physical needs (Pace, 2004). Martin and Cutler (2002) also reported similar experiences of the dimensions of flow in their study of the flow experience and motivation of theatre actors.

> For instance, when actors believed their skills were adequate and matched the difficulty of the roles they were playing, they also were likely to report that they had clear goals, were in control, were very focused, experienced enjoyment, felt a merging of their movements and their self-awareness, and operated on automatic pilot (Martin & Cutler, 2002, p. 350).

Csikszentmihalyi (2002, p. 54) postulates that, "although the flow experience appears to be effortless, it is far from being so. It often requires strenuous physical exertion, or highly disciplined mental activity." However, the merging of actions and awareness, one of the characteristics of the flow phenomenon, adds to the optimal experience as it eliminates self-doubt and questioning. "In flow there is no need to reflect, because the action carries us forward as if by magic" (Csikszentmihalyi, 2002, p. 54).

Clear goals and unambiguous feedback

Complete involvement in an activity that produces the phenomenon of flow is predicated on the fact that there are clear goals to achieve and unambiguous feedback about the achievement of these goals. Some activities have very short-term goals. In team sports, the goals are clearly defined by the rules of the game and the feedback is clear and instant – scoring a point, kicking a goal. Some activities have long-term goals and feedback, but these activities can still provide flow experiences for the

participants. Csikszentmihalyi gives the example of gardeners who experience intense enjoyment from patiently waiting and seeing their plants that they have tended carefully, grow and flourish (Csikszentmihalyi, 2002, p. 55). This feedback can come in many different formats; what is important is the knowledge that the goal has been achieved. "Such knowledge creates order in consciousness, and strengthens the structure of the self" (Csikszentmihalyi, 2002, p. 57).

Csikszentmihalyi states that some goals and feedback can be quite ambiguous as in the case of music composition. A composer may wish to compose a piece of music, but how does he or she know whether the music that is created is 'right' or 'wrong'? The musical goals of a jazz band, where the music is improvised, are sometimes negotiated on the move and develop as the activity occurs. The band members themselves can provide instant feedback through their musical acceptance and development of the various motives and phrases that arise during the improvisation process. Thus in many creative activities, "a person must have developed a strong personal sense of what she intends to do" (Csikszentmihalyi, 2002, p. 55). Musicians, artists and others engaged in creative activities, need to develop the ability to self-assess, providing their own feedback against internally produced criteria for what is 'good' or 'bad'. Once this ability is cultivated, the phenomenon of flow can occur even in these typically subjective activities.

St. John (2006) also reports on the importance of immediate feedback and clear goals in the experience of flow within a *Kindermusik* classroom. Her study showed that musical activities such as playing instruments to recorded music and movement activities using manipulatives such as a scarf, that were multi-sensory in nature, were highly conducive to flow as they provided immediate feedback and clear goals to the participants.

Goal setting is an important field in psychology and an understanding of the way this effects performance outcome is important in many disciplines including music. Talbot-Honeck & Orlick (1998, p. 63) interviewed elite classical musicians and found that their goals were divided into three subcategories: "self-growth or personal excellence goals, goals concerning the music itself and a strong desire to express feelings with their music or to give something of themselves in their interpretation of it." The personal excellence goals involved their growth as a musician and artist. The musical goals were driven by a desire to interpret the music

as well as they could, and they were further driven to communicate emotionally with their audience and colleagues. Only one musician expressed a goal that was materialistic, even though this could well be a valid goal for a professional musician.

In some performance settings, feedback is a vital aspect of the flow experience. In the case of theatrical performers, the audience "becomes a mirror that transmits immediate and unambiguous feedback" (Sato, 1988, p. 109). While this can produce a positive effect for the performer, such feedback may, at times, interfere with the concentration on a flow activity. Sato suggests that even members of motorcycle gangs 'perform' as if their actions were written in a script. Their characters, either rogue or hero, are played out in front of audiences who view the actions of the gangs and provide a type of feedback similar to that experienced by actors in a play. This type of immediate feedback from an audience provides a "heightened sense of self to the participants through the enactment of a heroic role in front of a public, and through the use of skills and discipline" (Sato, 1988, p. 116).

Concentration on the task at hand

One of the most reported characteristics of flow in the research data is that which pertains to concentration or focus of attention. Activities that are intensely enjoyable often require a complete focusing of attention on the task itself, leaving no room in the mind for any distracting thoughts. The sense of fulfilment and order of consciousness that comes from engaging in an activity with a sustained level of concentration and focused attention allows participants to experience the positive phenomenon of flow. Csikszentmihalyi reports the experience of focused attention of a dancer:

> I get a feeling that I don't get anywhere else…I have more confidence in myself than any other time. Maybe an effort to forget my problems. Dance is like therapy. If I am troubled about something, I leave it out of the door as I go in [the dance studio] (Csikszentmihalyi, 2002 p. 59).

In this case, not only is the focused attention contributing to a development of confidence in performance, it is acting in a therapeutic manner. Similarly, a mountaineer reports on this phenomenon:

> When you're [climbing] you're not aware of other problematic life situations. It becomes a world unto its own, significant only to itself. It's a concentration

thing. Once you're into the situation, it's incredibly real, and you're very much in charge of it. It becomes your total world (Csikszentmihalyi, 2002, p. 59).

Focused attention seems to bring a heightened sense of the reality to the task so that all other distracting elements – including personal comfort, fatigue, everyday worries and concerns – all get pushed aside in one's thoughts while the activity is progressing. Tellegen and Atkinson (1974, p. 274) refer to this focused attention as absorption and suggest "absorbed attention is highly 'centered' (in a roughly Piagetian sense) and amplifies greatly the experience of one part of reality, while other aspects recede from awareness." While their study is dealing with openness to absorbing and self-altering experiences as a trait relating to hypnotic susceptibility, it does provide useful data on the experience of focused attention and concentration for individuals. They report "the absorbed individual often seems not to notice external events that would normally draw attention" (Tellegen & Atkinson, 1974, p. 274). The paper by Chun, Golomb and Turk-Browne (2011) draws together many important studies in the field of attention to provide a taxonomy for understanding internal and external attention adding more clarity to the concept of focused attention as it applies to Csikszentmihalyi's model of the phenomenon of flow.

Sense of personal control over actions

An interesting characteristic of the phenomenon of flow is the sense of control one can feel while engaged in a highly absorbing and enjoyable activity. Even if perfection in the execution of the activity is not actually achieved, and is probably never achieved, the perception that this is indeed possible is one of the strongly reported characteristics of the flow experience (Csikszentmihalyi, 2002). To illustrate this, Csikszentmihalyi describes the dancer's experience:

A strong relaxation and calmness comes over me. I have no worries of failure. What a powerful and warm feeling it is! I want to expand, to hug the world. I feel enormous power to effect something of grace and beauty (Csikszentmihalyi, 2002, p. 60).

Feeling in control of one's situation is a powerful motivational factor when engaged in any activity, whether related to the work one does every day or the leisure activities that are engaged in. Csikszentmihalyi explains that, "what people enjoy is not the

sense of being in control, but the sense of exercising control in difficult situations" (Csikszentmihalyi, 2002, p. 61).

Bandura's (1982) theory of self-efficacy also adds depth to the understanding of this aspect of the flow phenomenon. His theory refers to situation-specific self-confidence, and is the "performer's perception of his/her competence to succeed in a given task at a given time" (Hardy, Jones, & Gould, 1996, p. 46). Hardy, Jones and Gould (1996) build on Bandura's theory of self-efficacy to suggest that efficacy expectations are built upon four sources: performance accomplishments, vicarious experience, verbal persuasion and emotional arousal. Performance accomplishments that are positive, and particularly those that require an exertion of effort to master a task that is perceived to be difficult, result in the development a high level of self-efficacy. Bandura (1982, p. 133) asserts that

> Positive incentives foster performance accomplishments. Gaining knowledge and skills that enable one to fulfil personal standards of merit tend to heighten interest and a firm sense of personal efficacy. Success in attaining desired outcomes through challenging performances can further verify existing competencies.

Placing Bandura's work within the discipline of music, Hallam's (1998, p. 128) study of musical expertise found that while being successful is unlikely to be the only factor in determining motivation to continue playing an instrument, "a child's self-determination is of central importance in relation to motivation to continue to play an instrument." A second source of self-efficacy comes from "seeing similar others perform successfully" (Bandura, 1982, p. 126). This vicarious experience can enhance self-efficacy when one views this success and believes they too possess similar capabilities. However, it can have a negative effect, if those observed fail to achieve in their performance, thus lowering the observers' judgement of their own capabilities. Thirdly, verbal persuasion is used widely to encourage individuals to try hard to succeed in a task and to help them to believe that they possess the capabilities to achieve what they seek (Bandura, 1982). Provided the verbal appraisal is within realistic bounds, verbal persuasion can assist to boost a sense of personal efficacy. Finally, the emotional state of an individual can have either a positive or negative effect on their perceived levels of capability.

Because high arousal usually debilitates performance, people are more inclined to expect success when they are not beset by aversive arousal than if they are tense and viscerally agitated. In activities involving strength and stamina, people read their fatigue, aches, and pains as indicants of physical inefficacy (Bandura, 1982, p. 127).

When relating this aspect of the flow phenomenon, the sense of personal control over actions, to music performance, Schneiderman (1991) comments on the librating feeling that can occur when one is totally immersed in the music during performance. She emphasises "I feel that I am still in control despite the surrender. One controls events through the music even as you give yourself up to it. As I play, I feel secure, not adrift at sea" (Schneiderman, 1991, p. 96). Pace (2004) also reports the sense of control as a flow phenomenon for Web users. Some of his participants reported this experience as an absence of any concerns about failure and, despite searching on the Web for very specific pieces of information, the experience of the flow phenomenon gave them the confidence to believe they would be able to find the information easily.

The loss of self-consciousness

When an activity becomes totally absorbing and requires fully focused concentration, there is not enough attention left for thoughts associated with events outside of the activity, and the awareness of self can temporarily disappear. An activity that has clear goals, consistent feedback and presents a balance of skills and challenges requiring one's full concentration and focus leaves little room for consideration of self-conscious thoughts such as "What are other people thinking about me? Do I look weird?" The mind is totally focused on the task at hand in a way that heightens the reality of the situation (Csikszentmihalyi, 2002).

Csikszentmihalyi dispels the view that a loss of self-consciousness means a lack of awareness or control. He likens it to a violinist in performance. "A violinist must be extremely aware of every movement of her fingers, as well as the sound entering her ears, and of the tonal form of the piece she is playing, both analytically, note by note, and holistically, in terms of its overall design" (Csikszentmihalyi, 2002, p. 64). He goes on to state, "loss of self-consciousness can lead to self-transcendence, to a feeling that the boundaries of our being have been pushed forward" (p. 64).

Schneiderman (1991, p. 90) also reports a similar sensation when totally immersed in music performance:

> At the same time, ironically, there is an extreme intensification of the sense of hearing and touch and "feeling" – that commanding but anatomically unlocatable sense. One is keenly sensitised to tonal quality, volume level, nuance of melody and rhythm, harmonic progressions, pacing, melodic intervals.

The loss of self-consciousness presents an interesting paradox in the study of the flow phenomenon. It is a subjective experience for each individual and provides a powerful motivation to continue in an enjoyable activity. However, if one were to analyse one's personal experience while in flow, the self-consciousness required for such study would stifle the depth of the experience. It is only afterward, when the activity is over, can reflection and self-consciousness be used to examine the experience that has been enriched through the new skills and fresh experience. Schneiderman (1991, p. 89) describes this phenomenon as experienced by herself in music performance:

> When I further attempt to define the very special state of mind I feel during this immersion it is elusive. If I ask myself "what am I thinking?" or "where is my attention focused?" my focus shifts to the training of attention itself and what I am thinking changes. The brain cannot examine itself.

This example reinforces the complexity of examining the flow phenomenon. Jackson (1995) validates the work of qualitative researchers in this field as these methodologies add depth to our understanding of the experiences related to this flow phenomenon, however, she continues to work with other researchers to report quantitative studies in flow research in sport (Jackson, et al., 2008). Other researchers have adapted empirical methodologies (Jackson & Eklund, 2002; Jackson, et al., 2008) to build a body of knowledge that can add to our understanding of the flow without being so reliant on the purely subjective data based on the recollection of an event after it has happened. Jackson and Marsh (1996) developed a Flow State Scale to measure flow in sport and physical activity settings that is based on past qualitative and quantitative analyses of the flow experience.

The transformation of time

Participants in many of the flow studies report that one of the defining characteristics of the flow phenomenon is the sense that time has been transformed in some way. When one is meeting the demands of a challenging activity with fully focused attention, it can seem the hours pass like minutes (Conti, 2001). Occasionally, it can be the opposite, and time seems to pass very slowly. Pace (2004, p. 354) suggests that our experience of time changes with the amount of attention we direct towards it: "When one is attentive to time, as in the case of waiting for a boring lecture to finish, time seems to pass relatively slowly." In the case of the ballet dancer, both can occur:

> Two things happen. One is that it seems to pass really fast in one sense. After it's passed, it seems to have passed really fast. I see that it's 1:00 in the morning, and I say: 'Aha, just a few minutes ago it was 8:00.' But then while I'm dancing…it seems like it's been much longer than maybe it really was (Csikszentmihalyi, 2002, p. 66).

Csikszentmihalyi suggests that while losing track of time is not one of the major elements of enjoyment, "freedom from the tyranny of time does add to the exhilaration we feel during a state of complete involvement" (Csikszentmihalyi, 2002, p. 67). Pace (2004) acknowledges that Web users often experience a distorted sense of time when searching or browsing for information. For many, they are unaware of exactly how much time has passed during an activity. Jackson and Csikszentmihalyi (1999, p. 29) note that the transformation of time is a by-product of total concentration and absorption of attention: "When you are concentrating, you forget time, so that an event may seem to have finished 'before you knew it.'" The sensation of time slowing down can also be a product of intense concentration. When the mind is really focused, things seem to become much clearer. The transformation of time as a dimension of flow may not be experienced in some sports, particularly those where the athlete is aware of each second of time in the pacing of their race and use of their energy, but "when the transformation of time is experienced, it can feel very liberating to live in a *timeless* moment" (Jackson & Csikszentmihalyi, 1999, p. 30).

The results of a study into the affect of music on the perception of time by Droit-Volet, Bigand, Ramos and Bueno (2010, p. 231) show that "time flies in the presence of music because it distracts our attention away from the processing of time,

probably due to music's rich structure or the pleasure produced by listening to it."
Schneiderman (1991, p. 91) observes that the profound absorption of music
performance can produce a trance-like experience.

> There is a suspension of time and place and some rational processes but at the
> same time the senses are very active, sharp, constantly at work, evaluating,
> altering, feeding back to the muscles – all informed and unified by the intent of
> the music.

This literature will provide important theoretical concepts that will inform the analysis
in my study of flow in collaborative music performance. The experience of intense
concentration and the sense of time distorting as a result of a high level of focused
attention is an interesting characteristic of the data presented for this study.

The 'autotelic' experience

The preceding discussion has examined the characteristics of the flow
phenomenon, using the research literature, to provide support and evidence for each
part of this phenomenon. However, the term that Csikszentmihalyi uses to explain the
optimal experience is 'autotelic'. It derives from two Greek words 'auto' (self) and
'telic' (goal). He states that 'autotelic' experiences are intrinsically rewarding and not
done because one is expecting some future benefit, but rather because it is intensely
satisfying in, and of, itself. Jackson and Csikszentmihalyi (1999) also emphasize that
a flow-producing activity is usually engaged in just for its own sake. They comment
that people usually engage in sport for intrinsic reasons, especially in the early stages
of involvement. Csikszentmihalyi elaborates, that "most enjoyable activities are not
natural; they demand an effort initially one is reluctant to make. But once the
interaction starts to provide feedback to the person's skills, it usually begins to be
intrinsically rewarding" (Csikszentmihalyi, 2002, p. 68).

We are not usually motivated to engage in activities for purely intrinsic or
extrinsic purposes, but a combination of the two often provides the motivation for
these activities (R. M. Ryan & Deci, 2000). However, professional sportspeople,
musicians, writers and other creative performers, who engage in their craft for
financial gain, can start to lose this sense of intrinsic motivation as the extrinsic
motivational factors of money, business and career take precedence. They may suffer
a loss of the flow experience as "attention is split between the activity and the desired

external outcome, with the result that less psychic energy is left to monitor and execute the performance. And as the activity itself loses significance, so does the likelihood of experiencing flow from it" (Jackson & Csikszentmihalyi, 1999, p. 145). Martin and Cutler (2002) bear this out in their study of flow and the motivation of theatre actors. Undergraduate students were often more motivated to learn about the craft of acting and to gain knowledge of acting, whereas graduate students, who were often in receipt of financial rewards for their acting such as assistantships, had reduced intrinsic motivation. However, they are inconclusive about their findings regarding the motivation of theatre actors as they felt the small sample size warrants caution in making generalisations.

While the capacity to experience flow is almost universal, the quality of the flow experience can be quite different for people. Csikszentmihalyi has from the beginning of his research recognised that there may be the possibility of an 'autotelic' personality, a person who tends to enjoy life and is driven intrinsically in their activity.

> This kind of personality is distinguished by several *meta-skills* or competencies that enable the individual to enter flow and stay in it. These meta-skills include a general curiosity and interest in life, persistence, and low self-centeredness, which result in the ability to be motivated by intrinsic reward (Nakamura & Csikszentmihalyi, 2002, p. 89).

Nakamura and Csikszentmihalyi (2002, p. 99) go on to outline the various research projects that have investigated this notion of the 'autotelic' personality and its therapeutic possibilities in clinical situations, and the research supports the outcome that those who displayed 'autotelic' personality traits "felt more in control of their actions and better about themselves generally, and they reported more positive experience in productive activities (e.g. studying)."

Flow models

The four-state flow model

Csikszentmihalyi's original flow model has been adapted several times as the phenomenon of flow has become clearer through various research studies. Jackson and Csikszentmihalyi (1999) have adapted the four-state flow model (see Figure 2) that arose from the work of Massimini and Carli (1988) to place the challenges and skills on a quadrant, thus putting more perspective on the challenge-skills balance required in order to experience 'flow'. The flow experience is most likely to occur when there is high level of both challenge and skills and on the quadrant this is identified as a 'flow channel'. Flow can be experienced when the challenges and skills are at a relatively low level as well as when they are much higher. Provided that the challenges and skills are balanced, and are extending and stretching the participant to new levels, then flow can be experienced.
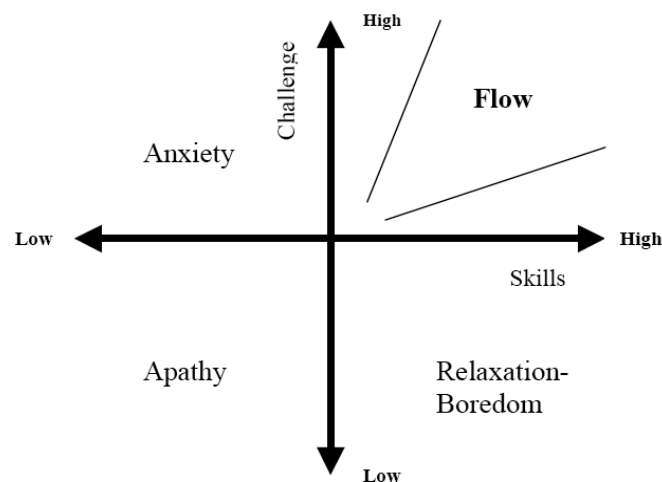
Figure 2: Four-state flow model (Jackson & Csikszentmihalyi, 1999, p. 37)

The eight-channel flow model

The work of Csikszentmihalyi has inspired many other researchers to consider the phenomenon of flow in various contexts. Massimini and Carli (1988) proposed an eight-channel flow model to explain the balance between skills and challenge. The centre of the diagram represents the average level of an individual's weekly

challenges and skills as measured by the Experience Sampling Method and the model is shown below:
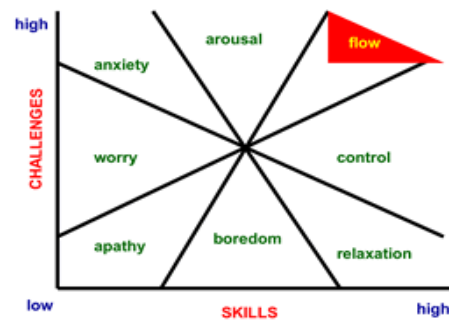
Figure 3: The eight-channel flow model adapted from Massimini and Carli (1988), (Csikszentmihalyi, 1997, p. 31)

While their study aimed to investigate these finer distinctions in the flow experience, participants were not able to consistently identify the various flow states within the eight-channel flow model. Their conclusions therefore were based upon combinations of the eight states that largely replicated the four-channel model earlier identified by Csikszentmihalyi. This has resulted in the eight-channel model receiving varying support in the literature, with most authors continuing to reference the four-channel model. This thesis will be referring to the four-channel flow model.

Inhibitors to flow

The four-state flow model (Csikszentmihalyi & Csikszentmihalyi, 1988 as cited in Jackson & Csikszentmihalyi, 1999) describes the interaction between skills and challenges and, when both of these dimensions are in balance, the flow phenomenon is most likely to occur. The model also provides some understanding of the experiences when the challenges and skills are not in the balance required for flow. Anxiety, relaxation/boredom and apathy can all be described in terms of the balance between challenges and skills and are individually discussed in the next part of this chapter.

High challenges – low skills: Anxiety

According to Jackson and Csikszentmihalyi's adaptation of the four-state flow model (1999), if the challenges of a situation are too great and not matched by an appropriate level of skills, then the participant can feel anxious and not experience any sense of enjoyment in the activity. Csikszentmihalyi (2002) states that the condition of anxiety (high challenge – low skills) is relatively rare in everyday life (p. 252) yet in more competitive activities such as sport and musical performance, performance anxiety occurs frequently. Salmon and Meyer (1992) suggest that many musical performers, both amateur and professional, experience feelings of excitement, tension and even anxiety before a public performance. Their book provides a strategy to limit the anxiety created by high challenge – low skills that may occur in musical performance.

> Play well within the boundaries of your technical skills. Many performers try to play in public their most difficult pieces, leaving themselves little reserve to cope with the demands on a performer in a live performance. Pieces that you struggle with in the comparative safety of the practice room are not good candidates for the stage (Salmon & Meyer, 1992, p. 197).

McGinnis & Milling (2005) also highlight the importance of the technical level of music ability when discussing music performance anxiety. "Conceivably, some musicians become fearful when facing public performance because they are aware that their technical ability is weak" (McGinnis & Milling, 2005, p. 367).

Anxiety, as it relates to the imbalance between challenges and skills, is but one aspect of the phenomenon known as 'music performance anxiety' that continues to be the subject of much research (Green & Gallwey, 1986; Kenny, 2010; Kenny, et al., 2004; McGinnis & Milling, 2005; Osborne, Kenny, & Holsomback, 2005; C. Ryan, 2005; Steiner, 1998; Sternbach, 2008; Wesner, et al., 1990). Some performers, such as professional opera singers, seem to possess adequate technical skills for satisfactory music performance but are nonetheless anxious about public performance (Kenny, et al., 2004). Such is the intensity of the anxiety for music performers, that many have sought treatment for the condition. McGinnis & Milling (2005) provide an overview of the current status of the psychological treatment of 'music performance anxiety' including behaviour and cognitive therapies, biofeedback, hypnosis, music and music-enhanced therapy and cognitive-behavioural therapy and medication. The various

therapies are evaluated in terms of the methodology, whether they considered the technical ability of the student suffering music performance anxiety, whether there was a treatment manual, intervention by multiple therapists, a full battery of outcome measures and follow-up assessment (McGinnis & Milling, 2005, p. 366). McGinnis and Milling's summary of the various treatments for music performance anxiety indicates that this field of psychology is growing but "compared with research on other performance anxieties and on generalized social phobia, there have been relatively few studies of treatments for this problem" (McGinnis & Milling, 2005, p. 371). As a field of study, it has tended to rely on self-report measures of treatment outcome, highlighting the highly subjective nature of the experience of music performance anxiety.

Green and Gallwey (1986) suggest that for many musicians, anxiety, fear of failure and self-doubt are an interference to the process of allowing their natural abilities, capacities and knowledge potential to be made manifest in music performance. Their book, *The inner game of music,* provides a guide to help musicians reduce the interference of self-induced anxiety, fear of failure and self doubt, at the same time that potential is being trained through practicing and learning new skills. Havas (1973), a concert violinist and teacher, also discusses the problem of music performance anxiety. Her book provides an in-depth discussion of the types of anxiety that can be experienced by musicians when they perform. Commonly known as stage fright, it is "one of the most destructive elements in the performing arts, be it acting, dancing, singing, making a speech, or playing an instrument" (Havas, 1973, p. 2). Havas divides the phenomenon of stage fright into three categories: physical, mental and social. Her work provides detailed pedagogical approaches to alleviate the physical aspects of stage fright for violinists such as the fear of dropping the violin, the fear of the trembling bowing arm, the fear of being out of tune, and the fear of high positions and shifts. The mental aspects of stage fright for violinists include the fear of not being loud enough, the fear of not being fast enough, the fear of memory lapse, and the power of words and the imagination, which describe the ways mental imagery can be used to take the anxiety out of performance. Finally, her book describes the social aspects of stage fright, which is often manifested in a fear of not being good enough (Havas, 1973).

The narrative data for my autoethnographic study of the phenomenon of flow during collaborative performance features many instances of music performance anxiety and even stage fright. Various researchers (Sadler & Miller, 2010; Steptoe, 1989; Talbot-Honeck & Orlick, 1998) have suggested that many professional musicians and performers learn to deal with stage fright through a process of practice and personal determination, even turning it from a negative phenomenon to a positive phenomenon. "Stage fright or pre-performance nervousness was accepted as normal, or even viewed in a positive way. 'Of course, there's always stage fright, and it's always there, but, for me, it's a thing that inspires me more than anything'" (Participant as quoted in Talbot-Honeck & Orlick, 1998, p. 68). Green and Gallwey (1986) also suggest that performers need to give themselves permission to fail. By releasing themselves from the fear of failure, they are now able to focus their attention one hundred percent on making music.

The power of stress or anxiety to cause physical impairment to performance is well documented in the sport psychology literature (Anshel, 1995; Cox, 1998; Robazza, Bortoli, & Nougier, 2000; Scanlan, Ravizza, & Stein, 1989; Straub, 1996). Weinberg and Gould (2003) detail the effects of arousal and state anxiety "the temporary, ever changing emotional state of subjective, consciously perceived feelings of apprehension and tension, associated with activation of the autonomic nervous system" (Weinberg & Gould, 2003, p. 79) on sport performance and conclude that "increased arousal and state anxiety cause increased muscle tension and can interfere with coordination" (Weinberg & Gould, 2003, p. 93).

Such increases in muscle tension are also extremely detrimental to music performers and Grindea's (1987) discussion on tension in piano playing alludes to the fact that too much tension at the wrong moment and in the wrong places has a negative impact on performance. "Not only does this prevent the player to express *[sic]* himself with ease and use the keyboard with the necessary control but, what is more important, it affects the freedom of breathing, this essential biological function of the body" (Grindea, 1987, p. 98). However, she does rightly point out that for pianists to achieve control over their body while in performance they must "instinctively maintain a perfect balance between generating and releasing tension, thus creating the illusion of continuous 'detente' in the same way as a film gives the illusion of continuous movement" (Grindea, 1987, p. 97). Grindea suggests that

musicians also suffer from the adverse affects of muscle tension as a result of music performance anxiety, leading to detrimental effects on the quality of the music performance, in the same way that sports people are negatively affected by tension during periods of performance anxiety (Weinberg & Gould, 2011). Grindea's work adds an interesting dimension to the discussion of music performance anxiety as it related to the imbalance between challenges and skills that can inhibit the experience of flow in music performance.

Low challenges – high skills: Relaxation/Boredom

Also described within the four-state flow model (Csikszentmihalyi, 1997) is the experience when the participant has a higher level of skills than is demanded by the situation. A state of relaxation is often initially experienced, but this can lead to boredom. Certainly, this is not always seen as a negative experience. In fact, in one study into the phenomenon of flow, American students reported that while they experienced flow quite regularly while studying at school, where their skills and challenges were in balance, they preferred the situation in which there was a excess of skills over challenges, for they felt they had more control over their studies (Carli, Delle Fave, & Massimini, 1988).

Jackson and Csikszentmihalyi (1999) comment that teenagers are much happier when they engage in sport rather than passive activities like watching television or 'hanging out at the mall'. The most recent Australian Bureau of Statistics 'Time Use Survey', conducted in 2006, showed that the most common recreation and leisure activity for people aged 15 years and over was watching television (*Broadcasting: Audience*, 2008). More recently, Strasburger, Jordan and Donnerstein (2010, p. 757) have shown that "children and adolescents spend more time with media than they do with any other activity except for sleeping – an average of >7 hours per day," yet it is the passive nature of activities such as watching television that Csikszentmihalyi suggests is the least likely activity to lead to the flow experience.

> Working people achieve the flow experience – deep concentration, high and balanced challenges and skills, a sense of control and satisfaction – about four times as often on their jobs, proportionately, as they do when they are watching television (Csikszentmihalyi, 2002, p. 84)

Getting past the boring repetitive parts of activities so that one can experience flow requires a concentration of energy and a control of the consciousness (Csikszentmihalyi, 2002). Jackson & Csikszentmihalyi (1999) emphasize that as human beings, we need to take charge of our own ordinary experience and build skills in cultivating the control of our consciousness. In sport, this may mean joining a sporting club, engaging a personal trainer or building up a personal habitual schedule to move past the boring and find new challenges to develop our skills. Larson (1988, p. 158) characterises boredom as a state where "there is no challenge in a task, when a student can see nothing in the work that is personally interesting or engaging." In Larson's study on the phenomenon of flow in writing tasks, these students who were bored produced written work that was "unable to provide the reader with any challenge to make the work interesting" (Larson, 1988, p. 162). The boredom of the experience flowed into writing that was also boring to read.

Locke and Latham (1990, p. 239) comment that "boredom results from the implicit appraisal that there is no value significance to the activity [and] that it lacks any meaningful purpose." They describe boredom as a negative emotion and report on an earlier study (Bryan & Locke, 1967) that found that specific, challenging goals led not only to increases in interest but to greater intensity of focus on the task. Echoing many of the characteristics of the flow model, they posture that the focusing of attention provided pleasure, thus negating the emotion of boredom, by creating absorption in the task, a sense of purpose and self-efficacy, and forgetting about the passage of time. Furthermore, they noted that intrinsic motivation had an important role to play in fighting the negative emotions of boredom.

Low challenges – low skills: Apathy

Finally, if the challenge of the situation is low and the skills of the participant are low, apathy is often the result. Csikszentmihalyi's research, which asked over one hundred people to regularly report on what they were doing and how they were feeling at eight random times during each day over a one week period, found that apathy, characterised by low level skills and challenges, was a common experience during leisure activities. "In this condition, people tend to say that they feel passive, weak, dull, and dissatisfied. When people were working, sixteen percent of the responses were in the apathy region; in leisure, over half (52 percent)" (Csikszentmihalyi, 2002, p. 159).

However, this same study also highlighted one of the paradoxes in the discussion of flow with respect to the challenge – skills balance. Csikszentmihalyi's study of flow in everyday experience (2002) found that while more people experienced flow more often at work than during leisure, most still preferred not to be working and to spend more time in leisure. He attributes this to the modern worker's relation to his job and the way he perceives his goals at work. If the work is perceived as contributing to someone else's goals, rather than the long-range personal goals of the worker, the work is seen as a waste of time and energy, even if it does provide regular flow experiences. Sennett (1997, p. 161) comments that work has become more flexible and short-term resulting in a devaluing of work as a "point of reference for defining durable personal purposes and a sense of self-worth." The result has been a diminished sense of loyalty to an employer and many young workers "view the places where they work mostly as sites to make contacts with people who can get them better, or simply other, jobs" (Sennett, 1997, p. 170).

Csikszentmihalyi (2002, p. 16) reports, "although flow at work is enjoyable, people cannot stand high levels of challenge all the time. They need to recover at home, to turn into couch potatoes for a few hours each day even though they don't enjoy it." He goes on to argue that passive entertainment, such as watching television, listening to music, looking at displays of objects, when they are not challenging our mental and physical resources, can leave us "more exhausted, more disheartened than we were before" (Csikszentmihalyi, 2002, p. 163). In order to feel that life is worthwhile and fulfilling, Csikszentmihalyi (2002, p. 163) surmises, "people who learn to enjoy their work, who do not waste their free time, end up feeling that their lives as a whole have become more worthwhile." This is supported by the research of Waters and Moore (2002, p. 33) who concluded that involvement in meaningful leisure activity by unemployed people could alleviate psychological distress and maintain self-esteem, "which may contribute to better job-search activity and better chances of re-employment."

Concepts related to flow

Peak performance and peak experience

Several authors have further differentiated some of the terms often associated with the concept of flow, including those of peak experience and peak performance. Privette (1983) synthesizes earlier literature in the field to explain that peak experience is defined as an intense and highly valued moment and peak performance is described as an episode of superior functioning. Peak performance is an important research topic in sports performance. Jackson et al. (2001) report that there is some correlation between a self-reported flow state and ratings of perceived success, or peak performance, as measured after a competitive event. For elite athletes, mental strategies that they use to achieve peak performance are well honed in their preparation for sporting events. Their level of focus, an important mental strategy for peak performance, moves constantly between the external factors of the other athletes around them and the internal factors of their own performance.

> There is also a constant shifting between internal feelings and the external things happening in the race, such as the changing terrain or the jockeying for position with other riders. The athletes believed that in their best races, for the majority of the time, they are more focused on their internal feelings and race rather than externally focused on the other competitors (Kabush & Orlick, 2001, p. 45).

Thus the ability to maintain a high level of concentration and focus, also important phenomena of the flow experience, is seen as a key to peak performance for athletes.

The concept of peak performance is also of great interest to those in business and human resource management as it is seen as critical to the success of an organisation to have its leaders and members working towards common goals of productivity and peak performance. Katzenbach (2000, p. 254) provides many examples of strategies that can be used by leaders of organisations to align the hearts and minds of employees towards peak performance and suggests that "a true peak-performance workforce is a moving target: each level attained also opens up the potential for reaching a higher level, and the dynamics of a competitive marketplace

constantly push would-be market leaders to 'better their previous best.'" Dunning (2004) comments that peak performance can occur in the workplace when people are challenged to perform and do not feel bored or dissatisfied with their roles.

Musicians can experience peak performance when the mind and body are in alignment. Emmons and Chase (2006, p. 270) state that "the higher the level of physical and technical skills, the more important the mental aspects of performance become." Musicians, like top athletes, can reach a point just before a performance where the physical and technical skills are as good as they can be and when little more can be done to improve these aspects of the performance. This is when the mental strategies become even more important. "One cannot order up a peak performance, but one can create a climate in which it might happen" (Emmons & Chase, 2006, p. 270). The mental skills of top performers can be refined through practice as evidenced by a number of research studies (Duke, Simmons, & Cash, 2009; Ericsson, et al., 1993; Hanrahan, 2005; Meinz & Hambrick, 2010). Understanding that the performance of music is itself a socially driven phenomenon (Llobet & Odam, 2007) helps to develop specific mental strategies to achieve peak performance especially in group situations such as orchestras and other music ensembles.

Maslow's (1962) description of peak experience indicates that "in peak experiences he recognized a level of psychological experiencing that surpasses the usual level in intensity, meaningfulness, and richness" (Privette, 1983, p. 1362). Tellegen and Atkinson (1974) also discuss the similarities between the phenomenon of peak experience and the complete absorption that is often associated with these experiences. They comment that the absorption involves "a full commitment of available perceptual, motoric, imaginative and ideational resources to a unified representation of the attention object" (Tellegen & Atkinson, 1974, p. 274). The link between peak experience and flow is also highlighted by Lubinski and Benbow (2000) who note that a peak experience will be engendered when one engages in a complex performance requiring an extraordinary commitment of concentrated effort and sustained attention. These peak experiences are often associated with "seemingly effortless but impressive performance" (Lubinski & Benbow, 2000, p. 146). Bakker (2005, p. 36) believes that "the peak experience of flow is an all or nothing phenomenon: an experience that one either has or does not have." However, the work of Privette (1983) suggests that flow can be experienced at a number of levels and in

activities that are not necessarily peak experiences or examples of peak performance. She adds perspective to the twin phenomena of peak performance and peak experience by stating that flow is a construct that is similar to peak performance and peak experience and that the characteristics of each phenomenon overlap. This overlap is due to the common features of each type of experience, all of which are positive, enjoyable experiences and her paper identifies mutual and distinctive features of each phenomenon.

Mindfulness and flow

In the last twenty years, mindfulness has gained considerable attention in the field of clinical and empirical psychology. It is linked to the phenomenon of flow in that it is a psychological state of focused attention that allows a person to become totally aware 'in the moment' (Miller, Fletcher, & Kabat-Zinn, 1995). Stemming from Asian meditative practices, the aim of mindfulness is "to cultivate a stable and nonreactive present moment awareness. This is usually accomplished through a regular daily discipline involving both formal and informal mindfulness practices" (Miller, et al., 1995, p. 193). Kabat-Zinn has reported the successful application of mindfulness techniques in medical interventions to help reduce chronic pain (Kabat-Zinn, 1982; Kabat-Zinn & Burney, 1981; Kabat-Zinn, Lipworth, Sellers, Brew, & Burney, 1984; Miller, et al., 1995). In business management practice, mindfulness is a process that allows a person to choose the right cognitive approach to a task, and, depending on what cognitive processes are being used, "a mindful person will appear resourceful, strategic, creative, analytical, or practical" (Dunning, 2004, p. 161). Mindfulness can be used to explain the intense concentration that is needed for a concert pianist to memorise many piano concertos and concert works (Langer, 1989). Langer goes on to describe mindful people as those who are open to new ideas, new ways of doing things, different points of view, who possess a creative and flexible approach to life and its challenges. "In summary, we propose that mindfulness can be defined, in part, as the self-regulation of attention, attention switching, and the inhibition of elaborate processing. In this context, mindfulness can be considered a metacognitive skill" (S. R. Bishop, et al., 2004, p. 233). Flavell's work (1979; see also Flavell, Miller, & Miller, 2002) defines metacognition as the process of analysing your own thinking and thought processes, and thus is linked to the skill of mindfulness.

The link between flow and mindfulness has been explored in a number of contexts with Wright, Sadlo and Stew (2006) reporting that their research participants explained their flow experiences in ways that resonate with the concept of mindfulness.

In this study, participants reported that both challenge-skills and mindfulness experiences involved living fully in the present moment, not reflecting on past memories or spending time anticipating what may happen in the future. In both states, time no longer preoccupied them and they wanted to do what they were doing because it was rewarding to them, although in different ways (Wright, et al., 2006, p. 30).

While they reported these similarities, they also noted that there are distinct differences between the experience of flow and the experience of mindfulness. They found that there needed to be relaxation prior to performing the challenge-skills experience and yet the necessity of this state was not clear before the mindfulness experience. The goals in the challenge-skills experience are very clear, yet mindfulness seemed to have no goals at all; and the participants also noted that they experienced feelings of joy, elation and the ability to cope with life's stresses during the challenge-skills experience, while the mindfulness experience left them feeling relaxed and at peace with the world. Their research suggests that

The construct of flow is still evolving and more research is needed to examine it in more detail and uncover the extent to which the characteristics and processes of flow are unique or similar to other subjective, psychological states (Wright, et al., 2006, p. 31).

Bishop et al. (2004, p. 234) regard mindfulness as "a process of investigative awareness that involves observing the ever-changing flow of private experience," thus making it a useful concept for consideration in this autoethnographic study that will explore the phenomenon of flow for a piano accompanist. By using a methodology that is intentionally subjective, the concepts of flow, peak experience, peak performance, mindfulness can be fully explored within the field of piano accompaniment, music aesthetics and performance. In the next chapter, I will outline the methodology for my study and provide a clear and compelling argument for this type of methodology to study the phenomenon of flow for a piano accompanist.

Summary of Chapter 2

Beginning with an overview of the philosophical concepts related to the aesthetics of music, this chapter investigated the effect of music on human experience and the way that music can influence the emotions of its listeners and performers. Music has always been used as an expression of our own particular culture and continues to engage with the depth of emotions that we experience as humans. The psychological dimensions of music performance can thus be further investigated by exploring related psychological constructs that also investigate human experience, and in particular, those experiences that are pleasurable and intensely enjoyable. The work of psychologist Mihalyi Csikszentmihalyi, who defined the concept of 'flow' or 'optimal experience', provides further insight into the psychological dimensions of the experience of music performance.

The phenomenon of flow has been studied in a broad range of settings including sport, music and theatre performance, and various work and leisure activities, using both quantitative and qualitative methodologies. This review of the findings of these studies has provided a theoretical underpinning of the concept of flow in collaborative music performance as a piano accompanist. These and other studies have also looked at the inhibitors to flow, namely anxiety, relaxation/boredom and apathy, and the important literature in the field of music performance anxiety has added a further dimension to the theoretical position of this research project. The literature that explores the related concepts of peak experience and peak performance has strong resonance with the experience of collaborative music performance, particularly from the perspective of the performer. Mindfulness and flow have been linked in a number of studies, but its characteristic of intense awareness of the private experience makes it a useful addition to the theoretical underpinning of this research project, which will explore the phenomenon of flow for a piano accompanist.

Chapter 3: Research methodology

This chapter begins by outlining the research process for this study of the phenomenon of flow for a piano accompanist. I will discuss the method used to collect and represent the data in a form that serves the research question. The processes used to analyse this data will then be discussed as well as the way this analysis has been used to form a theory for understanding (Gregor, 2002) the phenomenon of flow in this study.

In order to introduce the reader to the approach taken in this study, this chapter explores autoethnography, the research methodology for this study, together with an overview of some of the research methodologies, both quantitative and qualitative, that have been used to study the phenomenon of flow in other contexts. The chapter also provides a brief literature review outlining the place of autoethnography in qualitative research methodologies, and various approaches to conducting autoethnographic studies are discussed linking these with the related fields of ethnography, narrative inquiry, case study and self-study. In particular, I will be exploring how ethnography, narrative inquiry, case study and self-study inform my autoethnographic process, with particular reference to the collection and preparation of the data that is at the core of this study.

The discussion continues with an analysis of the limitations of this research design, drawing together the various arguments about the validity and reliability of data collected using autoethnography. The chapter concludes with an overview of the various processes available for the analysis of the autoethnographic data, with due consideration being made to the appropriateness of these analytic tools for my particular study.

The research design

In order to explore this phenomenon of flow in a meaningful way, I will be using an autoethnographic research design that Ellis and Bochner describe as a "study and procedure that connects the personal to the cultural" (C. Ellis & Bochner, 2000, p.

739) where "authors use their own experiences in the culture reflexively to bend back on self and look more deeply at self-other interactions" (C. Ellis, 2004, p. 46). There is growing interest in this genre of subjective qualitative research (Chang, 2008; Denzin, 1997; L. Richardson, 1992). Berg (2007, p. 180) argues that "social scientists should recognise that research is seldom, if ever, really value neutral" and he goes on to state that "subjective disclosures by researchers allow the reader to better understand why a research area has been selected, how it was studied and by whom" (p. 181).

The autoethnographic narrative vignettes (Humphreys, 2005) that are the data of this research project focus on various experiences starting from my early years as a piano accompanist, focusing especially on those experiences that were particularly memorable in both positive and negative ways. The analysis of these narrative vignettes will then allow me to answer the research question and form a theory for understanding (Gregor, 2002) the phenomenon of flow for a piano accompanist. Autoethnography is the only methodology that gives me the opportunity to investigate the subjective phenomenon of flow for a piano accompanist from an 'insider's' perspective (Naples, 1997; C. Smith, 2005).

The data collection

The data for this study is presented in Volume 2. It incorporates narrative devices such as description and scene setting, as well as direct speech, to create an evocative narrative, thus drawing the reader into the experience. The use of direct speech is a narrative device that helps to capture the immediacy of the situation driving the narrative forward so that the reader can begin to understand the subjective experience being recalled (Coulter & Smith, 2009). The direct speech is not an exact representation of the words that were uttered of those occasions, as there were no recording devices present when they occurred. The use of direct speech creates a more evocative account for the reader and the veracity of the direct speech is confirmed by its place within the narrative: the direct speech fills out and completes the descriptive narrative (Holley & Colyar, 2009). This is consistent with the approach advocated by Ellis (2004, 2009) and also several other researchers including Murphy (1987), de Vries (1999, 2000), McNiff (2007), Bartleet and Hultgren (2008), Bartleet (2009) and Walker (2009). The use of these narrative devices allows me as both the researcher

and the subject of the research to describe the subjective experiences that were once in the background and bring them to the foreground.

The data was essentially drawn from my memory but is supported by a number of document artefacts including personal diaries, audio and video recordings of concerts, personal scrapbooks of memorabilia including press cuttings, photos, and programs of concerts, as well as professional conversations with some of the performers with whom I have worked over the years. This has been given ethical clearance by the HREC of CQUniversity Australia, (Project Number H10/01-011).

The data deliberately focuses on events in my past, rather than making use of a reflective journal during performance activities that I undertake during the course of this study. I continue to have many opportunities to work as a piano accompanist in a wide range of settings, but since commencing this study on the phenomenon of flow, I am now so conscious of thinking about the phenomenon that it is becoming a distraction during the performance and reducing the likelihood of experiencing flow. As commented by Schneiderman (1991) the analysis of the flow experience while in flow can actually stifle the experience – the brain cannot examine itself.

The form of the narrative

The narrative as seen in Volume 2 is not presented as a full autobiography. Such an exercise would not be necessary to answer the research question under consideration. The narrative vignettes are presented roughly in chronological order making use of footnotes to explain musical terms that may not be familiar to the reader and to add further contextual detail regarding the characters and places mentioned in the narrative. The footnotes are also used to give further background detail on some of the pieces of music discussed in the narrative and serve to add a scholarly overtone to the narrative, transforming it from mere memoir or autobiography to data within a research study.

Richardson and St. Pierre (2005) point out the narrative inquiry can be a research process in itself. The researcher, through the writing of a personal narrative, continues to gain further insights into the experiences and is able to recall further details as they relive these experiences in their writing. My memories were brought into greater relief by referring to various artefacts such as audio and video recordings, press cuttings, programs, photographs, and professional conversations (Healy, et al.,

2001; Orland-Barak, 2006; Tillema & Orland-Barak, 2006) with some of the artists I collaborated with over the years. In a narrative such as this where the focus is on the investigation of memorable accompaniment experiences in order to understand the phenomenon of flow for a piano accompanist, the writer also needs to make significant decisions about what is included in the narrative and what is omitted. Ellis' (2004) approach to narrative and analysis is outlined as follows.

> In my work, I prefer to keep story separate from traditional analysis. I like to take readers deep into emotional detail and hold them in the experience. Only later, do I move to traditional theorising; sometimes I don't move there at all because I want the theorising to happen in the story (C. Ellis, 2004, p. 199).

The vignettes presented in this autobiographical narrative recall experiences from recent times as well as particularly memorable experiences from many years ago. There were many experiences that I could have included in this narrative, but the vignettes that were chosen were those that were the most rich in terms of the depth of my subjective experience. In the same manner that an ethnographer writes about, or describes a culture "using firsthand observation and participation in a setting or situation" (C. Ellis, 2004, p. 26), I wrote about personal experiences that have characteristics similar to those described by Csikszentmihalyi in his theory of flow. The narrative does not attempt to analyse these experiences, nor does it draw comparisons with the dimensions of flow. This is left to the analysis chapters and the subsequent development of a theory to describe the phenomenon of flow in this particular case study.

The use of narrative in autoethnographic research is particularly useful in defining the turning points in our lives or those moments that live in the memory as exceptional circumstances (Webster & Mertova, 2007). Since the research question is also investigating the phenomenon of flow, and flow is a subjective experience usually associated with events that are intrinsically rewarding and memorable, the narrative is able to recreate those exceptional circumstances in evocative ways for the reader. The narrative of these exceptional circumstances was pivotal in developing the theory to answer the research questions. This type of writing, with its use of rich description mingled with direct speech, brings to the foreground subjective experiences that would otherwise remain hidden. Flow is itself a subjective phenomenon and while many researchers have used quantitative methods to try to

understand this phenomenon (Jackson & Marsh, 1996; Jaros, 2008) and others have used qualitative methods that rely on observation and interview to describe flow (Custodero, 2005; Custodero & Stamou, 2006; St. John, 2006), my study explores this phenomenon by recreating my most memorable experiences as a piano accompanist in the form of a narrative, and uses the analysis of this narrative to develop a theory to answer my research questions.

Constructing believable data

To create a greater sense of verisimilitude for the reader, I constructed the narrative from multiple sources including my memory and various document artefacts. According to Webster and Mertova (2007, p. 93) "reliability is not the statistical measure, rather it is measured by the accuracy and accessibility of the data, so that any reader can get hold of the relevant text or transcript." 'Member checking' (Lincoln & Guba, 1985) was also employed through professional conversations (Healy, et al., 2001; Orland-Barak, 2006; Tillema & Orland-Barak, 2006) with some of the performers with whom I have worked over the years.

The choice of each narrative vignette for inclusion in Volume 2 could be criticised in a number of ways. Has the data been 'massaged' to create a better fit with the theory? How can the researcher accurately remember these details given that memory is often selective and distorted by the passage of time (Gergen & Gergen, 1997; Hinchman & Hinchman, 1997; Kerby, 1997; Warnock, 1987) and subsequent experience? In answering these types of criticisms, I am aware that many qualitative researchers also have to deal with similar issues even when researching the experience of other people and not themselves, as in ethnography and narrative inquiry. Many qualitative researchers make use of structured and semi-structured interviews with their research participants (B. L. Berg, 2007; Hollway & Jefferson, 2000). During these interviews participants are asked to recall their experiences. Such recollections are subject to the same criticisms as autobiographical recollections: they can be 'massaged' to fit the emerging theory and the memory can be distorted by the passage of time and experience (M. W. Smith, 2009). Ethnographers who seek to triangulate their interview data with observation data also face challenges in the interpretation of their observations as such interpretations often occur after an event and have to make use of field notes to recreate an experience or event (Tedlock, 2000). Time, experience and the ontological perspective of the researcher can also distort the

memory of these events (Bochner & Ellis, 1996; Denzin, 1996, 1997; Van Maanen, 1995). Hence the data for this study is provided in full in Volume 2 to enable the reader to gain an insight into my collaborative piano experiences and to follow the development of the theory for understanding the research question that unfolds in the subsequent chapters of this thesis.

Analysis of the data

The analysis of the narrative data followed the approach adopted by Chang (2008, 2011) who exhorts autoethnographers to approach their analysis with a level of rigour acceptable in the social science discipline. Chang suggests that by reading and re-reading the data, themes will emerge from the data. While this approach is "akin to grounded theory, where researchers work inductively and present their findings in the form of traditional categories and theory" (C. Ellis, 2004, p. 196), Chang lists ten strategies that are not intended to be followed in strict order but are provided to help the researcher focus on both analysis and interpretation of the qualitative data. Her ten strategies are:

 (1) search for recurring topics, themes, and patterns; (2) look for cultural themes; (3) identify exceptional circumstances; (4) analyse inclusion and omission; (5) connect the present with the past; (6) analyse relationships between self and others; (7) compare yourself with other people's cases; (8) contextualise broadly; (9) compare with social science constructs and ideas; and (10) frame with theories (Chang, 2008, p. 131).

This flexible approach was useful in the analysis of my autoethnographic data as it incorporates both analysis and interpretation combining a 'zoom-in' and 'zoom-out' approach (Chang, 2008, p. 129): "zooming in elicits ethnographic details; zooming out engenders overarching cultural themes." Chang's (2008) approach to the analysis of autoethnographic data addresses issues surrounding the rigour of this type of research. By engaging with the analytic process using Chang's ten-step process the theory can be compared and contrasted with similar theory and other studies on the phenomenon of flow.

My process of the analysis of the narrative began by searching the text for recurring topics, themes and patterns. This was done using the computer coding software package NVivo. This enabled me to step back from the narrative and

consider it in a more objective manner, allowing me to identify the significant topics and themes that were recurring. I found this process of coding to be particularly useful as it allowed me to revisit the narrative and, using a process of critical reflection (Schön, 1987; Steier, 1991), rethink the actual experiences in the light of the patterns and themes that were emerging from the analysis. NVivo is also a useful software package that allows the researcher to make links between various recurrent themes in qualitative data and search for these connections in the text. While the narrative text has been created with the use of vignettes that often focus on particular experiences, the coding program allows me to identify where themes may occur across various experiences and at different times in my life.

Since I am both the researcher and the researched there can never be a truly objective analysis of this type of data. I wrote the narrative about my experiences and therefore am very close to this data. Much of this lived knowledge is in my head and continues to inform my activities as a piano accompanist. Consequently, the analysis of this data will consciously and unconsciously draw on this lived knowledge. De Vries (1999) notes that this may in fact improve the analysis.

> In being able to refer to my life beyond what was written in the narrative I made more informed and "fuller" judgements as to the essential themes of my lived experience, and thus answered in the most honest possible way what the nature of my lived experience has been (de Vries, 1999, p. 135).

The subsequent analysis of the data has helped me to develop a theory for understanding that will answer the research question. Theory can fall into a number of different categories including descriptive, explanatory, predictive or propositional (Fawcett & Downs, 1992), but research of this nature falls into the notion of 'theory for understanding.' Gregor (2002, p. 7) describes this as theory that "explains 'how' and 'why' something occurred. It is not formulated in such a way, however, that predictions about the future are made so that they can be tested." Theory for understanding is useful for explaining new or interesting insights and can thus be useful to inform my practice of collaborative music performance as a piano accompanist. "As the main aim of this theory is not prediction, care should also be taken in the wording of any claims made so that they do not appear to go beyond what is warranted from a particular investigation" (Gregor, 2002, p. 8). Duncan (2004) also acknowledges that autoethnographic studies are most suited to creating theories rather

than testing them, allowing the researcher to explore and develop this type of theory for the improvement of practice.

Bartleet and Ellis (2009a) comment that autoethnography is particularly useful for creative artists and musicians who have been turning to this methodology to align their practice with new research paradigms (de Vries, 2006; Dunbar-Hall, 2009; Emmerson, 2009; Järviö, 2006; Schindler, 2009). My research into the flow phenomenon for a piano accompanist fits neatly with this philosophical approach of autoethnography.

Ethical considerations

Although this is an autoethnographical study, and is primarily focused on my personal experiences of the phenomenon of flow as a piano accompanist, there are still ethical considerations to grapple with. The creation of a narrative account of my experiences as a piano accompanist brings to the foreground not only my own experiences, but makes reference to those with whom I have collaborated over the years. Ellis et al. (2008) note that no autoethnography can be undertaken without considering the ethical implications of the research. Ellis has written extensively on this issue (C. Ellis, 1997, 2004, 2009; C. Ellis & Bochner, 2000) and grappled with the telling of very personal stories that involve not only herself but also her intimate others. She has had to confront significant ethical questions with the retelling of painful experiences, weighing up the pain to herself and others against the gains in sociological understanding made by researching such intimate subjects.

As a piano accompanist I have worked with individuals, small ensembles and large ensembles such as choirs. My narrative is concerned with my subjective experiences as the accompanist, but my interaction with my musical collaborators is an important part of the experience. Recreating the salient aspects of these musical relationships is part of the narrative telling. Leaving out personal prejudices and vindictive social observations is also part of the narrative telling. The purpose of the narrative is to create a truthful and honest narrative to provide data that can be analysed to address the research question. The narrative seeks to stay close to the topic of piano accompaniment, examining my most memorable experiences so that I can understand more fully the phenomenon of flow in a personal case study. Data that is not relevant to this study has been omitted from the narrative. The careful selection

of vignettes allows the narrative to explore aspects of piano accompaniment without causing embarrassment or pain to any participants mentioned in the data.

An ethical approach to any research presumes that no harm will come to any participants in the research, and this includes the self if the research is an autoethnography. The names of all characters have been changed in accordance with the ethics approval granted by the Human Research Ethics Committee of CQUniversity (Approval H10/01-011). The place names have remained unchanged, as per the ethics approval, as these places do not directly identify any of the characters referred to in the narrative.

The theoretical position for this study

The ontological position for this study

Autoethnography is a qualitative research method that uses reflexive inquiry to investigate a subjective phenomenon providing a case study of the self. Guba and Lincoln (1996, p. 158) argue that "the constructivist paradigm provides the best 'fit' whenever it is human inquiry that is being considered." This paradigm acknowledges the diverse range of understandings that can be arrived at in the study of human activity. My study is examining the subjective phenomenon of flow as it occurs in the activity of collaborative music performance. While some flow studies of human activity have employed empirical methods, autoethnography is a method that privileges the voice of the researcher who is also the researched and the one who has experienced the phenomenon of flow. The narrative that forms the data for my study allows me to recreate my collaborative music performance experiences for the reader and study these in the light of the literature pertaining to flow and its various psychological components. This type of evidence provides me with tangible data concerning an intangible set of experiences. Consistent with the constructivist paradigm, this research methodology takes the ontological position that

> There exist multiple, socially constructed realities ungoverned by natural laws, causal or otherwise: a relativist ontology. These constructions are devised by individuals as they attempt to make sense of their experiences, which it should be recalled, are always interactive in nature (Guba & Lincoln, 1996, p. 161).

Ellis and Bochner (2000, p. 739) acknowledge the useful contribution to knowledge that can be made through autoethnography as it is able to "display multiple layers of consciousness, connecting the personal to the cultural." Autoethnography requires the researcher to delve into their experience to uncover new ways of knowing about that experience. Lincoln (1997) notes the importance of the self in all qualitative studies, while Foltz and Griffin (1996, p. 302) acknowledge that the researcher plays a central role in the collection of data and its interpretation. In this study into the phenomenon of flow in music performance from my point of view as a piano accompanist, autoethnography validates my subjective experience. Bartleet and Ellis (2009a) suggest that autoethnography is particularly useful for musicians and performing artists to examine their practice. The subjectivity of music performance has led to an air of mystery surrounding the nature of music performance experience. Autoethnography is one way to open out this experience to scrutiny and add to the body of knowledge. A relativist ontological position for this study recognises that the knowledge generated through the autoethnographic process allows for "readers to feel the moral dilemmas, think with our story instead of about it, join actively in the decision points that define an autoethnographic project, and consider how their own lives can be made a story worth telling" (C. Ellis & Bochner, 2000, p. 735).

Central to the ontological position of this study is the notion of truthfulness. Ellis and Bochner (2000) acknowledge the criticisms levelled at autoethnographic studies, which are always concerned with events or experiences of the past and can be subject to the distortions of memory, or reflect a "romantic construction of the self" (Atkinson, 1997, p. 326).

> So the question is not "Does my story reflect my past accurately?" as if I were holding a mirror to my past. Rather I must ask, "What are the consequences my story produces? What kind of person does it shape me into? What new possibilities does it introduce for living my life?" (C. Ellis & Bochner, 2000, p. 746)

They posit that since all language lacks transparency there can be no single standard of truth. An autoethnographic text gains verisimilitude if "it evokes in readers a feeling that the experience described is lifelike, believable, and possible" (C. Ellis & Bochner, 2000, p. 751). In the same way that case studies are not generalisable in the sense of a realist ontology (Guba & Lincoln, 1996), an autoethnography provides

meaning in that it "provides opportunities for the reader to have vicarious experience of the things told" (C. Ellis & Bochner, 2000, p. 751). This study into the phenomenon of flow during music performance, with its use of a first-person narrative, allows the reader to the gain an understanding of the experience by vicariously engaging with the experience from the point of view of the piano accompanist. The knowledge gained through the subsequent thematic analysis of the narrative data will draw attention to the phenomenon of flow and its characteristics in this type of music performance activity.

The epistemological position for this study

In an autoethnographic study the researcher is also the researched. Emerging from the postmodern view of the world, autoethnography acknowledges and acclaims the role of the insider in bringing to light an intensely personal and subjective experience. Its epistemological position acknowledges that "it is impossible to separate the inquirer from the inquired into" (Guba & Lincoln, 1996, p. 163). In the case of autoethnography this relationship between the knower and the known is merged totally. Schwandt (2000, p. 190) notes that qualitative inquiries pay "attention to the fine-grained details of daily life." The autoethnographer uses memory, artefacts, member-checking (Lincoln & Guba, 1985) and other devices to reconstruct an experience to gain a new understanding and perspective on this experience. Since commencing this study into my experiences of flow during collaborative music performance it has not been possible to analyse my current performances for flow, as I am too much aware of the phenomena, thus disturbing any flow that might occur. It is not possible to examine oneself while in the process of flow (Csikszentmihalyi, 1993; LaBoskey, 2005; Schneiderman, 1991). Therefore, I have drawn on my memory of past experiences of collaborative music performance, where I was not directly investigating my own experience, and through the process of creating the narrative I have been able to recall and then study the characteristics of various memorable performance events. My process of data collection and analysis to create a theory for understanding my flow experiences in collaborative music performance is supported by Schwandt (2000, p. 197) who suggests that as human beings "we invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience." This constructivist epistemology "opposes a naïve realist and empiricist epistemology that holds that

there can be some kind of unmediated, direct grasp of the empirical world and that knowledge (i.e. the mind) simply reflects or mirrors 'what is out there'" (Schwandt, 2000, p. 197).

Autoethnography removes the risks inherent in the representation of others, and allows for the production of new knowledge by a unique and uniquely situated researcher, thus offering small-scale knowledge that can inform specific problems and specific situations (Denzin & Lincoln, 2003; Wall, 2006). The researcher's values will also play a strong part in the research process, and autoethnography, as such a personal research method, cannot escape being shaped by such values. Ellis and Bochner (2000, p. 761) assert that "more and more academics think it's possible to write from the heart, to bring the first-person voice into their work, and to merge art and science." The use of the first-person is evident in the narrative that forms the data for this particular study. It is through the use of the first-person that I recreate for the reader the experience of the phenomenon of flow in music performance, and then use this narrative as a starting point to compare and contrast the characteristics of flow as presented in the data with the model developed by Csikszentmihalyi.

Overview of research designs for the investigation of the flow experience

Early research designs for flow studies

The concept of flow was first identified and described by the American psychologist Csikszentmihalyi to describe an intensely enjoyable phenomenon that occurs when one is totally absorbed in a challenging task, with clear goals and clear feedback, that gives a sense where nothing else mattered but the task at hand (Csikszentmihalyi, 1975). He found that many people experienced this phenomenon, including musicians, artists, dancers, athletes, and surgeons, and in order to understand the phenomenon as being something more than a 'mystical' or religious experience, he began to study the phenomenon through a series of studies that used both quantitative and qualitative methodologies. He employed a tool called the Experience Sampling Method (ESM) (Csikszentmihalyi & Larson, 1987). His research subjects carried an electronic pager with them for a period of up to a week.

At various times of the day they were 'beeped' and asked to complete a self-report form with open-ended and scaled items to describe the quality of their experience at the time in a variety of dimensions. Of particular interest to Csikszentmihalyi was the activity that the subjects were doing as they were reporting on their quality of experience (Csikszentmihalyi & LeFevre, 1989).

With this data, he began to piece together a comprehensive picture of flow and its specific characteristics, and, more importantly, what types of human activity promoted the experience of flow and what types of activity impeded the experience of flow. It was a complex task, but soon he was able to create a model of the flow phenomenon that inspired many other researchers and became the basis of a wide gamut of research topics that sought to define the experience of flow in a number of settings throughout the world, ranging from Japanese motorcycle gangs (Sato, 1988) to elite athletes preparing for the Olympic games (Jackson, 1992), flow experiences in choral performance (Jaros, 2008) and students studying in Italy (Carli, et al., 1988; Massimini & Carli, 1988).

Quantitative and qualitative approaches to studying flow

Most of the early studies into flow used both quantitative (such as the Experience Sampling Method) and qualitative approaches (interviews). Interviews provide the opportunity for participants to explain their subjective experience in a way not usually captured with paper and pencil questionnaire assessment. In the scientific community, a positivist perspective for research design is often considered the 'real science' (Wall, 2006). However, quantitative methodologies that are created to test a hypothesis continue to dominate research studies of flow in the disciplines of psychology and music education: creativity and flow in musical composition (MacDonald, et al., 2006), the relationship between performance anxiety and flow (Kirchner, et al., 2008), the wellbeing and flow of office workers (Bryce & Haworth, 2002), the experience of time and intrinsic motivation (Conti, 2001), flow in teams (Cosma, 1999), and the motivational determinants of flow (Kowal & Fortier, 1999). A number of researchers have gone further with the empirical methods to further tease out the characteristics of flow. Most notably has been Jackson who has applied the flow phenomenon to the field of sport psychology (Jackson, et al., 2001). Her studies and those with her colleagues have looked at using various instruments to measure flow, including the Flow State Scale, and the validity of these instruments to explain

this subjective experience (Jackson & Eklund, 2002; Jackson & Marsh, 1996; Jackson, et al., 2008).

While Jackson has undertaken both quantitative (Jackson & Eklund, 2002; Jackson & Marsh, 1996; Jackson, et al., 2008; Jackson & Roberts, 1992; Jackson, et al., 2001) and qualitative (Jackson, 1992) studies of the flow experience she has also written about the growing role of qualitative methodologies (Jackson, 1995) to add depth to the field of sport psychology, of which flow is just one part. Hefferon and Ollis (2006) use interpretive phenomenological analysis to analyse professional dancers' experiences of flow in performance. Based on the work of Smith (2004; see also J. A. Smith, Jarman, & Osborn, 1999; J. A. Smith & Osborn, 2003), interpretive phenomenological analysis provides a useful qualitative analysis tool in the field of psychology. In the discipline of information technology, Chen, Wigand and Nilan (1999) used content analytic procedures to analyse open-ended questionnaires to directly elicit 304 web users' perceived flow experiences on the web, while Pace (2004) used grounded theory to examine the flow experiences of web users.

Problems with studying the flow experience

Csikszentmihalyi (1990, 2002) acknowledged in his early work that flow is a subjective phenomenon and therefore difficult to measure and quantify through traditional empirical methods. However, he has continued to refine the various research instruments, such as the experience-sampling method (ESM), that have been used to measure flow (Csikszentmihalyi & Larson, 1987). Kimiecik and Stein (1992) observed there could be some issues with the reliability of the interview data if the interviews occurred well after the experience itself, but they also noted that the experience-sampling method (ESM) could be intrusive and impractical. "Besides being impractical in some sport environments (e.g., swimming, football), beepers could go off during an important movement component (i.e., tennis backhand, golf backswing)" (Kimiecik & Stein, 1992, p. 155). Adding to this, "one cannot discount the technique's intrusive nature. In fact, the possibility exists that interrupting an athlete while performing an activity could disrupt the flow experience itself (e.g. concentration, loss of self-consciousness) which a researcher is trying to measure" (Kimiecik & Stein, 1992, p. 157).

Qualitative studies into the experience of flow (Alberici, 2004; Bernard, 2009;

Chen, et al., 1999; Harley, 2003; Jackson, 1992; Pace, 2004) all rely on their interviewees recalling experiences of flow during various activities, and my study, using autoethnography, relies on the recollection of flow experiences and the subsequent description of these experiences in an autobiographical narrative. However, through the collective work of all these researchers, using a range of research methodologies, the phenomenon of flow, across many different occupations and activities, is becoming more understood.

The place of autoethnography in qualitative research

Denzin and Lincoln's (2005, p. 20) discussion on the development of qualitative research brings them to the conclusion that "an embarrassment of choices now characterizes the field of qualitative research. Researchers have never before had so many paradigms, strategies of inquiry and methods of analysis to draw upon and utilize." This broadened approach to qualitative research has opened up the field to include new forms of expressing lived experience where researchers are free to abandon the concept of the aloof observer, which is at the core of traditional qualitative inquiry, and include narrative, performative and autobiographical representations as valid critical inquiry. This has sparked a wave of interest in more personal, intimate and embodied writing with autoethnography also growing in acceptance among researchers in health sciences as demonstrated by Foster, McAllister and O'Brien (2006) in their overview of the use of autoethnography as a means of researching practice in mental health nursing.

Reed-Danahay (1997) notes that the term 'autoethnography' can have multiple meanings. One of the earliest uses of the term autoethnography was in a paper by Hayano (1979) who defined it as an ethnographic study from an insider's perspective. For Hayano (1979, p. 100) autoethnographers "possess the qualities of often permanent self-identification with a group and full internal membership, as recognised both by themselves and the people of whom they are a part." This is the type of autoethnography "where the culture of one's own group is textualised" (Reed-Danahay, 1997, p. 5). Adding to this interpretation of autoethnography is the work of Pratt (1992, 1994) who describes autoethnography as a form of ethnography of one's own culture, rather than a piece of autobiography. Pratt's work, as with Hayano,

acknowledges the ethnographic features of the methodology. Other definitions, as outlined by Reed-Danahay (1997), include autobiographic writing, which includes life history, life story or self-story. Denzin (1989) suggests that autoethnography is different to straight ethnography, life history or autobiography because it incorporates elements of the interactions with others as well as one's own life experience. For Deck (1990), the author of an autoethnography has authentic first-hand knowledge of a culture and is therefore able to provide authority to an autoethnographic text. Brettell (1997, p. 245) comments that the "boundaries among the various genres of life-writing and writing about culture are indeed blurred," adding to the diversity of research styles contained within the term autoethnography.

Autoethnography offers "a way of giving voice to personal experience to advance sociological understanding" (Wall, 2008, p. 39) and is an intriguing methodology to use to explain the subjective experience of flow. Emerging from the postmodern view of the world, this research design acknowledges and acclaims the role of the insider in bringing to light an intensely personal and subjective experience. Self-study researchers also acknowledge the self as the subject of the inquiry (Loughran, Hamilton, LaBoskey, & Russell, 2004). Bullough and Pinnegar (2001, p. 15) outline the delicate balance that self-study researchers need to maintain.

> It is the balance between the way that private experience can provide insight and solution for public issues and troubles and the way in which public theory can provide insight and solution for private trial that forms the nexus of self-study and simultaneously presents the central challenge to those who work in this emerging area.

Ellis and Bochner (2000) take a subtly different approach and describe autoethnography as the process where authors use their own experiences in their culture to look more deeply at self and self-other interactions. Denzin and Lincoln (2003, p. 5) observe that "qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them." Furthermore, in the current age, qualitative researchers will explore "messy, uncertain, multi-voiced texts, cultural criticism and new experimental works" using "more reflexive forms of fieldwork, analysis and inter-textual representation" (Denzin & Lincoln, 2003, p. 38). As I began to explore the subjective phenomenon of flow in my own experiences in collaborative music performance, I

began to realise my research would more closely align with autoethnography, rather than self-study as defined by Bullough and Pinnegar (2001). As discussed by Bartleet and Ellis (2009) autoethnography is especially useful for musicians as it can expand musician's awareness of their practice, values and beliefs, and this paradigmatic positioning will enhance my study of the phenomenon of flow in collaborative music performance.

The lived experience of the researcher is, by its very nature, subjective, and there is growing interest and recognition of this genre of qualitative research (Bartleet & Ellis, 2009b; B. L. Berg, 2007; Chang, 2008; Denzin, 1997; C. Ellis, 2004; C. Ellis & Bochner, 2000; C. Ellis & Flaherty, 1992; L. Richardson, 1992). Berg (2007, p. 180) argues that "social scientists should recognise that research is seldom, if ever, really value neutral" and he goes on to state that "subjective disclosures by researchers allow the reader to better understand why a research area has been selected, how it was studied and by whom" (B. L. Berg, 2007, p. 181). Chang (2008) offers a comprehensive positioning of autoethnography as a qualitative research method and presents useful approaches to the collection and analysis of autoethnographic data.

Studies using subjective approaches such as autoethnography aim to describe specific phenomena in detail, explain the patterns that exist and "not to discover general laws of human behaviour" (Schofield, 1990, p. 202). Autoethnography draws on the experience of the researcher to "produce a coherent and illuminating description of and perspective on a situation that is based on and consistent with detailed study of that situation" (Schofield, 1990, p. 203). Lincoln and Denzin (2003, p. 615) assert that the "qualitative researcher is not an objective, authoritative, politically neutral observer standing outside and above the text." They make it clear, as does Geertz (1988), that the author of an ethnographic study cannot possibly write a text without revealing something of their personal, subjective and poetic self in the text. Foltz and Griffin (1996, p. 302) explain that "since all knowledge is socially constructed, the researcher, as the instrument of data collection and interpretation, plays a central role in creating this knowledge." Lincoln (1997) also notes the complexity that is now qualitative research with the acknowledgement that the self is part of the research process and the text acknowledges the role of the self in this process thus finding new audiences for social science research. Ellis and Flaherty

(1992, p. 5) see lived experience as "interpreting the meaning of our own and other people's lives" and they call for texts that "capture and evoke the complex, paradoxical, and mysterious qualities of subjectivity" (p.5) so that we gain new understandings of the subjective experience. These new understandings could involve the transformation of our identities, or selves, in response to personal and physical changes, and in the broader sense, the research paradigm allows for "readers to recognise themselves – their feelings, thoughts and everyday experiences – in the texts" (C. Ellis & Flaherty, 1992, p. 11) thus adding to knowledge of the human experience.

Approaches to autoethnography

To clarify the varied nature of autoethnography in qualitative research, Ellis (2004, p. 45, italics as per original text) outlines the various approaches to autoethnography. Some approaches designate particular types of writing "such as *personal ethnography* and *reflexive ethnography*, while other terms refer to methodological approaches, such as *systematic sociological introspection*, *narrative inquiry* and *biographical method*."

Personal ethnography

According to Ellis (2004, p. 45) "personal ethnography is a personal narrative, where social scientists view themselves as the phenomenon and write evocative stories specifically focused on their academic as well as their personal lives." De Vries (1999, 2000) took this approach when examining the nature of being a classroom primary school music teacher. The data for the research consisted of a personal narrative that was then analysed for themes that would answer the research questions. Davies (1999, p. 179) notes that the role of the self in the experience of ethnographic fieldwork "must be acknowledged and its significance addressed during analysis and, perhaps less universally agreed, should be made visible in reporting findings." Humphreys (2006) explores his own journey in teaching qualitative research methods by comparing it to his own experience of learning to play the clarinet. In another example of the use of autobiography as research in the social sciences, Murphy (1987) uses his autobiographical account of his experiences of

developing a spinal tumour and his gradual paralysis to quadriplegia to interrogate his own experiences as a person with a disability and to disseminate information to the broader community about the social world of people with disabilities. These types of personal accounts provide exemplars for the creation of my own narrative that serves as data for this thesis.

Richardson (1990, 1992, 1996) emphasises that autobiographical narrative relates an individual's past to the present so that they can explain and justify their life experiences. Autobiographies by historical, popular, and literary figures are a well-established writing genre, but personal narrative as a research tool of social science is a relatively recent approach (Hertz, 1997; Lincoln & Guba, 2000) and requires the researcher to critically reflect on the self as researcher, to consciously experience the self as "both inquirer and respondent, as teacher and learner, as the one coming to know the self within the processes of research itself" (Lincoln & Guba, 2000, p. 183). This use of personal writing as a research tool has been utilised convincingly by a number of researchers (Conway, 2003; East, 2009; Kirk, 2005; Schindler, 2009). DeVault (1997, p. 226) suggests that "personal writing is useful for exploring the unexpected and, thus for bringing to light aspects of the 'ordinary' experience that are typically obscured."

Reflexive narrative and narrative ethnography

Reflexive or narrative ethnography "focuses on a culture or sub-culture, and authors use their life story in that culture to look more deeply at self-other interactions. This approach offers insight into how the researcher changed as a result of observing others" (C. Ellis, 2004, p. 46). Strong-Wilson's (2005, p. 226) autobiographical account uses her own experience as a white teacher relocating to a native Canadian community to explore why, like her "female, white, and 'feminist' predecessors," she is drawn to powerful indigenous women. Reflexive narrative provides McNiff (2007) with a way to examine her own educational practice and comment on the broader issues of her critical engagement with educational theory. Narrative ethnography can also provide the researcher with an evocative medium to explore topics of sensitivity. Scott-Hoy (2009) uses narrative ethnography in a powerful way to explore how young adolescents deal with grief and loss through their engagement with music.

Brettell (1997) adds to this discussion by noting that it is difficult to separate some of these genres of writing and that this blurring of genres occurs when multiple sources of information, such as letters, memoirs, journals, diaries, fiction and poetry, are used to create a life-history narrative, be it biographical or autobiographical. She describes her own work of writing a book about her mother who was a writer, as a blurring of genres – biography, autobiography and autoethnography. She suggests that this life narrative, "be it biography or autobiography, can also be viewed as autoethnography in the sense that, as my mother wrote about herself or others, she was also "writing cultures" – engaging in a world through her own experience as both a participant and an observer" (Brettell, 1997, p. 230).

Co-constructed narratives

Some autoethnographers make use of co-constructed narratives to explore an experience or phenomenon. Bartleet and Hultgren (2008) research the process of conducting a music ensemble and use their joint observations to explore their own development of their practice. Ellis and Bochner (2000) provide an exemplar of this style of autoethnographic writing as they blend direct speech with academic writing in their discussion on the evolution of autoethnography within the landscape of qualitative research. Co-constructed representations can also take the form of staged dialogue as in the case of Ellis and Flemons' (2002) dialogue about qualitative inquiry, art, personal narrative, and ethnography.

Performance autoethnography

In more recent times, researchers have engaged with performance to re-enact ethnographically derived notes. Building on the work of McCall (2000), Alexander (2005, p. 415) states that "using performance as an 'explanatory metaphor' involves reconstructing the notion of performance from *theatrical entertainment* to performance as a *method of explaining, exemplifying, projecting, knowing, and sharing meaning*" (italics as per Alexander). Performance as ethnography and autoethnography has been investigated by Saldana (2008). This performance piece brings to light the memories and emotional experiences of the author performing in a high school instrumental ensemble. The evocative performance work challenges its viewers to recall their own similar experiences during their vulnerable teenage years, thus shedding light on the development of the performer's identity. Mio (2005) uses

the composition of a concerto to explore the identity of a musician, and Kennedy (2007) explores the concept of joy through arts-based inquiry.

Many of these ethnographies and autoethnographies rely on narrative approach to the construction of the data. This narrative allows the autoethnographer to draw the reader into the subject matter and gain some understanding of the experience under study. It is here that there is an intersection in research methodologies. Narrative inquiry is a broad field in its own right and as autoethnography has gained a foothold in the scholarship of qualitative research, it has been able to draw on some of the important work being done in the field of narrative inquiry as a research method.

Narrative autoethnography

Autoethnography and narrative inquiry are closely related in that autoethnography links the personal to the cultural, and narrative provides the researcher with opportunities to evocatively engage the reader with the experience or phenomena under study (Clandinin & Connelly, 2000). The narrative that is provided in Volume 2 of this thesis, and is the data for my study, blends autoethnography and narrative inquiry as suggested by Leavy (2009, p. 38) who describes narrative autoethnography "as traditional autoethnographic writing that is represented as a narrative or story." Ellis' earlier work (2004, p. xix) also supports this position stating that "autoethnography claims the conventions of literary writing." As such, narrative autoethnography may be presented as a short story, poem, drama, novel, or performance piece. This mix of autoethnography and narrative inquiry is particularly useful in arts-based research such as music where the music itself can create beauty, connect people through emotions and also form an integral part of many cultural rituals (Bernard, 2009; Bochner, 2001; Leavy, 2009). The use of narrative can be a powerful tool to explore the experience of music and the effect of its performance on those who listen to it as well as those who create it.

Bresler (2005, 2008) observes that many researchers use sight-driven methodologies to explore a social phenomenon – watching, visualising – without recognising that ethnographic and interview research also has an important aural dimension. She posits that the listening skills and aural understanding associated with music can help researchers enrich the research process by exploring dimensions of a phenomena that would largely remained untapped. Just as lived experience is fluid

and constantly moving, "the fluidity of sound and music sensitises us to the ephemeral, to the ebb and flow of lived and researched experience" (Bresler, 2008, p. 234). Thus the dimensions of music such as rhythm melody, dynamic, tempo, texture, timbre and form can inform the data collection and analysis methods of the qualitative researcher by increasing their perception of the phenomena. As they strive to capture a fluid phenomena in numbers or words, Bresler (2008) commends them to draw upon the lessons learned about the dimensions of music to achieve some clarity and stability when investigating the visual and lived experience.

Case study and autoethnography

While Reed-Danahay (1997) notes that autoethnography can assume various methodological positions, this particular study of the phenomenon of flow for a piano accompanist is in the form of an autobiographical case study. It is therefore important to compare the research methodology of this project with the literature regarding case study methodology. Stake (1995, p. xii) uses case study methodology predominantly in studying educational programs, but acknowledges "there are many, many ways to do case studies." He notes that the main purpose of case study is to fully understand the one case.

> The real business of case study is particularisation, not generalisation. We take a particular case and come to know it well, not primarily as to how it is different from others, but what it is, what it does. There is emphasis on uniqueness, and that implies knowledge of others that the case is different from, but the first emphasis is on understanding the case itself (Stake, 1995, p. 8).

One type of case study research that is pertinent to this particular study of the phenomenon of flow for a piano accompanist is the biographical case study. Stake (1995, 2000, 2005) acknowledges that biographical case study often deals only with a phase of life and not necessarily the whole complexity of a life, recognising that life is beset with problems, has patterns and phases and a uniqueness that makes it interesting for case study research.

While the findings of this study will help me to understand the phenomenon of flow as I have experienced it as a piano accompanist, it is difficult to generalise these findings to all piano accompanists. However, Flyvbjerg (2006, p. 223) asserts that such case studies of real-life situations are "important for the development of a

nuanced view of reality." He also notes that case studies often contain a substantial amount of narrative and that "good narratives typically approach the complexities and contradictions of real life" (Flyvbjerg, 2006, p. 237). He argues for the importance of case study research in contributing to the cumulative development of knowledge by repeating the insight of Kuhn (1987, as cited in Flyvbjerg, 2006, p. 242):

> A discipline without a large number of thoroughly executed case studies is a discipline without systematic production of exemplars, and that a discipline without exemplars is an ineffective one. In social science a greater number of good case studies could help remedy the situation.

George and Bennett (2004) also outline the wide ranging uses of case study methodology in the social sciences stating that it can be useful methodology for the development of theory, and when a theory is well developed, such as the theory of flow as developed by Csikszentmihalyi (1975, 1990, 2002), case studies can be effectively used to test this theory (Haberl, 2001; Matthews, 2003; Neumann, 1992; Werther, 1999). Case studies continue to be an important part of research into musical experience and learning (Borthwick & Davidson, 2002; Ginsborg, Chaffin, & Nicholson, 2004; May, 2005; Nielsen, 1999) supporting Flyvbjerg's (2006, 2011) argument that case study research provides context-dependent knowledge that is valuable in helping a learner move from novice to expert within a discipline.

Related methodologies

In order to more fully appreciate the place of autoethnography in qualitative research, it is necessary to briefly outline the philosophical and theoretical underpinnings of a number of related research methodologies: narrative inquiry, self-study and action research. These have been alluded to in earlier sections of this chapter and are now discussed in more detail, thus providing greater clarity for the reader regarding the research methodology employed in this thesis.

Narrative inquiry

Narrative inquiry is a broad term that is used to describe a form of qualitative research that explores "experience as expressed in lived and told stories" (Pinnegar & Daynes, 2007, p.5). Narrative inquiry is different from autoethnography in that the researcher uses another person's experience to construct the narrative, whereas in autoethnography, narrative can be used by the researcher to describe his or her own experience. Polkinghorne (1988, p. 160) observes that "our lives are ceaselessly intertwined with narrative, with the stories that tell and hear told, with the stories that we dream or imagine or would like to tell." He argues that the human experience can be constructed with the use of narrative and that this has been the case for thousands of years with examples from the Bible and the poets of ancient Greece. As a research method, narrative can be used to gain understanding of why humans act in a particular way. The narrative research report is reflective in style and its intent is to use narrative explanation to make sense of complex events that are part of the human experience. Polkinghorne (1988) notes that this type of narrative research can take the form of case histories that describe the context of past events. These events are arranged by the narrative researcher into a coherent story "in which the links between the events are developed, and the significance provided" (Polkinghorne, 1988, p. 174).

Within the broad framework of narrative inquiry, researchers have used a variety of approaches to analyse and explore the data that is presented as a story or a description of events or experience. "For narrative inquirers both the stories and the humans are continuously visible in the study" (Pinnegar & Daynes, 2007, p.7). Narrative research acknowledges that "humans and the human interactions they study exist in a context and that the context will influence the interactions and the humans involved" (Pinnegar & Daynes, 2007, p.11). Narrative inquiry allows the researcher to cast off positivist approaches to researching human experience and embrace a more subjective view of the research subject. It also allows the researcher to treat words as data. This is one of the strengths of narrative inquiry and possibly accounts for its growth among music educator researchers (Barrett & Stauffer, 2009; Clandinin, 2009; Conway, 2003) as well as researchers in other discipline areas such as psychology (Gergen & Gergen, 2010), sport and exercise psychology (B. Smith, 2010) and teacher education (Craig, 2011; Huber-Warring, 2010).

Self study

Even as social science has been grappling with the role of the 'self' in qualitative research, and in particular the challenges of revealing the 'self' within traditional ethnography, research in education has been similarly challenged to accept the "voices of the teachers themselves, the questions teachers ask, the ways teachers use writing and intentional talk in their work lives, and the interpretive frames teachers use to understand and improve their own classroom practices" (Leglar & Collay, 2002, p. 856). According to Leglar and Collay (2002), the objectivist and scientific paradigm of education research in the twentieth century has favoured objective research agendas and thus marginalised teachers who are at the forefront of practice, and caught in the theory-practice divide that privileges theoretical knowledge constructed by philosophers, psychologists and social scientists. However, there has been a growing interest from teachers who want to bring a research perspective to their practice that is both authentic to their experience and relevant to their needs.

The concept of self-study in education is an important field in qualitative research with a number of edited volumes bringing together ideas on the use of reflective practice and self-study to inform teacher education and practice (Calderhead & Gates, 1993; M. L. Hamilton, Pinnegar, Russell, Loughran, & LaBoskey, 1998; Loughran, et al., 2004). Many researchers have combined the use of reflective practice and self-study to inform their own work as teachers and build their pedagogical understanding (Conway, 2003; Gambrell, 2006; Gudjonsson, 2002; Knowles, 1993; Loughran, 2004; McBride, 2005). This type of reflexivity allows a researcher to become more self-aware and adept in attributing meanings, interpreting actions because "a reflexive mode can make one aware of oneself as subject and object as well as of the process that creates the consciousness of both" (Wasserfall, 1997, p. 154). The value of reflection as an essential tool for professional educators was elucidated by Schön (1987) and has been the subject of other inquiries on the value of reflective practice in education and research (Brookfield, 1995; Brown, 2009).

Ellis and Bochner (2000) recognise that writing about the self and personal experience can be not only therapeutic but can provide a broader perspective and

understanding about the human experience. Describing the term 'autoethnography',
Ellis writes in the first-person:

> I start with my personal life. I pay attention to my physical feelings, thoughts
> and emotions. I use what I call systematic sociological introspection and
> emotional recall to try to understand an experience I've lived through. Then I
> write my experience as a story. By exploring a particular life, I hope to
> understand a way of life (C. Ellis & Bochner, 2000, p. 737).

Holman Jones (2005, p. 784) suggests that autoethnography allows the researcher to
place personal stories within the context of larger social contexts. In this way, these
stories can "constitute a first step toward social change." In these contexts,
autoethnography, as a way of studying the self and connecting the personal to the
cultural and social (C. Ellis, 2004), provides a methodology for teachers to examine
their practice and the effects of their practice on student learning. In an education
system that continues to challenge teachers to develop their practice using the
evidence gleaned from research (Cochran-Smith, 2005), teacher self-study is drawing
strength from the debates around the validity and reliability of qualitative research in
general (Freeman, deMarrais, Preissle, Roulston, & St. Pierre, 2007).

Action research

Ellis and Bochner (2000, p. 754) describe autoethnography as "action research
for the individual." Clearly the reflective nature of autoethnographic research aligns it
closely with action research (Kemmis & McTaggart, 2000, 2005; McMahon, 1999)
where the process is generally thought to involve a spiral of self-reflective cycles
allowing for participants to develop an understanding of their practices and see them
evolve through a process of self-reflection, analysis and application of reformed ideas
and practices. For Kemmis and McTaggart (2005) participatory action research has
the capacity to empower communities and bring about real social and political
change. Adding to this idea of critical reflection, Bartleet and Ellis (2009, p. 9)
suggest that autoethnography can inspire researchers "to critically reflect upon their
music experiences in relation to the autoethnographic tale being told." My study does
not follow the action research model, but some autoethnographers (Duncan, 2004)
have designed their studies in the form of personal action research relying on
systematic self-reflection to provide the basis for the critical analysis of their work.

These three related methodologies, narrative inquiry, self-study and action research are all underpinned by the concept of critical reflection making use of the widening approaches to qualitative inquiry that have become evident in the last decades of the twentieth century (Denzin & Lincoln, 2005). I will now consider the various approaches to analysis that have been used by autoethnographers in order to contextualise my own analysis process for this thesis.

Approaches to the analysis of autoethnographic data

Ellis (2004) suggests that autoethnographers have at their disposal a range of techniques to analyse their data including grounded theory, interpretive phenomenological analysis, narrative inquiry, narrative analysis and various hybrids of analysis techniques based on aspects of these theories.

Autoethnography as method

The analysis of the narrative data for my study into the phenomenon of flow during collaborative music performance as a piano accompanist follows the approach adopted by Chang (2008, 2011), who exhorts autoethnographers to approach their analysis systematically and thoroughly. She summarises her approach to autoethnography:

> Autoethnographers do not see the self in a vacuum. Instead, they examine the relationship between the self and the context (a combination of different others): how the context has shaped the self, and, therefore, how the self reflects the context and how the self reacts to the context and transforms it. Collecting data about the self ultimately gives rise to the understanding of the context. It is the analysis and interpretation of the context, in relation to the self, on which autoethnographers strive to focus their ethnographic attention during their research endeavour (Chang, 2011, p. 17).

Chang's approach, as discussed earlier in this chapter, draws together many of the ideas of qualitative analysis in an attempt to give a framework for autoethnographers who are often faced with messy, multi-layered and multi-voiced texts, and need some form of guidance in making sense of a large amount of data. Chang (2011, p. 15) advocates that "analytical and interpretive orientation is the crux

of autoethnography as a qualitative research process and products [sic] because autoethnographic writings differ from other self-narrative writings, such as memoir and autobiography, which primarily focus on story-telling."

Grounded theory

Grounded theory provides some autoethnographers with a clear process for coding the data and allowing the new theory to emerge from the data itself. Ellis (2004, p. 29) suggests that "researchers using grounded theory often hold to the belief that if you apply a valid and systematic methodological approach, you'll get close to an accurate representation of what's actually going on." Charmaz (2005) provides a useful discussion of the application of grounded theory to social science research and Pace (2003, 2004) has successfully applied grounded theory methods to the study of the flow experiences of web users. What many qualitative researchers find appealing about grounded theory is that "its methods offer explicit strategies, procedural rigour, and seeming objectivity" (Charmaz, 2005, p. 510).

Interpretive phenomenological analysis

A number of researchers in the field of psychology have been using interpretive phenomenological analysis (IPA) to analyse qualitative data, and in particular qualitative data that is presented in a narrative form. Interpretive phenomenological analysis (J. A. Smith, 2004; J. A. Smith, et al., 1999) provides a framework for analysis with a level of rigour that appeals to scholars in the discipline of psychology, many of whom are more familiar with empirical methods. It bears many similarities to grounded theory in that it is attempting to allow new theory to arise from the data through systematic coding and analysis of themes.

Narrative analysis

Taking an approach borne from narrative methods (Clandinin & Connelly, 1991, 2000), Webster and Mertova (2007) suggest that by reading and re-reading the narrative data, themes will emerge from the data. They do not advocate a grounded theory approach (per se) to the analysis, but refer to reading the data and looking for themes that emerge from the data. Webster and Mertova (2007) expound a methodology and analysis that consists of looking for 'critical' events in the narrative. These are events that have a deep impact on the storyteller and refer to events that

have changed the storyteller's understanding or worldview. "The longer the time that passes between the event and the recall of the event, the more profound the effect of the event has been and the more warranted is the label *critical* event" (Webster & Mertova, 2007, p. 74). The truthfulness of the data and resulting analysis is confirmed through comparison with like and other events. "Like events occur at the same level as the critical event and, because the context is like the critical event, they are labelled 'like events'" (Webster & Mertova, 2007, p. 78). Like events repeat the context, method and resources used in the critical event. 'Other events' include other incidental and anecdotal information that reveals the same issues. "These events occur at the same place, context and time as the collected critical and like events" (Webster & Mertova, 2007, p.78) and are often informal associations that inform the critical events.

The many approaches to the analysis of autoethnographic data have one thing in common: a desire to communicate to the reader a way of answering the research questions that is honest, clear, truthful and believable. Each method requires a type of reflexivity that, according to Wasserfall (1997, p. 154), allows a researcher to become more self-aware and adept in attributing meanings, interpreting actions because "a reflexive mode can make one aware of oneself as subject and object as well as of the process that creates the consciousness of both."

Judging the quality of an autoethnography

My autoethnography about the flow experience of a piano accompanist is in fact a case study with the researcher also being the object of the research. As such, the final report of the study including my representation of that data and its subsequent analysis will need to satisfy the reader of its quality as a piece of research. A number of key issues will be addressed here dealing with issues of quality thus clearly defining this study and its limitations.

Dealing with subjectivity

An autoethnography is by definition a case study of the self. As such, autoethnography has faced criticism as a methodology for being "self-indulgent, narcissistic, introspective, and individualised" (Atkinson, 1997; Sparkes, 2000; as

cited in Wall, 2006). Consistent with a case study approach, this study "concentrates on experiential knowledge of the case" (Stake, 2005, p. 444). The type of experiential knowledge expounded in this study is subjective, and Stake acknowledges that this is common in case study research. "Case researchers greatly rely on subjective data, such as the testimony of participants and the judgement of witnesses. Many critical observations and interview data are subjective" (Stake, 2005, p. 454).

Eisner (1991) argues that there is a case for subjectivity in research and the multiple perspectives created by personal biographies make possible new forms of knowledge which add to the depth and richness of the culture under study. These new forms of knowledge "then become candidates for shaping the experience of others, who in turn can use them to create even newer forms, which in turn…and so forth" (Eisner, 1991, p. 48). However, he does acknowledge that most qualitative research is a product of both objective and subjective entities, "that neither pristine objectivity nor pure subjectivity is possible" (Eisner, 1991, p. 53).

Issues around the use of memory

The use of memory in the creation of data has been criticised by realist researchers as lacking in rigour and systematicity (Wall, 2006). However, Coffey (1999) notes that the process of ethnography relies on the use of memory to recall experiences in the field and of the social interactions that were recorded by the ethnographer. Tedlock (2000) also notes that the writing of an ethnographic text involves a historical, political, and personally situated representation of human life. Such ethnographic texts rely on the memory of the ethnographer to recreate for the reader the culture under study so that sociological relationships can be studied and understood.

Autoethnography faces the same criticisms (Muncey, 2005; Wall, 2006, 2008) especially if the data for an autoethnographic study is created using the memory of the researcher. Psychologists recognise that our sense of self and identity is connected to the memory of our past (Kihlstrom, Beer, & Klein, 2003), yet in autoethnographic research projects "researchers intentionally embrace personal memory, self-observation, self-reflection, and self-analysis as a means to collect autobiographic data" (Chang, 2011, p. 15). Our memories are shaped by our experience and can be distorted over time (Bochner & Ellis, 1996; Denzin, 1996, 1997; Van Maanen, 1995)

so an autoethnographer needs to use multiple sources to create the data for this type of research to create an account that is believable and useful for research and analysis. My study into the phenomenon of flow during collaborative music performance makes use of multiple sources to create the data for analysis.

Issues regarding trustworthiness of autoethnographic data

According to Webster and Mertova (2007, p. 93) "reliability is not the statistical measure, rather it is measured by the accuracy and accessibility of the data, so that any reader can get hold of the relevant text or transcript." Stake (2005, p. 454) faces these issues of trustworthiness in case study research and suggests that "the qualitative researcher is interested in diversity of perception, even the multiple realities in which people live." What is clear from these descriptions is that the trustworthiness of data depends on it being accessible and repeatable from a number of perspectives, a process known as 'triangulation'. Stake describes the process of triangulation as "a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation" (Stake, 2005, p. 454). Eisner (1991, p. 55) notes that triangulation is a term used to describe "the confluence of multiple sources of evidence or the recurrence of instances that support a conclusion." Each of these authors describes a process whereby research data can be seen as trustworthy.

In order to address issues of trustworthiness for this study, the reader will be provided with a full copy of the narrative that is at the core of this autoethnography as a separate volume in the thesis. To create a greater sense of verisimilitude for the reader (Morse, Barrett, Mayan, Olson, & Spiers, 2002; Sparkes, 2000; Wall, 2006, 2008), the narrative that is the data of this study has been created from multiple sources including my memory and various document artefacts. The document artefacts include programs from performances, newspaper articles, photographs, audio and video recordings of performances and diary entries. Ellis and Bochner (2000) provide an exemplar of this style of narrative writing, blending a personal narrative within a scholarly discourse on autoethnography as a research method. Dunbar-Hall (2009, p. 156) provides us with a reflection of his autoethnographic process and notes that through the creation of a narrative about learning to play Balinese gamelan music, "a number of research agendas began to develop, and it was my awareness of this that first alerted me to a nascent autoethnographic identity." This approach was also used by De Vries (1999). His evocative narrative about becoming a primary school music

specialist teacher became the source of his subsequent analysis and discussion about music teacher identity.

Professional conversations (Healy, et al., 2001; Orland-Barak, 2006; Tillema & Orland-Barak, 2006) with some of the performers with whom I have worked over the years have also been used to create the narrative data for this study. These professional conversations provide another perspective on my data collection and subsequent analysis. They are particularly useful as these people have been directly involved in my performance experiences as they are the people I have accompanied in various types of performances. Their experiences of me as their piano accompanist add more depth to my understanding of the flow phenomenon and what circumstances contribute to or detract from the experiences of flow in music performance.

Validity of autoethnographic data

The issue of validity presents some challenges in this type of study, as with many similar forms of qualitative research. Qualitative researchers often measure the validity of the data with the use of triangulation: using multiple sources of data to reach the same conclusions. A number of authors suggest that this is not appropriate for narrative styles of research (Flick, 1998; V. Richardson, 2001; D. Silverman, 2000; Webster & Mertova, 2007) as triangulation assumes that there is one 'single truth' to be found, and this is supported by Lather's (1993) argument that there is a multiplicity of truths. Stake (1995, p. 108) notes that many qualitative researchers "subscribe a little bit or a lot to an epistemology called 'constructivism'…that knowledge is constructed rather than discovered." As narrative researchers acknowledge the problems of establishing the truth using qualitative data, Stake (1995, p. 108) suggests a similar problem exists in case study research noting that "most qualitative researchers not only believe that there are multiple perspectives or view of a case that need to be represented, but that there is no way to establish, beyond contention, the best view."

Rather than moving away from the problem of validity, Denzin and Lincoln (2003, p. 5) suggest that qualitative research "is inherently multi-method in focus." Bringing together a number of research perspectives aids the researcher in the gathering and interpretation of valid and useful data to answer the research questions. They go on to state that "the combination of multiple methodological practices,

empirical materials, perspectives, and observers in a single study is best understood, then, as a strategy that adds rigor, breadth, complexity, richness, and a depth to any inquiry" (Denzin & Lincoln, 2003, p. 5). As posited by Webster and Mertova (2007, p. 92) "the real test of validity of any research should ultimately be done by those who read it and they should be the ones to decide on whether an account is 'believable.'"

An important aspect of the data collection and analysis will be 'member checking' (Lincoln & Guba, 1985). Stake (1995) describes 'member checking' where the researcher is studying a case involving another person. The actors ("people having active roles in the functioning of the case" (Stake, 1995, p. 1)) "are requested to examine rough drafts of writing where the actions or words of the actors are featured, sometimes when first written up but usually when no further data will be collected from them. The actors are asked to review the materials for accuracy and palatability" (Stake, 1995, p. 115). This process helps to validate the researcher's observations and interpretations. Mykhalovskiy (1997) also writes about the use of autobiography in social science and some of the problems he faced from the academic community who labelled his work self-indulgent and self-absorbed. However, he argues that "to write individual experience is, at the same time, to write social experience," and that "making connections between individual experience and social processes in this way, is a practice to which autobiographical sociology is particularly well suited" (Mykhalovskiy, 1997, p. 240). In my study I used professional conversations (Healy, et al., 2001; Orland-Barak, 2006; Tillema & Orland-Barak, 2006) with some of my collaborative partners as a form of 'member checking' of the data for this study. I particular, I was interested in discussing the data with collaborative partners with whom I had had a sustained musical relationship and could provide their insight into the representation of the data for this study.

Uniqueness of knowledge

With the rise of postmodern philosophy, there has been a gradual acceptance by qualitative researchers and those who review their work, that there are many ways of knowing and "no one way should be privileged" (Wall, 2006, p. 2). Wall goes on to state that it is possible to gain and share knowledge in many ways through the "sharing of unique, subjective and evocative stories of experience that contribute to our understanding of the social world" (Wall, 2006, p. 3). In fact, autoethnography removes the risks inherent in the representation of others, and allows for the

production of new knowledge by a unique and uniquely situated researcher, thus offering small-scale knowledge that can inform specific problems and specific situations (Denzin & Lincoln, 2003; Wall, 2006).

However, the rise of postmodern thinking and the growing acceptance of this philosophy amongst qualitative researchers does not allow the autoethnographer to 'get off the hook' lightly with regard to ensuring the trustworthiness of the research data. Duncan (2004) takes a position that

> Autoethnographic accounts do not consist solely of the researchers' opinions but are also supported by other data that can confirm or triangulate those opinions. Methods of collecting data include participant observations, reflective writing, interviewing, and gathering documents and artefacts (Duncan, 2004, p. 5).

The process of creating an autobiographical narrative allows the researcher to reflect-in-action (Schön, 1983), providing the researcher the opportunity to develop a multi-layered text (C. Ellis, 1997) as well as a scholarly text to contribute new knowledge. Richardson and St. Pierre (2005) note that writing is not just seen as a way of communicating information or knowledge transfer from researcher to reader, but the actual process of writing becomes an act of research – a way of knowing.

> Data collection and data analysis cannot be separated when writing as a method of inquiry. And positivist concepts, such as audit trails and data saturation, become absurd and then irrelevant in postmodern qualitative inquiry in which writing is a field of play where anything can happen – and does (L. Richardson & St. Pierre, 2005, p. 971).

Issues around the narrative representation of autoethnographic data

The narrative that forms the data contains elements, such as direct speech, that are not exact representations of the actual events. As they are written well after the event occurred, I am not able to provide verbatim accounts of the conversations that may have occurred. Making use of narrative devices such as direct speech and scenic description helps to create an evocative text "that is a powerful means of conveying complexity and ambiguity without rendering closure" (Sparkes, 2002b, p. 11). Many researchers who employ narrative inquiry in their research (Bochner, 2001; Bowman,

2009; Clandinin, 2009; Clandinin & Connelly, 1991, 2000; Conway, 2003; Mattingly, 1991; L. Richardson & St. Pierre, 2005) describe processes whereby qualitative researchers, when creating a narrative account of actual events may use scenic description to help the reader feel the immediacy of the experience, character development to gain an in-depth perspective of the experiences being studied, and a plot to draw the reader into the narrative and into the experience of the writer (see also Leavy, 2009). The writing itself will need to be judged against "criteria such as authenticity, believability, credibility, coherence, evocation, fidelity, insightfulness and verisimilitude" (Sparkes, 2002b, p. 21).

In this study, the narrative data, as presented in Volume 2 of this thesis, makes use of direct speech, scene setting and scenic description based on my memory of these events and checked against multiple sources such as audio and video recordings, printed materials and professional conversations.

Summary of Chapter 3

This chapter outlines the literature related to the research methodology that has been used in my study of the phenomenon of flow for a piano accompanist. Acknowledging the various quantitative and qualitative studies of flow that are present in the literature, I placed my chosen methodology, autoethnography, within the context of the broad range of studies on flow, arguing that it is an appropriate methodology for the study of this subjective phenomenon. The chapter discusses the theoretical position of my study with a discussion of the ontological and epistemological position that underpins this study. The chapter continues with a review of theoretical positions of a number of methodologies that relate to autoethnography, including narrative inquiry, ethnography, case study and self-study, further supporting my decision to use autoethnography as an appropriate methodology for studying the phenomenon of flow during collaborative music performance as a piano accompanist.

The chapter also includes a discussion on important issues related to any research study: validity and reliability. Many researchers have already grappled with these issues in the many forms of qualitative research that now appear in the twenty-

first century, and their contributions to what is understood by the terms validity and reliability allow me to position my project with certainty and confidence. As principal researcher, the autoethnographic narrative will provide me with a source of data to analyse in order to answer the research question posited at the start of this study. Autoethnography has been shown to provide valid, reliable and truthful answers to research questions in the social sciences, and so will also provide a methodology to answer my own research question around my flow experiences in collaborative music performance as a piano accompanist.

Chapter 4: Overview of the analysis

In the following analysis chapters I will be discussing what it means to be in flow during music performance as a piano accompanist. This analysis directly addresses the research question on the phenomenon of flow and how this is manifest in musical performance, with a particular focus on the application of this phenomenon in the work of a piano accompanist. Using the format of an autobiographical narrative presented in Volume 2 of this thesis, I have been able to describe some of my more memorable experiences and draw the reader into the subjective experience of music performance as seen through the eyes of a piano accompanist. In the following analysis chapters I will draw on the narrative to answer the research question relating to the phenomenon of flow in collaborative music performance. The content of these analysis chapters is outlined in this chapter. Chapter 5, 6 and 7 relate to the overall research question on the various features of the phenomenon of flow for a piano accompanist. Chapter 8 concludes the study.

The data analysis for my study has taken an inductive approach to build the theory from concepts emerging from the narrative and an intimate knowledge of the field (Merriam, 2009). This inductive reasoning, where the "researcher discovers recurrent phenomena in the stream of local experience and finds recurrent relations among them" (Miles & Huberman, 1994, p. 155) can also benefit from some of the strategies used in deductive data analysis which provide useful methods to reduce and focus the data set without losing meaning (Miles & Huberman, 1994). The autoethnographic narrative provides a large amount of descriptive data from which I have inductively drawn important themes and concepts. The theory of flow, defined by Csikszentmihalyi (2002), provides a framework against which these concepts can be compared and contrasted in a deductive manner where the "researcher has some orienting constructs and propositions to test or observe in the field" (Miles & Huberman, 1994, p. 155). Together, these analytical approaches provide a structure for this within-case analysis (Miles & Huberman, 1994) to arrive at a theory for understanding flow in this autoethnographic case study.

Concept map
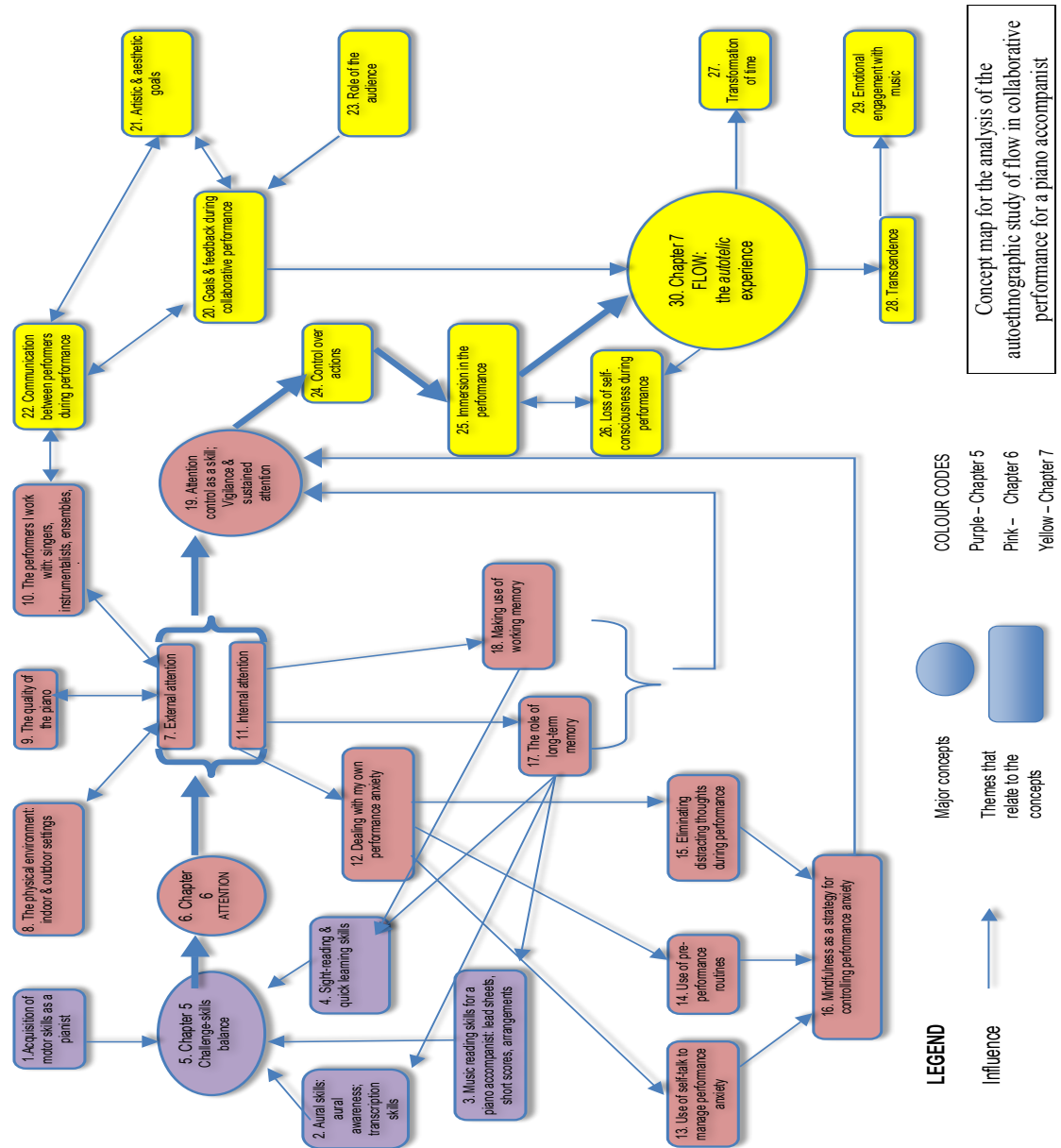
Concept map for the analysis of the autoethnographic study of flow in collaborative performance for a piano accompanist

LEGEND

Influence

Major concepts

Themes that relate to the concepts

COLOUR CODES
Purple – Chapter 5
Pink – Chapter 6
Yellow – Chapter 7

1. Acquisition of motor skills as a pianist
2. Aural skills: aural awareness; transcription skills
3. Music reading skills for a piano accompanist: lead sheets, short scores, arrangements
4. Sight-reading & quick learning skills
5. Chapter 5 Challenge-skills balance
6. Chapter 6 ATTENTION
7. External attention
8. The physical environment: indoor & outdoor settings
9. The quality of the piano
10. The performers I work with: singers, instrumentalists, ensembles,
11. Internal attention
12. Dealing with my own performance anxiety
13. Use of self-talk to manage performance anxiety
14. Use of pre-performance routines
15. Eliminating distracting thoughts during performance
16. Mindfulness as a strategy for controlling performance anxiety
17. The role of long-term memory
18. Making use of working memory
19. Attention control as a skill: Vigilance & sustained attention
20. Goals & feedback during collaborative performance
21. Artistic & aesthetic goals
22. Communication between performers during performance
23. Role of the audience
24. Control over actions
25. Immersion in the performance
26. Loss of self-consciousness during performance
27. Transformation of time
28. Transcendence
29. Emotional engagement with music
30. Chapter 7 FLOW: the *autotelic* experience

Concept map description

The concept map, shown above, is provided for the reader to see, at a glance, the network of themes and concepts that defines my experience of flow as a piano accompanist (Miles & Huberman, 1994). To aid in the understanding of this network, I will provide the reader with a description of the salient aspects of the concept map, making clear the significance of the symbols used and pointing the reader to the subsequent chapters that expand upon these broad theoretical themes.

In this concept map I have used circular shapes to define the central themes of my analysis and the rectangular shapes to encapsulate the concepts that inform these concepts. The directional arrows are used to connect themes and concepts, with the arrow pointing in the direction of influence. Double-headed arrows indicate that the two connected concepts influence each other. The thick arrows connect the central themes in order of influence. The numbering of the themes and concepts is not sequential but has been used for reference purposes only. For further clarity, the concept map has been colour coded: the concepts coloured purple are discussed in Chapter 5, the concepts coloured pink are discussed in Chapter 6 and the concepts coloured yellow are discussed in Chapter 7.

Overview of the theory

The first four concepts (1, 2, 3 and 4) represent the significant theme of the challenge-skills balance (5) that is needed to facilitate the phenomenon of flow. The analysis of the data found each of these concepts to have a positive effect on the challenge-skills balance during collaborative music performance.

Once these specific challenges and skills are in balance (5), the area broadly labelled as attention (6) appears as a pertinent phenomenon. Using the definition of attention provided by Chun et al. (2011), I have separated the phenomenon of attention into external (7) and internal attention (11). My analysis of the narrative identified three broad concepts that are modulated by my external attention: the physical environment I perform in (8), the quality of the piano I play (9) and the types of performers that I perform with (10). However, the human interactions with collaborative performers (10) places changing demands on my external attention, and this is indicated with a dual-dimensional arrow between (7) and (10).

The characteristics of my internal attention (11) during collaborative performance are more complex. The analysis of the data found a strong emphasis on the issue of performance anxiety (12) and the three concepts related to this (13, 14 and 15) indicate strategies that I have used to modulate and control this aspect of my internal attention. The use of self talk (13), the use of pre-performance routines (14), and the elimination of distracting thoughts during performance (15), result in the ability to cultivate mindfulness (16) to manage performance anxiety, which is connected to the concept of my internal attention. Mindfulness contributes to the notion of attention control as a skill (19) and the ability to sustain focused attention over a long period of time (vigilance), which is an important concept when understanding the role of attention in the phenomenon of flow. Hence theme (19) has been shown as a central concept in my theory with the use of a circle.

Another pertinent aspect of my internal attention is the role of long-term memory (17) and working memory (18) in the selection and modulation of internally generated attention characteristics. Linking long-term memory and the encoding of information for long-term storage to internal attention, Chun et al. (2011, p. 84) go on to explain that "elaborate encoding involves actively associating new information with context and other information in the mind." This is a particularly useful way to describe the processes of internal attention in collaborative music performance, and links long-term memory to the various skills of music reading (3), sight-reading (4), quick learning (4) and aural acuity (2) identified as concepts for the challenge-skills balance (5) and the phenomenon of flow. The analysis of the data found connections between the ability to draw on the information stored in long-term memory and the execution of these reading and aural skills during collaborative music performance as a piano accompanist. Hence the concept map shows a directional link between these concepts. Chun et al. (2011, p. 85) also place working memory (18) within internal attention "because it operates over internal representations (of what is no longer externally available)." In my study I found that the ability to manipulate information in the working memory was found to be particularly important in my ability to sight-read music (4) because of the processes the brain uses to chunk objects to increase the capacity of the visual working memory (Luck & Vogel, 1997). The concept map shows this link with the use of a directional arrow. Both concepts of long term memory (17) and working memory (18) were found in my study to contribute to the

development of attention control as a skill, leading to vigilance and sustained attention (19), an important theme in understanding the phenomenon of flow during collaborative music performance as a piano accompanist. This influence is shown on the concept map with the use of a direction arrow.

Once there is some level of control over attention during collaborative music performance and an ability to sustain this attention over the period of the performance (19), my study found there were a number of important concepts that contribute to the 'autotelic' experience of flow (30). These include the contribution played by having clear goals and feedback (20), particularly those goals associated with the artistic and aesthetic aims of the collaborative performers (21), and the dynamic communication between my collaborative partners (22) that provides the type of feedback that facilitates the phenomenon of flow (30). The types of collaborative partnerships I engage in as a piano accompanist (10) influence the nature of the communication that occurs during a performance (22), allowing the performers to know, as they are performing, if they are reaching their artistic and aesthetic goals (21) as determined by the style of the music and the personal goals of each of the performers. A curious outcome from the data analysis was the minor role played by the audience (23) towards the establishment of the goals and feedback theme (20) as it related to flow during collaborative performance (30). The analysis of the data for this study found that the feedback obtained through effective communication between performers (22) was much more likely to facilitate the phenomenon of flow rather than the feedback that may come from an audience. It could be postulated that the reason for this is due to the dynamic nature of musical communication *during* a performance, whereas the feedback from an audience usually comes *after* a performance. The audience response (23) could confirm an experience of flow, but not necessarily facilitate it.

The experience of feeling in control of your actions (24) comes as a direct result of the level of attention control and vigilance (19) achieved during a collaborative music performance leading to the ability to immerse oneself in the performance (25). The analysis of the data for this study found that the concepts relating to the control of actions (24) and immersion in the performance (25) were powerful predictors for the phenomenon of flow in collaborative performance (30). Hence these concepts are connected with a thick arrow to indicate their importance in understanding the nature of the flow experience. An interesting side effect of the sense of immersion in

performance is the loss of self-consciousness during performance (26) which comes not only from the sense of immersion (25) but also from the experience of flow itself (30). The analysis of the data found that these concepts could be uniquely identified, and they were linked to the 'autotelic' experience of flow.

The transformation of time (27) was a theme that emerged from the data analysis but rather than being an influence on flow, was often the result of the flow experience itself. Furthermore, the analysis of the data found that the concepts of transcendence (28) and emotional engagement with music (29) were also products of the 'autotelic' experience of flow (30) during collaborative music performance as a piano accompanist. There is a growing field of research in the area of music and emotion that has helped to explain the findings of my study, which indicates that flow can result in a feeling of transcendence (28) and a strong emotional engagement with the music (29) further enhancing the phenomenon of flow during collaborative music performance.

Overview of analysis chapters

The analysis chapters that follow draw together the findings of my autoethnographic study and discuss them in the light of relevant and specific literature so that my theory is further contextualised and expounded. Each chapter discusses one section of the theory as conceptualised by the concept map, and I have provided here the breakdown of the content for each chapter, and its links to the concept map and the concepts and themes contained therein. Within the analysis chapters the discussion of the theory is supported with references from the narrative. To ensure clarity for the reader, these narrative excerpts are shown using italics. Direct quotes from published scholarly articles and books are shown in regular font.

Chapter 5

A key theme for flow in my experience as a piano accompanist is the balance between challenges and skills (5). When the specific challenges and skills I need for piano accompaniment are in balance, the accompaniment experience continues to be fresh and exciting while drawing on an ever-increasing knowledge and understanding

of style within the many genres of music that I encounter as a piano accompanist. In particular this chapter examines the four concepts (1, 2, 3 and 4) that contribute to the challenge-skills balance:

- The challenges in the acquisition of motor skills for a pianist (1);
- The aural challenges and related skills for a piano accompanist (2);
- The challenges of music reading with specific reference to the specific music reading skills for a piano accompanist (3);
- The challenges and skills for an accompanist that involve sight-reading and quick learning (4).

Together these concepts contribute to the challenge-skills balance that Csikszentmihalyi identified as a significant feature of the phenomenon of flow and are important concepts in my theory of understanding the phenomenon of flow in collaborative music performance as a piano accompanist.

Chapter 6

Attention is one of the key themes (6) in understanding my experience of flow as a piano accompanist. Further to understanding the role of attention in the process of piano accompaniment, this chapter examines the characteristics of external (7) and internal attention (11) and the other characteristics of the phenomenon of flow in the light of music performance and piano accompaniment.

- The selection and modulation of aspects of my external attention and my responses to performance events:
    - The sensory information of my surroundings associated with space and the physical environment (8 and 9);
    - The performers I work with, including singers, instrumentalists, vocal ensembles and dancers (10).
- The selection and modulation of aspects of my internal attention and my responses to performance events:
    - Dealing with my own performance anxiety (12);

- Use of self-talk to manage performance anxiety (13);
- Using pre-performance routines to manage performance anxiety (14);
- Eliminating distracting thoughts during performance (15); and
- Mindfulness as a strategy for controlling performance anxiety (16);
  - The role of long-term memory in piano accompaniment (17);
  - Making effective use of working memory during piano accompaniment (18);
- The development of attention control as a skill for a piano accompanist, including the development of vigilance and sustained attention (19).

Chapter 7

The final analysis chapter explores the central characteristics of the phenomenon of flow during music performance and seeks to define my 'autotelic' experience (30) in collaborative music performance as a piano accompanist. This chapter will explore the following concepts:

- The way performance goals and feedback are communicated during collaborative performance (20);
  - Knowing the artistic and aesthetic aims of the music performance (21);
  - The communication between performers during a performance (22);
  - The role of the audience in providing feedback for a collaborative performance (23).
- The flow experience in collaborative music performance
  - Having a sense of personal control over actions (24);
  - Immersion in the music performance itself (25);
  - The loss of self-consciousness during performance (26);
  - The transformation of time during performance (27);
- Experiences of transcendence and the relationship to flow (28);
  - My emotional engagement with music during flow (29);

Chapter 8

In this concluding chapter I will draw together the arguments presented in chapters 5, 6 and 7 to respond to the research question on how the phenomenon of flow is manifest in musical performance, with a particular focus on the appearance of this phenomenon in my work as a piano accompanist and its role in shaping me as a confident and competent piano accompanist.

Chapter 5: The challenge – skills balance

Csikszentmihalyi's (2002) descriptions of the flow experiences of his research subjects, where they seek out more of these experiences because they are intrinsically rewarding, mirrors many of my own experiences as a piano accompanist. The narrative recounts piano accompaniment experiences in my early life as a student and in my later life that were part of my paid employment. Regardless of the type of extrinsic reward, many of them continued to be rewarding for all the reasons suggested in the description of flow: they were 'autotelic' experiences that were intrinsically rewarding and not done because one was expecting some future benefit, but rather because it was intensely satisfying in, and of, itself.

In this chapter I will be examining the first part of the theory that addresses my research question by looking at one of the key themes for my experience of the phenomenon of flow as a piano accompanist: the balance between the challenges I faced in my development as a piano accompanist and the skills that I needed to acquire. Csikszentmihalyi's model for flow places a great importance on the balance between challenge and skill. This has been supported in various research studies including those in areas of sport (Jackson & Csikszentmihalyi, 1999), office work (Bryce & Haworth, 2002) and computer interactions (Chen, et al., 1999; Pace, 2004).

The challenge-skills balance for a piano accompanist

One of the main pre-conditions for flow, according to Csikszentmihalyi (1996, p. 111) is that "our abilities are well matched to the opportunities for action." He describes 'challenges' as the circumstances one might face and 'skills' as the ability to meet the demands of those challenges. He goes on to assert that the level of challenge and skill has to be finely balanced in order to achieve enjoyment and optimal experience. Jackson and Csikszentmihalyi (1999, p. 16) clarify this by stating that "to experience flow, it is not enough for challenges to equal skills; both factors need to be extending the person, stretching them to new levels." One of Csikszentmihalyi's earliest models of the phenomenon of flow, as seen in Figure 1 in Chapter 2, identified that flow could occur even if the challenges and skills were quite

modest and low-level, but the experience needed to be extending the person in both areas of challenges and skills, allowing them to be stretched beyond their present capabilities. Provided that the challenges could be balanced by the appropriate level of skill then the participant had the right pre-conditions to experience flow during that activity.

Interestingly, these challenges and skills are different for each individual in each circumstance of life. If one is to experience flow in an activity where there is "an almost automatic, effortless, yet highly focused state of consciousness" (Csikszentmihalyi, 1996, p. 110), then one has to look for ways to extend the challenges of this activity to meet the ever-growing development of personal skills within that particular discipline. This autoethnography, examining my experiences of flow as a piano accompanist and using data presented as an extended personal narrative, has also identified the effective balance between the challenges of the music and accompaniment situation and my skills as a pianist and collaborator, as an important theme for understanding the experience of flow.

I will now draw out some particular examples from the narrative and examine how they contribute to the notion of keeping the challenges and skills in balance as a pre-condition for flow in piano accompaniment.

The acquisition of motor skills as a pianist

The narrative begins with my earliest recollections of learning to play the piano and these were primarily associated with the acquisition of specific motor skills related to playing the piano. The development of these motor skills is critical for pianists and has been of interest to piano pedagogues for hundreds of years with many composers, including Carl Czerny (1791 – 1857), Ignaz Moscheles (1794 – 1870) and Charles-Louis Hanon (1819 – 1900), writing studies to address specific issues in the motor skill development for pianists (Burkholder, et al., 2006). Hanon's work, *The virtuoso pianist in sixty exercises* (Hanon, 1928), is widely used by piano teachers to develop motor skills in pianists and became one of my most well-worn volumes of technical exercises. Many different strategies for technical development exist for pianists allowing for individual differences, age, physique as well as the mental

attitudes of performers. A recent longitudinal study on the influence of practice on the development of motor skills in pianists confirms the need for this variety of pedagogies, finding "no practice strategies were identified as predictors for motor skill development for the entire group of pianists" (Jabusch, Alpers, Kopiez, Vauth, & Altenmuller, 2009, p. 81).

The narrative also explores the development of the specific skills I needed in order to be a competent accompanist. According to Katz (2009, p. 3) there are many skills needed to be a competent accompanist or musical collaborator and "some of these challenges demand our physical understanding of how our partners feel; others are entirely subjective as we wordlessly tell stories or emotionally manipulate our partners and our audience." However, he makes it clear that first and foremost a competent accompanist needs to possess good technical motor skills as a pianist, to create "perfect ensemble and good balance with one's partners" (Katz, 2009, p. 3) and this is borne out in research studies (Kokotsaki, 2007; White, 2010) and is articulated in the memoirs of famous accompanists (Moore, 1962; Newton, 1966).

My first piano teacher had a clear process for the development of my technical and musical skills as a pianist. For each of my piano exams I would always learn many more pieces than was necessary. "*I was always learning lots of pieces through the year, so that when it came to exam time, I not only had the four 'List' pieces ready, but also could include up to six 'Extra List' pieces*" (Part 1). The constant acquisition of new repertoire meant that my music reading skills were always being challenged. In Part 3, I outline how she used various piano studies, beginning with *A Dozen a Day* by Edna Mae Burnam, which are particularly useful for very young pianists, to allow me to develop specific technical skills. I found them very enjoyable and incorporated them into my daily practice as well as play sessions.

> *Such was my delight in doing these exercises that I used to play the exercises on the piano at home to my sisters, and, pretending I was the school teacher, get them to do the actual physical exercise. We had lots of fun with "climbing the stairs," "hopping on left foot," "hopping on right foot," "skipping," "chin-ups" to name a few – that is until they got bored with me and went to play elsewhere* (Part 3).

Playing the piano requires a great deal of practical skill in just being able to negotiate the physical demands of coordinating the hands, as well as building the strength in the muscles of the fingers, hands, forearms and back (Parry, 2004; A. H. Taylor & Wasley, 2004). Recent research in the musculoskeletal disorders affecting pianists is a growing field in occupational medicine (Bragge, Bialocerkowski, & McMeeken, 2006) highlighting the importance of carefully planned and monitored technical development for pianists (Clarfield, 2001; Grindea, 1987) so as to avoid unnecessary tension and possible musculoskeletal damage. This type of skill development has long been recognised by composers and pedagogues to be of utmost importance for the successful execution of the repertoire for the piano. One such pedagogue, Austrian pianist, composer and teacher, Carl Czerny, a pupil of Ludwig van Beethoven (Burkholder, et al., 2006) composed many *études* (studies) that focus on the technical development of the pianist from the earliest years to the most advanced. Using the works of Carl Czerny under the guidance of my first teacher, I was gradually building a solid foundation for finger strength and dexterity. This teacher, and my subsequent teacher, worked through a carefully planned curriculum to expose me to various musical skills of interpretation and expression. Besides the works of Czerny, a number of pieces remain firmly fixed in the memory as clear examples of this development, including the *Well Tempered Clavier* by Johann Sebastian Bach.

> *I had been working systematically through the Well Tempered Clavier, one Prelude and Fugue every few weeks. This was a different approach to Mrs Greenway. Ms North was interested in broadening my understanding of music beyond the mere solo exam repertoire. Every few weeks I was encouraged to start yet another Prelude and Fugue* (Part 5).

My first piano teacher was also keen for me to develop the skills of an accompanist, even as a young child. Although the narrative indicates that I was quite nervous during this performance, it remains nevertheless as an example of a good balance between the challenge of accompanying my sister in a public concert and the skills I had already attained as a pianist allowing me to pay attention to my own playing as well as the playing of my violinist partner. This musical partnership eventually became very fruitful and we were given many opportunities to perform in public gaining useful experience in a wide range of performance situations. Our work

as a duo, taking on more challenges as our collaborative skills grew, brought with it a sense of personal satisfaction and increased our enjoyment of the music performance experience.

> *Although we initially used to fight and disagree over the most trivial things, such as who should give the lead when starting a particular piece, we soon settled into a partnership that was both musically satisfying and personally enjoyable. We were in demand to perform as guest artists in concerts put on by the local concert band and youth orchestra. Whenever there was a charity concert or Christmas gala, we were inevitably on the program* (Part 11).

My sister and I spent many hours rehearsing our pieces before we felt competent enough to perform in public. At this early stage in our development as a musical partnership, deliberate practice was essential to develop our technical and performance skills to meet the ongoing challenges of the various types of repertoire that we were tackling. Sloboda (1990, 1994) indicates that dedicated practice is essential for the growth of expertise in music performance. Furthermore, the enjoyment that we both experienced in this collaborative work supports the findings of Hallam (1998, p. 127) who notes that "playing in orchestras, bands, chamber music groups, etc., while not normally categorised as practice, nevertheless rehearses the skills necessary for the development of musical expertise." There continues to be a debate about the role of talent versus deliberate practice in the acquisition of music performance skills (Gagné, 1999; Gruson, 1988; Rostron, 2000) but the seminal work of Ericsson, Krampe and Tesch-Römer (1993, p. 366) makes it clear that "expert performance is acquired slowly over a very long time as a result of practice and that the highest levels of performance and achievement appear to require at least around ten years of intense prior preparation." The narrative demonstrates that my skills as an accompanist were developed through deliberate practice as an accompanist over a long period of time, as well as exposure to a wide range of accompaniment styles and opportunities. I started my piano studies at a young age and continued with dedicated piano training for nearly fourteen years. Whether or not I displayed an early talent for the piano is not clear, but as discussed by Ericsson, Krampe and Tesch-Römer (1993, p. 398):

> The central argument is first that the perception that an individual is talented, that is, innately equipped and predestined for success in a domain, leads to the

early start of deliberate practice. Second, the individual attains an elite level of adult performance by maintaining a high level of practice.

The continual development of my skills as a pianist ensured I was always being challenged with new repertoire and new performance situations, particularly in collaborative performance. As Csikszentmihalyi's early flow model suggests (see Figure 1 in Chapter 2) flow can occur if the challenges and the skills are in balance, but also continue to increase. The narrative demonstrates numerous examples where I was faced with new challenges as a collaborative pianist, yet I was able to meet these challenges by developing the requisite skills, ensuring continuing opportunities for flow in collaborative music performance.

McCormick and McPherson (2003, p. 47) add a further dimension to this debate on talent versus deliberate practice suggesting that "whilst practice plays a vital part in the development of a musician's capacity to perform well, it should not be considered in isolation from motivational and related themes." Their later study (McCormick & McPherson, 2006) found that self-efficacy was again found to be the most important predictor of achievement in music examinations. Consistent with Pajares (2003) they suggest that

> Teachers can influence their student's self-beliefs about their own ability if they provide them with challenging tasks and meaningful activities to master, actively support and encourage them along the way, teach in ways that demonstrate that they believe in their students, and convey these impressions in ways aimed at developing a robust sense of self-confidence (McCormick & McPherson, 2006, p. 333)

My teachers encouraged me to explore all avenues of piano performance, including piano accompaniment, underpinning this with a clear curriculum designed to build my motor skills as a pianist. Each of these challenging tasks helped to develop my skills to a higher level, providing many opportunities for optimal experience and flow.

Aural challenges for a piano accompanist

The Christmas pantomime production of *Dick Whittington* (Part 7) also presented me with a new challenge, and that was the challenge of transcribing the

notated music of Neil Diamond's *Crunchy Granola* from a recording. *"It took many hours over many days, made all the more difficult by the fact that it is not even a piano piece, but is scored for guitar and rock band"* (Part 7). Transcription requires very finely tuned aural skills and a thorough understanding of rhythmic and harmonic structures. Kraus and Chandrasekaran (2010, p. 601) found during their studies on the effects of various types of learning on changes in the brain that "music training induces an enhancement of the processing of auditory signals" and in particular, "musicians who learn 'by ear' show superior auditory encoding of musical sounds relative to those who rely on non-aural strategies." I had not been required to play 'by ear' (Coker, Knapp, & Vincent, 1997) or transcribe music 'by ear' until I started to play for this particular Christmas pantomime but exposure to this particular challenge allowed me to develop important skills that would add to my skill-set as a piano accompanist.

Similarly, playing in a small jazz ensemble provided me with challenges that helped me to develop specific aural skills such as listening to other performers, and listening to my own playing in a critical way to ensure I had captured the nuances of the style of music I was playing.

> *I had the ability to play the chords at the right speed, but my lack of understanding of the subtleties of the rhythmic groove of this Latin beat betrayed my classical roots…The rest of the ensemble continued on as I adjusted my rhythmic groove and learnt to listen to the other players…Our mentor Mr Goodson often gave up his lunch hour to listen to us and critique our playing. It was extremely helpful to have an extra set of ears especially in the early months of playing together* (Part 13).

> *One of the important lessons I learned from this ensemble playing was the ability to really listen to other musicians…working with a drummer also helped me immensely with my sense of rhythm. I came to understand the sense of rhythm that underpins all genres of music, not only jazz and popular music, by working with a drummer who had an excellent sense of time and style* (Part 13).

Katz (2009) acknowledges the importance of the long-term acquisition of these cognitive skills for the collaborative pianist. Sloboda (2005) suggests that expert performers rely on an acquired aural understanding of the music. Through this

knowledge they learn to expect a certain tonal and temporal language according to the genre of performance. When this language is not present, the pianist needs to become highly attentive to the music score to achieve an accurate performance. In Palmer's (1997, p. 126) discussion on the cognitive processes that occur in music performance she notes "reproduction accuracy worsened with increasingly disrupted structure expression relationships, although accuracy improved over repeated attempts even for the most distorted timing patterns." In my experience playing the atonal *Sonata for Flute and Piano* by Richard Meale in a performance with a professional flautist, the absence of a familiar tonal and temporal language meant that my attention to the music score was highly focused, providing all the ingredients for an experience of flow.

> *The rhythmic and harmonic language of this piece was so far from tonality that at no time could I relax and let my ear be the judge of my performance. It was as if I had to check every note I played as well as keep looking forward to perform the piece as it unfolded. This constant going backwards and forwards kept my mind racing. Every ounce of my consciousness was consumed by this concentration* (Part 25).

My aural awareness was challenged in the performance of this atonal music. I still find it difficult to perform music that is atonal, or even music that includes complex harmonic language such as the songs by the German composer Richard Strauss (1864 – 1949) and other composers who write using the intense chromatic language of the late Romantic period. My aural skills that have been developed over many years, playing mainly tonal music, make it difficult to adjust to the aural landscape of atonality. I find myself constantly questioning my accuracy when playing this type of music, and it is mentally fatiguing to be constantly checking the music score as I perform, rather than allowing myself to read ahead and prepare for the forthcoming musical material.

Of interest to this study is the way the narrative provides a number of examples of the aural challenges in collaborative performance and examples of flow experiences that are independent of the genre of music being performed. As a piano accompanist I have developed my aural skills through performance in a variety of genres, and it is not the style of music that provides the pre-condition for flow, but the

balance between the aural challenges presented by that genre and my skills at that time that provided the opportunity for an experience of the phenomenon of flow.

Music reading challenges for a piano accompanist

I began to learn to read music at a young age. It was part of my development as a pianist and yet like many performers I did not think of it as a psychological process and was unaware of what was actually going on in my thoughts as I read the music score. "The notion that highly practiced perceptual skills are executed without the involvement of consciousness" (Sloboda, 2005, p. 11) resonates with my own experience of learning to read music. My music reading skills have now become automatic but, as postulated by Stewart, Walsh and Frith (2004, p. 194), "automaticity is not an all-or-none phenomenon and is better thought of as a continuum." Moors and De Houwer (2006, p. 302) provide an extensive overview of the varying theories for automaticity over the last few decades and conclude that all the various approaches to automaticity "share the idea that extensive practice leads to learning, which may be accompanied by changes in attention, awareness, control, speed, and accuracy." Looking at the issue of the level of automaticity in a music performance, Chaffin, Lemieux and Chen (2007) found that in a highly polished performance by a concert pianist there was considerable variability in the performance as she attended to the technical difficulties of the work as they arose in performance. Some aspects of the performance displayed elements of automaticity, and yet she was able to attend to specific problems as they occurred in performance. Moors and De Houwer (2006) conclude that automaticity defies a simple explanation as it contains a combination of various conceptual elements that concern the intentions of the performer, the level of conscious action as well as the level of controlled action. My narrative demonstrates the gradual development of my music reading skills leading to higher levels of automaticity when it comes to music reading in performance. Like the pianist in Chaffin, Lemieux and Chen's (2007) study, my performances were never the same, yet as my music reading ability improved I was able to attend to other musical and technical elements in performance, including working with my collaborative musical partners.

As a whole, the narrative provides very few insights into my cognitive processes of learning to read music. The acquisition of music reading ability happened when I was young, but the on-going challenges of music reading have been found in a number of areas particularly associated with collaborative performance, as I will now elaborate upon.

Reading lead sheets

I took on the challenge of playing for musicals at quite an early age and my first exposure to music theatre, as the accompanist for a Christmas pantomime, also presented me with a new challenge in music reading. As a classically trained pianist I was becoming quite fluent at reading from a notated score where all the musical information is written down and clearly stated for the musician to follow. The score for the Christmas pantomime of *Dick Whittington* was pieced together from various popular songs and included *"a collection of sheet music of pop songs as well as handwritten charts that consisted of just a melody line and a few chords. Some pieces looked like a guitar charts with the words arranged in verses and a few chords scrawled above them"* (Part 7). Known as a lead sheet (M. Levine, 1995), the song is notated as a melody and the chord structure is shown for each bar, but the rest of the arrangement is left up to the pianist to create in a way that is appropriate for the style. *"This was a big learning curve for me and I spent many hours at home over the next few weeks mastering the art of making something out of almost nothing"* (Part 7). The rehearsal period was also quite long, giving me plenty of opportunity to develop the skills needed to both read and perform from these types of scores and lead sheets. As an accompanist, I am still required to perform from lead sheets in all types of situations, so the skills developed in these early years have been in frequent use.

Reading orchestral reductions

As a piano accompanist I am sometimes required to play music that was not specifically designed for performance on a piano including orchestral reductions of concertos and choral works. *"My role, as accompanist, was to emulate the smooth legato lines of the orchestral strings and this took many hours of patient feedback from the clarinet teacher"* (Part 11). This teacher took the time to mentor and train me in the performance of this Mozart concerto allowing me to gain the necessary skills to meet the challenges of this new type of performance. It allowed me to experience the

enjoyment of realising a musically satisfying performance, thus increasing my motivation to seek out further opportunities as an accompanist. It also gave me the confidence to make musical decisions about the performance of orchestral reductions in various contexts. Playing this type of music is commonly required of an accompanist and over the years I have become more comfortable creating these performances from scores that were not initially composed as piano works. For instance, when accompanying an instrumental concerto for an examination, the pianist is expected to reduce any lengthy orchestral sections in a way that does not compromise the musical integrity of the work. These types of decisions rely on my understanding of musical style and harmony. Katz (2009) also provides insight into this issue for accompanists.

> Since we cannot duplicate exactly what the orchestra plays, we are compelled to be inventive and highly creative in selecting what and how to play. Unlike a Schubert song where every note must be executed, comfortable or not, with orchestral transcriptions all is permitted and nothing is the 'real thing' (Katz, 2009, p. 154).

Reading music theatre scores

Similarly, when playing accompaniments for music theatre songs, sometimes I am required to cut out chorus sections or dance segments, while retaining the solo vocal parts, creating a seamless transition from one section of a song to another, or even to join several songs together in one continuous medley of songs.

> *Robert had put together a couple of medleys of music theatre songs and also included some new works in his show. Some of these new works were cut-down versions so that they would work in context of his cabaret performance. I had done this sort of accompaniment many times before, performing with students their one-person shows and cabarets as part of their assessment. The idea of piecing together lots of songs around a theme was a familiar concept for me now. I was also comfortable working with scores that were rearranged to suit a new concept even though this often involved changing the key of the songs and working out new endings to suit their new context (Part 26).*

An interesting turning point came for me at a music theatre seminar where I had the opportunity to further refine some of these music reading and arrangement skills

that I had been intuitively developing through my exposure to various styles of piano accompaniment.

"You know, you don't have to play all those dots on the page," he pointed out to me after one student's performance.

He moved onto the piano and began the introduction to the song encouraging the singer to repeat their performance. The priority was not the exact notes but rather the rhythmic feel of the music – sometimes he added extra notes, sometimes he left notes out.

"How do you know what to play and what not to play?" I asked him after the session had finished.

He laughed.

"Some of these arrangements are just so terrible. They give no support to the singer at all. You have to go with your instincts" (Part 22).

I found this conversation very liberating as an accompanist and in Part 22 of the narrative I explain my mental wrestling with the authenticity of my accompaniment. There are times as an accompanist where I need to be totally faithful to the score and perform every nuance that the composer has set out. This is certainly required whenever I play sonatas for a solo instrument and piano, such as those composed by Beethoven, Schubert, Hindemith, Meale and Brahms. *"One of the interesting aspects of sonata performance, and in particular the sonatas by Brahms, is that the composer gives equal importance to both parts. Each performer takes it in turn to lead the musical development of the work with the phrases passing between each player throughout the work's progress"* (Part 18). However, in music theatre accompaniment, the vocal score, sometimes written in the form of a 'short score' (McLamore, 2004), can be almost unplayable for it may includes cue for the various orchestral instruments that would be normally playing in the orchestral arrangement for the show. As an accompanist in this genre, I had to learn which notes to omit while still maintaining the integrity of the music and realising the composer's intentions.

In a similar demonstration of the cognitive processes relating to the tonal and temporal language of a particular style of music that the pianist acquires through performance experience, Part 22 of the narrative describes the process of altering a

music score in keeping with stylistic elements that are not always apparent from the written score. In all styles, whether classical, popular contemporary or music theatre, the accompanist cannot always solely rely on the music score to derive the appropriate tonal and temporal information about a work.

> *These arrangements need to be enhanced by the accompanist with extra notes, chords and rhythmic patterns in keeping with the style of the work itself. Regardless of the type of musical score I was working from, my job as accompanist is to be faithful to intent of the composer, the style of the music and to use all available sources of information, including scores and recordings of seminal performances, to devise an accompaniment suitable for each performer and each performance situation* (Part 22).

Fluent reading

Dealing with the challenges of playing the music scores for music theatre productions provided me with many opportunities to develop some specific technical skills pertinent to piano accompanists. In Part 8 the narrative describes a rehearsal for the musical *Annie Get Your Gun* where I was pushed into an extremely challenging music-reading situation that involved my ability to read fluently and quickly. I had spent time preparing at home, at a much slower tempo, and suddenly I had to perform the accompaniment at a much faster tempo than I had planned.

> *They began by singing through of a couple of the chorus numbers and then it was time for a dance number. Opening to the page for the first dance number, I was ready to go.*
>
> *"Five, six, seven, eight" called the choreographer, and I began to play at the nice steady tempo I had practiced.*
>
> *"Stop, stop," she said after only a couple of bars. "That's not the right tempo. It goes like this…"*
>
> *She clapped her hands at about two or three times the tempo I had rehearsed. My mind whirled. This was so much faster than I had anticipated. My heart raced.*
>
> *"Let's start again… Five, six, seven, eight."*

I had no time to catch my breath or even look at the music again. I just
threw myself into playing again. My fingers flew and I have no idea if I got to
the end with a great deal of accuracy, but I got there with the mostly right
number of beats and pretty much the right number of bars (Part 8).

The experience described here recalls an incident where my music reading skills
had to be very fluent to deal with the sudden change in the tempo. The challenge was
presented at a moment's notice and yet I had the skills to meet this challenge. This
part of the narrative provides a good example of the balance between challenge and
skills that are a theme for my theory of the phenomenon of flow in collaborative
performance. It also highlights an important aspect of piano accompaniment: the
transition from novice to skilled performance through deliberate practice. As my
motor skills and music reading skills were developed through deliberate practice and
were refined by expert tuition from piano teachers, other teachers associated with my
accompaniment partners, and the performance of challenging pieces such as
orchestral reductions and music theatre scores, I was able to devote more of my
attention to the other aspects of piano accompaniment that were less able to be
practiced as they often occurred 'in the moment' of performance. As early as 1968,
Huey (1968, p. 104) observed in his study about learning to read, that in learning a
skill, "repetition progressively frees the mind from attention to details, making facile
the total act, shortens the times, and reduces the extent to which consciousness must
concern itself with the process."

The narrative provides an interesting case study of the increasing instances of
the phenomenon of flow during piano accompaniment once the motor skills and
music reading skills took less of my direct attention.

This performance had everything. The singers had the vocal capacity to realise
this music to its full potential. I felt a part of that performance as I took the
accompaniment and shaped it to draw every last piece of expression from it.
The spine-tingling finish left me breathless. Something magical had just
happened on the stage – the performers, the music, my accompanying – it was
truly memorable (Part 29).

The narrative does not mention anything about finding the right notes or being
worried about the technical difficulties of the activity. Rather, the focus is on the

experience of the music performance, the sense that my attention was totally tuned to the creation of the music 'in the moment' and through this focused attention, finding an optimal experience and moment of flow.

Palmer and Drake (1997) highlight the importance of developing these cognitive skills early in life. "Early in skill acquisition, pianists must acquire specific cognitive skills essential to music performance; in particular, the planning and monitoring skills required for competent (correct) performance, which are prerequisite for advanced skill levels" (Palmer & Drake, 1997, p. 381).

Investigations into the cognitive processes that occur during music performance continue to intrigue researchers (See for instance Berry, 2006; Dowling, Bartlett, Halpern, & Andrews, 2008; Drake & Palmer, 2000; Duke, Cash, & Allen, 2011; Duke, et al., 2009; Gabrielsson, 2003; Palmer, 1997; Palmer & Drake, 1997). This research enriches this case study of my own experiences as a piano accompanist. Many of these empirical studies provide the scientific evidence to explain the nature of my experiences, and add another level to my understanding of the phenomenon of flow as it has occurred in collaborative music performances.

Acquisition of skills in sight-reading and quick learning

Sight-reading involves playing music with little or no preparation (Kopiez & Lee, 2008, p. 41) and "is characterised by great demands on the performer's capacity to process highly complex visual input (the score) under the constraints of real time – without the opportunity of error correction." It is an essential skill for a piano accompanist and "the ability to grasp things quickly and deliver an unpolished perhaps but very acceptable reading for a rehearsal, audition, or lesson is essential" (Katz, 2009, p. 278). My second piano teacher encouraged me to take on the role of piano accompanist to a children's choir, the Koolingarra Songsters, giving me the opportunity to build my skills in sight-reading and quick learning. Rather than spending my private lesson time on sight-reading skills, I learnt 'on the job.' Referring to music activities such as playing in orchestras, bands or chamber music, Hallam (1998, p. 127) highlights the value of working in collaborative environments stating "some skills, for instance, sight-reading or listening, may be better developed in those circumstances than through individual practice." I began my work as the

accompanist for the Koolingarra Songsters while I was in junior high school and gained a lot of confidence in my sight-reading ability through the regular experiences of the rehearsals.

> *I did try to practice at home, but inevitably I was caught out – the conductor could just request anything and we were expected to be able to play it straight away. It was sink or swim – and fortunately I swam. I learnt to sight-read not by any special methods, but just by being 'thrown in the deep end'* (Part 6).

Kopiez and Lee (2008, p. 56) add an interesting dimension to my experience by finding "that there is a critical time window (before turning 15) for optimal training. Thus, skill acquisition has to start early in order for the person to become an excellent sight reader." My early accompaniment experiences playing for instrumental and vocal soloists built a solid base for my sight-reading skills that continued to grow even as I worked with professional performers in a range of situations.

> *By the end of the Festival I was mentally and physically exhausted. Accompanying these artists in each of the evening concerts, and especially tackling four Hindemith sonatas in four consecutive concerts was an example of sight-reading and just–in–time learning at an extreme level. I had never been exposed to this type of speed learning yet it did provide a type of adrenalin rush almost akin to extreme sports. Not that I was an extreme sportsperson – just an accompanist keen to take on an extreme challenge* (Part 24).

Drake and Palmer (2000, p. 29) make it clear that "under the strict temporal constraints imposed in music performance, performers must produce the correct events (what) and produce them at the correct moment in time (when)." They go on to describe how novice performers often struggle to manage these temporal constraints during sight-reading activities and often focus on producing the correct events at the expense of the correct timing, causing them to frequently stop, pause and correct their work as they go. This contrasts with skilled performers who are able to process information about both the pitch and rhythm resulting in a less disrupted performance. Gudmundsdottir (2010, p. 334) in her overview of music-reading research notes that "experts outperform the novices in their ability to identify a group of pitches as a particular chord or a scale and are able to instantly translate that knowledge into a motor output." However, an earlier work by Lehmann and Ericsson (1993) found that

pianists who focused on solo performance, and might have been slighter better pianists, were less accomplished sight readers than pianists who specialised in piano accompaniment. Their study highlights the different approaches to music learning.

Accompanists often perform after no or minimal preparation, and their ability to sight-read relies heavily on reading the score, generating adequate fingerings, and executing corresponding motor responses in a smooth fashion at or near performance tempo. On the contrary, a solo performer will typically only engage in sight-reading at a slow tempo during the early phases of familiarisation with a new piece. When the music is later interpreted at higher speed, the musician has already committed parts or all of it to memory, and the score only serves as a retrieval cue in case of memory lapses (Lehmann & Ericsson, 1993, p. 183).

The latter part of my narrative includes a description of performing as an accompanist for auditions and the experience of flow I was able to achieve working with each performer one at a time, matching my skills as a sight-reader and pianist with the challenges of playing a whole range of song accompaniments without rehearsal. The singers were auditioning for a role in an up-coming music theatre production and I had not had the opportunity to rehearse with them. Although I already knew some of the songs they chose to perform, there were always new songs as well as arrangements in different keys. The sight-reading was quite a challenge but since my skills as a sight-reader and accompanist were now at an expert level I knew the challenges and skills were in balance and this provided the conditions for flow.

There is no time for practice, just time to establish a tempo, check the key signature and connect with the groove of the rhythm. Finding the correct style for each piece is one of the core elements of successful accompaniment for auditions. There is no time for rehearsal, and many times the performance will not be note-perfect, but the performer on the stage needs the accompanist to capture the correct style and rhythmic groove so that they can settle into a convincing performance for the audition panel…My performances slipped into the background as they supported the events on the stage – and this was exactly how I intended my playing to be. In fact, the sign of my success was that no one does really notice me. The accompaniments blend with the singers in a series of seamless performances (Part 28).

A recent paper by Meinz and Hambrick (2010, p. 915), building on the work of Kopiez and Lee (2008), suggests while deliberate practice is necessary to develop skills in piano sight-reading, working memory capacity (WMC), the ability to maintain task-relevant information in a highly active state, "contributes to individual differences in sight-reading skill." Their empirical study found that sight-reading skills increased "not only from practice devoted specifically to this activity, but also from other practice activities," however, working memory capacity also "plays a direct role in sight-reading performance by determining the extent to which pianists can prepare for future keystrokes by looking ahead in music scores" (Meinz & Hambrick, 2010, p. 917). My theory includes this link between the working memory and the ability to sight-read, and the concept map and explanation presented in Chapter 4 outlines this connection between these concepts.

The accompaniment of instrumentalists creates a number of challenges for the collaborative pianist particularly in the areas of sight-reading and quick learning. Katz (2009, p. 236) remarks that "with sonatas and larger chamber works there are usually much fiercer and more constant technical demands for the pianist." As an accompanist in a regional city *"I am in demand to accompany all performers"* (Part 30) and I am often called in to accompany students sitting diploma-level instrumental exams where the repertoire can be very demanding for the accompanist, particularly repertoire from the nineteenth century (late classical and early Romantic works) or the twentieth century where the pieces can exhibit great complexity with the rhythmic and harmonic structures. The violin sonatas of Beethoven and Franck are examples of the late classical and early Romantic literature that place great demands on both the instrumentalist and the accompanist. The string sonatas of Prokofiev, Debussy and Shostakovich and woodwind pieces by Bozza, Martinu, Jolivet, Messiaen, Poulenc and Hindemith (Part 24) all demand great technical proficiency of the accompanist and have been part of my professional accompaniment experience. Although each performance was very demanding, I often felt a great sense of personal satisfaction knowing that I had the skills to meet the unique challenges of each piece. The intense concentration required of these performances, described in Parts 24 and 25 of the narrative attest to the flow experiences that can arise when one participates in an activity where the challenges and skills are in balance, and the activity is also seen to be highly valuable and enjoyable.

Another challenge for the accompanist is that many instrumentalists only rehearse with their accompanist quite close to a performance. Since their instrument can hold absolute pitch, they are able to comfortably rehearse their parts without the direct assistance of an accompanist, unlike singers who often rely on an accompaniment to provide them with the absolute pitch for rehearsal. The late start in the rehearsal process means I have to be quite advanced in my own learning of the work before the intended performance, which could be an examination or public concert. When working on Meale's *Sonata for Flute and Piano "we had only two days to get the concert program together, so our rehearsals were long and intense, matching the difficulty of the piece we were preparing"* (Part 25). It is a very difficult work with complex rhythmic and harmonic structures that required a performance with a high level of accuracy together with attention to the minute details of attack, phrasing and dynamic variation.

> *The performance required intense concentration. There was not a moment where I could relax. I had to keep counting intensely, watching the piano and the flute parts, as well as the flautist to maintain our ensemble. I felt as though I had held my breath for the entire time of the performance, but I was actually trying to match my breath with that of the flautist. He had great lung capacity and could hold the long phrases for what seemed an eternity* (Part 25).

I felt a great sense of achievement with the successful performance of this work, and the fact that it stayed so strongly in my memory attests to its impact on my development as an accompanist. Csikszentmihalyi's (2002, p. 54) research concludes that the experience of flow can appear to be effortless but it is rarely so: "It often requires strenuous physical exertion, or highly disciplined mental activity. It does not happen without the application of skilled performance. Any lapse in concentration will erase it."

Quite early in my development as a pianist and accompanist I was fortunate to be able to work alongside a number of expert accompanists who could model this ability to sight-read in complex music performance situations.

> *Carol was one of these pianists. She had played for many shows and was an excellent sight-reader. But more than that, she was an excellent ensemble player. She was totally reliable in that she always played the right rhythms and*

notes, and provided a solid basis for the singers on the stage…Carol was a
great role model for me in terms of her dependability (Part 9).

Carol's work as an accompanist provided me with a benchmark in terms of the standard I needed to attain to become a reliable accompanist. She demonstrated a number of important accompaniment skills including the ability to sight-read proficiently, play accurately and in time, and support the performers during their performance. Furthermore, her role as mentor and the value of her encouragement to my development as a performer is borne out in the literature. "Females tended to value the encouragement and praise received from mentors, whereas males more frequently valued the career, business, and professional expertise of their mentors" (Torrance, 1983, p. 8).

My ability to sight-read and learn music quickly has resulted in a number of memorable performances where I felt my skills as a pianist were stretched to meet the demands of a highly complex performance with very minimal preparation.

The rehearsal had been brief so that when we went on stage for the
performance, there was a sense of rawness in our preparation. It was on the
edge. Even though I knew the work well, there was a sense that anything could
happen and this heightened my awareness of my surroundings (Part 29).

Rather than feeling anxious in these situations, I knew that my skills were more than adequate to meet the challenge of the performance and this created pre-conditions for an experience of flow.

Summary of Chapter 5

This chapter has outlined the characteristics of the concepts pertaining to one of the important themes for flow in my experiences as a piano accompanist: the balance between challenge and skills for a piano accompanist. The analysis of the data places this theme as the first section of my theory for understanding the phenomenon of flow for a piano accompanist. Examining the autobiographical narrative, I have found four key concepts for the balance between challenge and skills in collaborative music performance. These concepts are the challenges and skills associated with the acquisition of motor skill development for a pianist, aural acuity, music reading, and

sight-reading and quick learning. I have discussed each of these concepts in turn, comparing their characteristics with the findings of other relevant literature in the field. This has enabled me to gain a deeper understanding of their role in establishing the challenge-skills balance as a theme in my experiences of the phenomenon of flow during collaborative music performance.

The next chapter examines the next theme that emerged from the analysis of the data: attention. The theory outlined in Chapter 4, and illustrated with the accompanying concept map, shows that the theme of attention can be split into a number of concepts, each of which play an important part in understanding the role of attention as part of my flow experiences as a piano accompanist.

Chapter 6: Attention

In this chapter I will begin by looking at one of the central themes of the flow phenomenon in my experiences as a piano accompanist: focused attention, a frequently recurring topic in the narrative. While Csikszentmihalyi's definition of flow has various dimensions, the specific areas related to the control and focus of my attention are significant as they dominate my most memorable piano accompaniment experiences. While much of the literature in these fields is based on empirical evidence gathered through many psychological experiments throughout the twentieth and twenty-first century, I have found these findings useful in coming to understand my subjective experience of music performance and accompaniment, thus helping me to understand the phenomenon of flow and its effect on my life as a performer and piano accompanist.

Attention as a characteristic of flow

Csikszentmihalyi's description of the phenomenon of flow describes a sensation where there is complete focus of attention.

> When all a person's relevant skills are needed to cope with the challenges of a situation, that person's attention is completely absorbed by the activity. There is no excess psychic energy left over to process any information but what the activity offers. All the attention is concentrated on the relevant stimuli (Csikszentmihalyi, 2002, p. 53).

The model for the concept of flow acknowledges the ability of human consciousness to order and make sense of the vast amounts of information that confront us as sentient beings during every day of our lives. Each waking moment of our day, information is processed by the investment of our attention and we become aware of this information as it enters our consciousness through thinking, willing and feeling about this information (Nakamura & Csikszentmihalyi, 2002). However, it is the level of attention that plays a key role in the phenomenon of flow. An intense concentration on a task often results in the merging of action and awareness and the subsequent loss

of self-consciousness can allow the participant to feel like the passage of time has become distorted because attention is so fully focused on the task and not the surroundings (Nakamura & Csikszentmihalyi, 2002). The extract from the narrative demonstrates this type of experience.

> *The rehearsal space was a light and airy practice studio. Its large window opened to the vista of cane paddocks with the ranges in the distance. As we began to go through the song there was this absolute sense of oneness and empathy that came between us. Everything around us was blocked out except for the performance – the connection between the words and the music – the singer and the accompanist* (Part 23).

Attention is a very broad term for how the brain controls its own information processing, and "its effects can be measured through conscious introspection, overt and implicit behaviours, electrophysiology, and brain imaging" (Chun, et al., 2011, p. 74). In its broadest terms, Gillig and Sanders (2011, p. 43) define attention as "being able to focus on a specific thing without being distracted. It is different from simply being alert, because *alertness* refers to basic arousal. An alert person is simply awake." Since attention is such a broad term, Chun et al. (2011) have attempted to define the construct of attention by looking its basic characteristics. Their paper outlines a proposed taxonomy of external and internal attention that provides a useful organising framework for me to analyse my own experiences of attention as part of the phenomenon of flow in piano accompaniment.

External attention and internal attention for a piano accompanist

Chun et al. (2011) propose that attention can be categorised as either external attention or internal attention. "Whereas external attention involves selection of perceptual information coming through the senses, much of cognition involves regulating our internal mental life" (Chun, et al., 2011, p. 82). After critical reflection and analysis of the narrative presented in Volume 2, I propose that in my experience as a piano accompanist, the external attention, which involves the selection of perceptual information coming through the senses, includes

- the physical environment in which I play (the quality of the piano, the acoustics and the temperature of the room or venue) and my spatial

relationship with my collaborative partners;

- the people I accompany (the individual musical characteristics of single performers, as well as small and large groups of performers, including the differences between accompanying singers, dancers and instrumentalists) the way in which we communicate during performance (peripheral vision, the use of gesture and breath to give performance cues); and

- the events that occur during performance (listening to the other performer to support them in performance, balancing the sound, the use of body language to convey music performance and dance performance cues, dealing with unexpected changes of tempo, not having the correct music score, performers losing their place during performance).

All of these aspects of my piano accompaniment rely on my ability to select and modulate a large amount of sensory information, often in the moment of performance itself. My narrative provides many examples of these types of external attention characteristics in my role as a piano accompanist. The discussion in the later part of this chapter will consider each of these external factors, and will add more depth to the understanding of the phenomenon of flow during my piano accompaniment experiences.

The internal attention "refers to the selection, modulation, and maintenance of internally generated information" (Chun, et al., 2011, p. 73) and in my experiences as a piano accompanist this has included:

- The attention to my responses to the performance experience (dealing with my own nerves and anxiety, using pre-performance routines, eliminating distracting thoughts and concentration during a performance);

- The ability to draw upon long-term memory (understanding, recognition and the appropriation of appropriate styles and performance practices, understanding of the core principles of music composition and their application in collaborative music performance); and

- The ability to use the working memory effectively in the moment of performance (control of my thoughts and the ability to stay focused

during the performance, regulating what I think about at any one time, switching quickly from one performance style to another).

My narrative explores various aspects of my internal regulation of attention, which contributes to some of the central features of the phenomenon of flow including focused attention and vigilance.

External attention for a piano accompanist

Spatial attention

My narrative of the experiences of being a piano accompanist recalls many times when my attention was directed to dealing with various types of external sensory information. The focus of attention, so important in the phenomenon of flow, can be understood further by considering how attention to "spatial locations in the environment" (Chun, et al., 2011, p. 79) can be modulated to maintain this focus. Chun et al. (2011) go on to state that spatial attention is largely a visual concern. Although as a musician, the auditory components of my work have always been central to the experience of creating music (Finney & Palmer, 2003), spatial attention is needed to modulate the external sensory information emanating from the physical environment I work in as a piano accompanist. During music performance I am not only processing the sounds I make at the piano as I respond to the requirements of the music score, but I am making adjustments to my playing in response to the physical environment I find myself in and the musical partners I am performing with.

The physical environment

If the environment is ideal and I am playing a piano that is well in tune, has good action, is located in a well-lit space that allows the sound to resonate clearly, then little of my attention is consumed with the physicality of dealing with my surroundings and I can give over all of my attention to processing the other sensory perceptions demanding my external attention such as working collaboratively with the other performer in the music performance. In these ideal circumstances, the characteristics of the piano and the acoustics of the space do not even rate a mention in my narrative accounts. However, when I have found myself in a situation playing a

poor quality piano or playing the piano in a room with poor light and acoustics that make it difficult to hear myself properly, I find that my attention is totally consumed by the regulation of these external circumstances and I have little attention left for the musical aspects of the performance. The negative aspects of the physical environment become a strong distraction and my attention is used to "suppress distraction from task-irrelevant stimuli" (Chun, et al., 2011, p. 80).

I remember playing a piano where the damper pedal was constantly squeaking through the performance as I was accompanying some singers in a lunchtime concert. The squeak was not loud enough to reach the audience but it certainly consumed my attention as I tried to adjust my foot to find a way to minimize its noise. It was almost impossible to concentrate on the task of playing the music and accompanying the singer. In Part 30 of the narrative, I recount an experience performing with a small group of singers on an outdoor stage, in the blazing sun during the hottest part of the day where the physical problems of the piano and space consumed much of my attention through the performance.

> *It was so hot in the sun that it took all our energy to stay smiling and complete the set as required. I longed for a breeze, as did the vocalists, yet at the same time, knew that any strong breeze would blow my music score around making it impossible to provide the accompaniment they needed as singers. As predicted, the sound technician gave us patchy fold-back through the speakers at the front of the stage making it extremely difficult for the singers to hear each other, and for me to hear each singer and balance my sound with theirs* (Part 30).

This performance was very uncomfortable for us all. The keyboard provided for the performance was of poor quality, the sound was difficult to hear and we were battling elements of heat and wind.

Similarly in Part 23 of the narrative, I recall an incident where the rehearsal for a performance was particularly memorable in its emotional intensity but this could not be replicated in performance due to external factors that took all of my attention.

> *We were both quite nervous before our performance at the party. There was no reason for this except that we were both performing in an unfamiliar environment in a room with quite a dead acoustic. Suddenly, there were other factors besides the music to occupy our mind including the fact that I had to get*

used to a different keyboard and balance our sound as we performed, making
sure that I was neither too soft nor too loud for the singer, but providing the
right amount of support to create a satisfying performance. The performance
drew to a close and was well received by the family and friends present, but we
both knew it had none of the emotional intensity of our rehearsal (Part 23).

In this circumstance, the poor acoustics of the room made the performance very uncomfortable for me as I struggled to balance my sound with the singer. Gerald Moore's memoir (1962) recalls his many experiences as an accompanist and amusingly titles his work with the common concern for many piano accompanists: *Am I too loud?* Katz (2009, p. 137) emphasizes that while the balance between the accompanist and soloist should always be of concern, "we must also remember that we are custodians of the composer's whole canvas" and need to provide a studied accompaniment that does justice to the full artistic context of the work being performed. Nevertheless, when I am in a position that I cannot easily hear or see my musical partner, it becomes an unnecessary distraction for my attention and spoils any sense of flow that might occur as I perform.

The performers I accompany

In my role as a piano accompanist, I have worked with all types of performers. Very early on, I learnt to work with singers who have unique needs from instrumentalists. Unlike instrumentalists, they often rely on the accompanist to provide the tonal environment for their music. This includes the pitch as well as the rhythmic patterns of the work. Regardless of whether the singers are singing in the classical style or contemporary, the accompanist provides both the tonal, rhythmic and stylistic environment for their performance. Similarly with instrumentalists, as an accompanist I had to learn each of their unique characteristics: the wind and brass players need time to assimilate their breath within the phrase (Part 12 and Part 24), string players often shape their sound as the note progresses with their ability to be able to vary the sound with the bow and the use of vibrato (Part 18), and the jazz ensemble works closely with the rhythm section to establish the groove of a piece (Part 13). In each case my role at the piano required that I manage my attention across many different external sensory inputs.

Accompanying singers

My experiences of flow in piano accompaniment were particularly memorable when working with singers. As musicians, singers are in the unique position of also working with text as well as the music, and since they usually perform from memory in performance, they often make a very strong visual connection with their audience. Welch (2005, p. 255) observes that "the singers communicate intra-personally by the moment-by-moment acoustic stream providing diverse forms of feedback concerning musical features, vocal quality, vocal 'accuracy' and 'authenticity', emotional state, and personal identity." One of my musical partners was a gentleman who had much experience as a solo performer. *"Oliver always told the story of the song and was extremely skilled as a vocal communicator. The audiences loved his performances"* (Part 20). He was always aware of the visual connection between singer and audience and exploited it to his advantage, drawing the audiences into his performances. At this stage in my accompaniment career I was quite inexperienced with singers and was often caught out by the expectations of the style of music we were performing. The notated scores did not always provide a clear indication of the nuances of the performance, and so when Oliver paused on a particular note, I was often caught out, playing on while he was a beat or two behind me. *"It didn't help matters that I was unfamiliar with many of his songs and so I kept getting caught out with his tempo changes. Neither did he wait for me. Oliver sang on regardless of where I was and it was clear he was in charge of all his musical performances"* (Part 20). This part of the narrative clearly indicates that the collaborative partnership between singer and accompanist is a two-way relationship. The singer needs to communicate their intentions to their accompanist and the accompanist needs to follow the singer, while at the same time be sufficiently aware of the stylistic characteristics of the music to be able to anticipate some of the expected temporal irregularities.

Throughout the narrative I draw attention to my musical associations with various singers and the specific challenges I faced in each type of performance situation and the skills that I developed to meet these challenges. In my early accompaniment experiences these new skills were often developed through my contact with the music teachers of these singers. Through them, I gained valuable advice in the development of my accompaniment skills supporting the findings of a recent British study, which suggested that highly successful music students studied,

on average, with more teachers than did other less successful music students (Davidson, Moore, Sloboda, & Howe, 1998). These singing teachers were not my formal piano teachers, but as Jaffurs (2004) noted in her study, much learning can take place outside of formal settings. These singing teachers were experienced in working with soloists and accompanists and were interested in the development of the whole ensemble, not just the work of their own pupil.

> *One such vocal teacher was very forthcoming with advice when I was accompanying his singing student in preparation for a singing exam…"Make sure you play those notes in the left hand quite strongly," he pointed out after I began the introduction timidly. "The singer needs to hear those bass notes. They are the notes that provide the foundation for everything. And as the singer goes higher, bring out your bass notes even more."*

> *I have used his ideas for many years working with singers and learning how to provide adequate support so that they feel comfortable and can then give a performance that is true to the musical style* (Part 11).

I learned much about the idea of 'supporting performers' and particularly singers when I began to do more accompanying for music theatre performances. In Part 9 of the narrative I describe the mentoring provided by Robert who was a regular répétiteur for one of the local amateur theatre groups, but who was keen to remind me that *"it is the singers who are 'treading the boards'. They're the ones putting themselves out on a limb on the stage. You've got to really support them in their task"* (Part 9). He was a very confident accompanist who had a great deal of skill as a vocal accompanist as he knew exactly how much support was needed at any time in their performance. He appeared to be constantly aware of their needs in terms of breath and pitch. He was able to slightly adjust the temporal aspects of the piece to accommodate their breathing and if they ever faltered in their pitch, he was quick to pick out their notes in the accompaniment giving them strong aural support.

Once I began to master more of the stylistic demands of vocal repertoire, I started to feel that my skills as a pianist were growing to accommodate the more complex role of vocal accompanist. In audition situations, the challenge is to be able to instantly capture the intention of the music and the singer without a prior rehearsal. It is this level of challenge matched with the skills to be able to complete the task that

provides a sense of enjoyment and fulfilment. The phenomenon of flow can be experienced over several performances as the concentration remains high and the awareness of the performance medium is heightened.

> *As each auditionee enters the room, they present the pianist with their music and there are only a few moments to look at it before they start to sing – this is sight-reading at the edge. It requires an intense level of concentration, yet at the same time, an awareness of the performer for whom you are accompanying. You need to be attuned to their volume, tempo, and nuance so that your style of playing can match the intent of their performance. After all, they are giving their all to secure a role in the music theatre production and as the accompanist, you are part of this presentation* (Part 28).

One of the methods singers use to communicate their intentions with the accompanist is the use of breath. The intake of breath creates bodily movement, which, in turn, communicates to the accompanist notions of tempo as well as intensity. Much of this is caught in my peripheral vision. The use of breath as a communication tool is discussed in more detail in the next chapter as it also directly relates to the way performers communicate during performance and provide feedback to each other as the performance progresses.

Accompanying instrumentalists

Unlike singers, instrumentalists often spend much of their time practicing without the aid of an accompanist. They are less dependent on another instrument to provide them with tonal and temporal support. The addition of an accompanist to their performance preparation often occurs quite close to a performance event requiring the accompanist to be particularly adept in managing a number of attention demands during the brief rehearsal periods: quick learning of often difficult scores and becoming familiar with the performance cues of the instrumentalist. The issues surrounding the quick learning of instrumental accompaniments have been discussed in Chapter 5, so I will now consider how instrumentalists convey performance cues during instrumental accompaniment.

Just as singers communicate their intentions through their breath and body movements, Dahl and Friberg (2007) reported that most instrumentalists move their bodies during performance and many of these movements are directly related to the

emotional qualities of the music they are wishing to convey to their audience. "In the course of a musical performance, an instrumentalist will often use body movements and facial expressions to anticipate and elaborate affective properties conveyed by the music" (Thompson, Russo, & Quinto, 2008, p. 1469). Davidson (2005) also found that instrumentalists used their body movements to communicate with their musical partners or other members of an ensemble. In a study of the musical coordination between members of a string quartet (Good & Davidson, 2002, p. 197) these movements can be quite large: "eventually, the first violinist created a large upward sweeping gesture of her bowing arm and whole upper torso to indicate an imaginary quaver upbeat to precede her first played note."

I have found that this is a skill that needs to be specifically taught to young instrumental performers for they need to use similar physical gestures to indicate to the accompanist when they will be starting to play. When working with young instrumental performers, I make a point of helping them learn these temporal indications so that our ensemble can be as coordinated as possible.

While the intake of breath is essential for wind players and singers to maintain their sound, it is also a useful tool to convey performance cues and information about phrasing and attack to their other collaborative partners.

> *Since they were all wind players, their body language and their intake of breath gave important clues to me as accompanist. The players would move their bodies in an unconscious way as they expressed the emotion and intensity of the music. It was my job to find a way to work with them, even though the exact placing of my breath is not essential to my performance of the piano part. Just as with singers, I found myself breathing with the wind players, allowing the phrases to be shaped by their breath. At times the rhythm was strict and our breath had to become short and sharp – quick intakes between the accented and driving melodies. At other times the rhythm took a more relaxed path and so our breath could be drawn in more slowly to match the melodic shape of each lyrical phrase* (Part 24).

Performers of non-wind instruments also use their breath to communicate their intentions with their musical partners. This can include audible sniffing and breathing. While such communication could be difficult to use in a large ensemble such as an

orchestra, in small ensembles and duos between an instrumentalist and their piano accompanist, this type of communication can be effective in conveying musicals cues such as the beginning of phrases, the tempo of a section and the type of attack required.

Accompanying vocal ensembles

With larger groups of singers, such as choirs, it is important to be able to modulate my attention between my own playing, the directions of the conductor and the choir as a whole. In this following example, I was able to attend to the directions of the conductor, yet at the same time attend to my own playing and the musical reaction of the choir as they joined the performance. The combination of this level of attention within a performance experience resulted in a good example of the optimal experience described by Csikszentmihalyi (1990) as it was one of the enjoyable performances where everything seemed to come together seamlessly.

> *She gave me the nod. I took a deep breath and launched into the introduction with as much gusto and panache as I could muster. The introduction to Grenada is almost like a cadenza from a concerto and it was my moment to shine as a pianist before taking the more supportive role of accompanist while the men sang. But somehow the introduction did more than just set the scene for the song. The men captured the bravura of my playing and sang like they had never sung before. Their sound reverberated through the hall and back to us on the stage. We could all feel it was exhilarating and it further spurred on Grace as she encouraged the men to give not only their voices but also their souls. I was able to sense this too. The spirit of their singing, together with the excitement of the music itself enabled me to push and pull the phrases, bringing out every nuance of musicality from the harmony, melodic interludes and the exuberant Spanish rhythm that underpinned the whole work* (Part 19).

The performance was particularly memorable because the level of my attention to several outside factors was achieved at one time: I was able to attend to my own performance in a highly skilled way, I remained attentive to the instructions from the conductor during the performance, and the musical reaction from the choir was also within my attention, heightening the experience and making it both memorable and

enjoyable. A similar optimal experience is recounted in Part 31 with an exhilarating performance of *O Fortuna* from Carl Orff's cantata *Carmina Burana*.

> *When we finally arrived at the fortissimo section, he released our sound like a spring and I too burst into the piano passage with gusto. "Sors salutis, et virtutis, michi nunc contraria, est affectus, et defectus" (Orff, 1965). I felt a sense of being carried along with the intensity of the music as if in a blur, yet at the same time there was an increased level of concentration for I knew I could easily get lost with the speed of this music. The final section is marked presto and together with the conductor we raced with exuberance towards the end. We had never performed it at that speed before, but the adrenalin shot from the intensity of the performance pushed us all along. Such was the concentration of the whole choir that we stayed together to the end, breathless yet exhilarated (Part 31).*

Accompanying dancers

My music performances with dancers, also demonstrates the ways I have had to attend to the external factors of the dancers' movement in my performance as a ballet accompanist. This type of accompaniment that often occurs in ballet examinations leaves no room for error on my part. For instance, my choice of tempo can make or break a performance for a dancer. Too fast and they cannot attend to the detail of the steps they are demonstrating, too slow and their muscular control can fail as they try to hold a position where the arms and legs are help upright. It is not my examination, but the stakes are high for the dancers as they get one opportunity to demonstrate their expertise in their exercises and dances.

> *The forty minutes of an exam goes very fast. Even in the earliest grades, the music is very challenging to play and the concentration needs to be very high. Furthermore, between each piece the examiner only gives the pianist enough time to turn the page and then it starts.*

> *"Let me see your grand battements," chimes the examiner in her cultivated voice. "Ready? And."*

> *That's my cue. Check the key signature, time signature and most*
> *importantly the tempo and off I go. There is no room for error – the dancers are*
> *relying on me to get it right for them. I don't let them down* (Part 32).

This part of the narrative provides some important insight into the thought processes that occur as I attend to the requirements of the dancer, the instructions from the ballet examiner and the details of the music itself. Many of these things happen almost simultaneously and continue for the full forty minutes of the examination. This process is then repeated many times throughout the day of ballet examinations. It is not uncommon to play up to eight sets in one day, each lasting about forty to forty-five minutes. There is some repetition in the sets if there are several groups of students doing the same grade ballet examination, but as the accompanist I am required to be prepared to play up to ten different grades (pre-primary, primary and then grades 1 to 8), with each grade having a set of pieces lasting about forty to forty-five minutes in duration. Highly focused attention on a number of important external factors in the music performance managed with a high level of concentration is a key element in these types of performances.

Managing adverse events that happen during performance

During the music performance or rehearsal, adverse events may happen that are not initiated by me, but I have to instantly react to and manage to maintain the continuity and musicality of the performance. My attention is required to deal with these externally generated adverse events while still being able to continue with my own performance. The events that I have cited from my narrative outline some of the more significant events in my development of these particular attention capacities.

The first selection from the narrative relates to an accompaniment experience where my attention was applied to the musical management of the performance. It describes a performance where I had to really focus my attention to control musical elements, in this case tempo, and this level of concentration, or focused attention was an important attribute of the ultimate success of the performance experience.

> *It was quite tempting, for instance, in the staccato passages in the middle*
> *section to let the tempo just run away. If this happened – as it did many times*
> *in rehearsal – we quickly ended up losing control of the tempo, getting faster*
> *and faster and finding it difficult to reclaim our original steady pace. Intense*

concentration was always needed in performance – listening to each other carefully, listening to our own part carefully – balancing the excitement of playing this dramatic music with the calmness required to keep every part of the performance under control (Part 11).

There have been times when the musicians I was required to accompany were unsure of their own part or still in the process of learning how to negotiate both the technical and aesthetic demands of the piece. Their uncertainty can appear in both rehearsal and public performance situations and as the accompanist I have often had to skip bars or even whole pages of music to keep up with the soloist who has lost their way or is taking liberties with the music score by not playing exactly what is written down. Some of these liberties can be justified, and indeed are expected in certain styles of music, and are used as opportunities to dramatise the performance or bring out the unique expressiveness of a piece of music. The ability to manage this type of unexpected situation in performance, or manage unexpected deviations from the written score in performance, demonstrates the importance of concentration to manage the external sensory factors for the piano accompanist. Part 12 of the narrative provides an example of this experience in the context of accompanying instrumentalists.

The other interesting characteristic of this accompaniment that stays as a strong memory, is the amount of following I was required to do to make these performances work. Some of the performers had no idea about how to keep a steady tempo. Whenever they were faced with lots of notes to play, they would slow down the tempo to accommodate them. Crotchets became minims, then became semibreves, and went then went back to crotchets again. My job was to follow – follow their erratic tempo fluctuations and follow their breathing. At least the breathing seemed to come in places that made sense musically – most of time the breathing coincided with the phrasing. It was a new experience to become so aware of this for an instrumental player, but one that would stand me in good stead in my development as an accompanist (Part 12).

A more frightening experience that demanded an intense level of concentration to manage a sudden adverse event occurred during a public performance where the last two pages of the score were missing, and I only found out about it during the performance itself.

The final two pages of the aria were definitely missing and suddenly instead of relying on the written score I had to revert instantly to playing by ear. We had done some rehearsal on the work so that I knew the aria and how it was meant to finish, but I had never committed any of the musical detail to memory. ...Finally, to my great relief, we arrived at the end. I had never stopped playing, despite the loss of the written score. The adrenalin, which seemed to supercharge my brain, overrode my sheer panic and I was able to improvise (somewhat) successfully to the end (Part 26).

The performance was only saved through my ability to focus my attention on managing this external event, or increase my concentration 'capacity', at this time. Referring to sports performance, Moran (1996, p.71) defines 'capacity' as "the amount of mental energy available for task related information processing in a given sport situation," and Bellon (2006, p. 1) notes that music performers, like sports performers, require the development of a "high degree of muscular control and coordination that can either be facilitated or inhibited by mental disposition." When thinking back on this event, that was quite frightening at the time, I am mindful that it does not fit Privette's (1983) definition of flow as it was not particularly enjoyable. She provides a definition that would describe it as superior or peak performance. "Peak performance involves a holistic experience of clear focus on self and valued object in transaction. The clarity of focus, the strong sense of self, and the awareness of the transaction share importance with the value and focus on the central object. The self is not lost" (Privette, 1983, p. 1364). However, Csikszentmihalyi (2002, p. 65) describes flow as an experience that often involves intense concentration.

When a person invests all her psychic energy into an interaction – whether it is with another person, a boat, a mountain, or a piece of music – she in effect becomes part of a system of action greater than what the individual self had been before.

His explanation of this aspect of the phenomenon of flow points to the central role of concentration in this experience. Contrary to the popular conception of 'going with the flow' meaning a loss of consciousness and a "passive obliteration of the self," Csikszentmihalyi (2002, p. 64) provides examples where participants experience a sensation where they become acutely aware of their surroundings and are able to exert a high level of concentration on the task at hand. Therefore, this section from my

narrative, where I have to deal with the sudden adverse event of having to instantly improvise during a performance points to the same sense of concentration as described in flow, but since it was not really enjoyable, it would be best described as peak performance rather than flow.

The accompanist needs to have a high level of concentration that allows them to absorb the total picture to create an aesthetically pleasing performance with their musical partners. Katz (2009, p. 3) describes the art of piano accompaniment as collaborative performance where as pianists "we guard and maintain the composer's wishes, the poet's requirements as the composer saw them, our partners' emotional and physical needs, and finally, of course, our own needs as well." This overarching responsibility to all aspects of the music and to all those participating in the performance, all external sensory inputs, requires a great deal of concentration as seen in the following narrative extract that describes my first professional accompaniment experience in a recording studio. The recording was being made for use in a film and present at the recording session were several members of the creative team including the director, producer and the star performer himself whom I was to accompany for this song in the film.

> *I was very nervous and felt overwhelmed by the company present. This was my first really professional gig and the adrenalin that was running through my body made me super-aware of all my surroundings and time seemed to go into slow motion. My senses were primed to receive every nuance from the performers and the production team, so that when we went into the recording studio I was at the peak of my concentration. The recording was completed as a duo, rather than each of us playing our parts separately, and I was amazed at the musicality and sensitivity of Edward Woodward's singing. He could not read music, and had only learnt the song from my scratchy cassette recording, yet he performed immediately with a degree of musicality that I had rarely experienced with amateur performers. I felt my own performance matching his. It was as if he was driving this work of art and I was just one part of the process (Part 15).*

The next part of this chapter explores the factors in my experience of piano accompaniment that are related to internal aspects of attention: the selection, modulation, and maintenance of internally generated information.

Internal attention for a piano accompanist

Dealing with my own performance anxiety

My narrative recalls many instances where performance anxiety dominated my internal attention. This anxiety has manifested itself in various ways during my career and has included anxiety commonly known as stage fright (Steptoe, 1989) where I have experienced fear in performing in front of other people, as well as other types of anxiety that relate to what happens during a performance, especially as I perform collaboratively with a range of musicians and ensembles. Any anxiety before or during a performance can have a debilitating affect on the confidence of the musician and their motivation to continue in the practice of music performance (Kenny, 2011). In Csikszentmihalyi's definition of flow, anxiety can occur when there is an imbalance between the challenges of the task and the skills available to complete the task. If the challenges presented are too great for the skills available, then the participant may experience anxiety and it is unlikely that flow will occur (Csikszentmihalyi & Csikszentmihalyi, 1988a; Kirchner, et al., 2008). From my very early years as an accompanist it was a noticeable part of my experience.

> *The hours of painful practice were all put behind us as we endured the two minutes of performance. It was one of my sister's exam pieces, and although it was not really hard for me to play the accompaniment, I had to concentrate really hard to cancel out my nerves. Not only did I have to play my own part well but I also had to keep an eye and an ear out for what my sister was playing. This was way out of my comfort zone* (Part 2).

This example occurs early in the narrative and recalls one of my earliest accompaniment experiences in a public performance. The technical piano skills required to perform the work were not a particular problem for me but it is clear that my attention was drawn to the management of my performance anxiety. Ryan's research (2005) supports my experience in that music performance anxiety can be experienced by elementary school children, and is particularly high on the day of the public performance.

Performance anxiety is a common problem for anyone performing in public and the problems for musicians have been studied extensively (Kenny, 2010; Kenny, et al., 2004; McGinnis & Milling, 2005; Osborne, et al., 2005; C. Ryan, 2005; Steiner, 1998; Sternbach, 2008; Wesner, et al., 1990; Yoshie, Kudo, Murakoshi, & Ohtsuki, 2009). As early as 1986, Green and Gallwey (1986) recognized that the performance stresses for musicians were very similar to those experienced by sports performers. Taking the ideas of Gallwey's (1974) earlier publication, *The inner game of tennis,* Green and Gallwey produced a 'how-to' book for musicians to help them conquer their performance anxiety and deal with their struggles to select and modulate internally generated information. A similar model has been developed by Robertson and Eisensmith (2010) who put together specific strategies for musicians to learn to control their thoughts while performing.

Performance anxiety was also present in my solo performances. The following extract recalls a performance when I was quite young, yet the memory of the fear remains palpable to this day.

> *The stage was accessed by a set of about six stairs on the left, making the platform quite high above the audience. It was a long and lonely walk from the side of stage to the centre. As I sat at the piano, the audience seemed so distant. Playing the grand piano was very frightening – the music sits so much higher than an upright. It all went by in a blur. As I played my piece, I noticed the tiniest of errors, but I got through to the end. I was sure that I had disgraced myself. After all, this concert was a really big deal. Only the state's best candidates were invited to perform, and I was totally aware that I had to live up to some high expectations. I returned to my seat amid the encouraging applause, to very proud parents and teachers, but I was still shaking from the ordeal. It took me some time to settle down and I was in awe of the performers who followed me* (Part 4).

As a solo performer I continued to have many instances of extreme performance anxiety. Even when I was studying full-time at the Conservatorium of Music, on the day of a concert performance or examination I would feel physically sick. In most cases I was able to manage the anxiety during the performance so that it was not detrimental to my playing. There was one occasion, during a prestigious lunchtime concert where I was an invited student performer from the Conservatorium, that I had

a complete mind-blank in the middle of the performance. It was a very difficult solo work and the stumble in the middle of the performance was very noticeable both to the audience and to me. The memory of this embarrassment remained painful for me for many years, and contributed greatly to my reluctance to perform at subsequent concerts from memory. Even to this day, I rarely perform works from memory, preferring the safety of the music score.

Using self-talk to manage performance anxiety

In my experience accompanying professional brass musicians in some complicated twentieth century works, the narrative recounts my use of self-talk (Anderson, 1997) to control my attention during the performance of these difficult works.

> *The first concert featured the Hindemith trumpet sonata. As I came on stage with the soloist and settled at the piano, I kept reminding myself mentally "just read the music, just read the music." It was a matter of intensely focusing not only on the written score for the piano part, but also on the written score for the solo part as well as following the performer in front of me. Since I did not know the pieces inside out, I had to rely on the soloist leading the performance and following their musical intentions as well as those of the composer* (Part 24).

Weiss's research (2008) found that when her musician research participants used self-talk as part of their performance routine they experienced greater self-confidence and decreased anxiety during performance. Self-talk and mental imagery have been documented in sports psychology literature (Anderson, 1997; McFadden, 1982; Straub, 1996; Weinberg & Gould, 2003) and has become a vibrant emerging field in the psychology of music as researchers seek to understand more about the mental skills of musicians (Bernardi, Schories, Jabusch, Colombo, & Altenmuller, 2009; T. Clark & Williamon, 2011; Duke, et al., 2009; Gregg, et al., 2008) and to look for ways to develop strategies for musicians to control their thoughts during performance (D. U. Robertson & Eisensmith, 2010).

Bonetti (1997) asserts that there is no substitute for thorough preparation when facing an imminent public performance of any kind. She goes on to say "performance fears are surely lessened when we have prepared securely and wisely in the months before the performance" (Bonetti, 1997, p. 61). While the narrative demonstrates that

practice can lessen the amount of attention taken up with performance anxiety, each time I was thrust into a new situation, I had to learn again to control my inner thoughts as I performed. *"It had been a long time since I had stepped foot on a large stage to perform, but with so many oratorio arias to perform, almost one after the other, I soon lost my nerves and got on with the task of creating music"* (Part 21).

My skills as a pianist have been developed in many long hours of rehearsal working on my own, yet the performance anxiety associated with solo performances removed much of the enjoyment for me. There were few instances of the phenomenon of flow during my solo performance activities and this mirrors the research of Kirchner, Bloom and Skutnick-Henley (2008) who found that flow was inhibited in musicians as their music performance anxiety increased. When making choices about career options after I completed a performance degree, I avoided a career path that focused only on solo performance and instead chose to seek out more opportunities to perform as an accompanist as well as develop my skills as a teacher in both studio and classroom settings. The enjoyment of working with others in various types of music activities shaped my future career choices. The narrative recalls a number of instances of my piano accompaniment work where there was some level of stress during collaborative performance, but the over-arching emotion continued to be enjoyment rather than fear when playing as an accompanist. Accompaniment moved from being a part-time amateur activity to become a significant part of my professional career in music academe. The enjoyment of working in collaborative partnerships overshadowed any of the negative effects of music performance anxiety allowing me to attend to the rewarding aesthetic opportunities in a wide variety of musical contexts.

Using pre-performance routines to manage performance anxiety

Mental preparation for performance also features in the narrative with examples of the thought processes and strategies that I used before I performed in public. In the early part of my narrative I recall that I was quite superstitious before a performance. My pre-performance routines were more about the weather, temperature of the day and the quality of my last practice.

> *Over my teenage years, I developed my practice routine before concerts in a*
> *superstitious way. I would practice the piece at home and hope that it would go*

badly, and I would deliberately rehearse until I had made quite a hash of the piece. I nurtured this growing superstition that to have a good performance I had to have a bad practice just before. This irrational belief was reinforced every time I played in public. If I felt I had played well, then my terrible practice had been a good thing. If the public performance fell apart, I felt it was all due to playing too well at home. I was even affected by the weather. Dull, overcast days did not augur well for a good performance, or so I thought. Adelaide winters are renowned for such days, and so winter performances made me particularly nervous (Part 4).

I was able to modify my pre-performance routine through the years so that it enabled me to remain calm and have greater control over the internally generated information as well as the external sensory demands that would come in the performance itself. I knew that I needed to find a place away from other performers and the chatter often generated in such circumstances, to focus on the performance ahead. This included finding a well-lit space to mentally rehearse my performance by reading through the music scores.

I arrived at the side of the stage before the section began, earlier than most of the performers, to try to find a good spot to sit. The dimly lit side of stage area was bathed in a dim blue light – great for singers to lose themselves in their moment – treacherous for me as their accompanist, trying to prepare for a string of different performances. I, instead, needed a spot that gave me a bit of light to see my music and help me focus on the uniqueness of each work (Part 26).

This example shows that not only was I using the pre-performance routine to take control of any anxiety in performance, but I was using that time to mentally rehearse the upcoming performance. Mental practice has been shown to improve the quality of performance for pianists (Bernardi, et al., 2009) while greatly reducing the amount of time needed for actual physical practice. The idea of using mental imagery in preparation for music performance continues to be explored (T. Clark & Williamon, 2011; Gregg, et al., 2008; Hays, 2002; Zhukov, 2009) drawing on the vast field of research on imagery in the domains of cognitive psychology and brain research.

In sport, many high level performers use a pre-performance routine of thoughts and actions that enhance their forthcoming performance.

> These athletes may also go through a pre-planned sequence of imagery, arousal setting cues, and other cognitive strategies as part of their complete routine. These routines can be used before or after skill performance or while waiting on the side lines. Thus performance routines focus specifically on what the athlete is thinking immediately before, during, after and between each skill performance (Boutcher, 1990, p. 231).

Cotterill, Sanders and Collins (2010) used interpretive phenomenological analysis in their study of the mental strategies of six golfers. They found these sportsmen developed specific pre-performance routines to achieve the optimal and positive psychological state of flow as identified by Csikszentmihalyi (1990). Although their pre-performance routines were all slightly different, depending on their individual differences in the selection of psychological skills, the authors noted that "the deliberate manipulation of attention focus appears to be a key strategy used by the participants in trying to achieve this ultimate super-confident state" (Cotterill, et al., 2010, p. 58). The value and use of pre-performance routines in sport is still being studied and Cotterill (2010, p. 132) suggests that they "continue to be an intuitively appealing and widely accepted technique to enhance preparation for performance in sport," but he warns that little is really known about how they actually work to select, modulate and maintain the sensory inputs for sports performers.

Over the years I have learned to prepare for performances by using slow breathing, focusing on the breath as it enters and leaves the body. One of my earliest piano teachers trained me in this process, which has nevertheless taken some time to control. Using the thoughts of 'calm' on the in-breath and 'control' on the out-breath, I have been able to take some level of control over my thoughts before undertaking a stressful performance. Robertson and Eisensmith (2010, p. 33) provide similar strategies for dealing with music performance anxiety using this technique, which they define as "an approach to stress management that relies on training attention." Their strategy teaches music performance students to focus on their breathing producing a calming effect. "Immediately before a performance, having students take two or three cleansing breaths can ready them for paying full attention" (D. U. Robertson & Eisensmith, 2010, p. 33).

In my experience as a piano accompanist, pre-performance routines, allowing me to focus on up-coming performances have been essential in ensuring a confident performance and through this, I am more likely to experience flow during the performance, having gained control of negative thoughts and managed their onset through the use of well-rehearsed pre-performance routines.

Eliminating distracting thoughts during performance

Dealing with distracting thoughts during a performance is another characteristic of internal attention. Such thoughts are usually associated with moments that are unlikely to produce the phenomenon of flow, as the attention is not highly focused but split across a number of areas at one time. The narrative extract below provides an example of a moment in a performance where my mind wandered away from the music score itself.

> *There was a point, quite early in the performance when I had let my concentration lapse just a little. I started to think about how well the performance was progressing and how confident the choir was sounding – but I was soon to find out that was a foolish thing to start thinking about. It was at the beginning of a very complicated choral section that was also fast and difficult for the orchestra. My mind had wandered off the music and I couldn't quite remember how this piece went, even though we had rehearsed it many times in the choral rehearsal rooms. I floundered in the rhythm in the opening phrase, even though the conductor was giving clear cues for the tempo. Immediately, there was a reaction from the choir as I heard a few voices hesitating causing a small chain reaction to other singers around them. With a jolt that brought me back to the reality of the performance, the adrenalin raced through me as I suddenly realised that it could all come apart. I was back on track again – I had the right rhythm and tempo, and the choir regained their confidence, tackling this section of the oratorio with vigour* (Part 33).

Moran (2004, p. 116) describes these types of distractions as "self-generated concerns which arise from our own thoughts and feelings." Chun et al. (2011) describe this as response and task selection, suggesting that they are clearly internal processes. This example from the narrative provides an example where my choice in the task selection, attending to positive thoughts about the success of the performance,

resulted in a negative experience where the music performance almost floundered irretrievably. Although these were positive thoughts, they were not helpful in maintaining the high level of concentration required to attend to all the external events that were demanding my attention at the time. This is borne out by Zedelius, Veling and Aarts (2011, p. 362) whose research into the conscious and unconscious processing of rewards suggests that "when people are involved in a cognitively demanding task, high rewards seize attention, much like other conscious meaningful information, and interfere with the process of keeping information active." The distracting thoughts about the progress of the performance almost resulted in a 'snow-ball' effect "whereby an error in performance triggers a chain of irrelevant negative thoughts" (Moran, 2009, p. 28). The performance was saved when I was able to refocus my attention on the music score and eliminate the thoughts that were not directly related to the performance at that moment.

Mindfulness as a strategy for controlling performance anxiety

In the last twenty years, mindfulness has gained considerable attention in the field of clinical and empirical psychology. It is linked to the phenomenon of flow in that it is a psychological state of focused attention that allows a person to become totally aware 'in the moment' (Miller, et al., 1995). Mindfulness can be used to explain the intense concentration that is needed for a concert pianist to memorise many piano concertos and concert works (Langer, 1989). Bishop et al. (2004, p. 234) regard mindfulness as "a process of investigative awareness that involves observing the ever-changing flow of private experience" thus making it a useful concept for consideration in the analysis of this autoethnographic study.

Learning to take control of the internal thought processes during music performance has been a long process for me. In my early life as a piano accompanist it seemed it was just a matter of good fortune if I managed to have some semblance of control over my responses to the performance experience, with many instances dogged by examples of music performance anxiety. It is only in the later parts of the narrative that events are recalled where I was able to calmly approach a collaborative performance with a sense of control over my thoughts.

The high levels of adrenalin ensured my concentration was high throughout the

performance. I felt in control at all times and was calm as I prepared ahead for

each sequence so that I was ready for my own solo singing moments, as well as the page turns, cuts and vamps as required. All those years of playing music theatre repertoire had paid off. I knew exactly what was expected of me and I could devote all my energies to melding my performance with the singer's (Part 27).

Despite the high levels of adrenalin present as this particular performance commenced, the sense of calm and control was clearly evident to me and also to an audience member.

Even other audience members noted the level of rapport in our performance. It was the morning after the concert – a Monday morning – and I was enjoying a tea break with one of my musician friends who had been at the concert.

"He is such a fantastic performer, so confident, and so easy to accompany," I mused.

The performance the previous night had been extremely enjoyable for me as well as for the audience members. Robert had taken us all on a fascinating journey through his life illustrating his rising career with songs that were special to him, warmly inviting everyone into his life.

"You were very relaxed last night," commented my friend. "You seem to be getting better and better, if that is possible, with your accompanying" (Part 27).

I had experienced a sense of relaxation during the performance, and my colleague, with his keen understanding of musical interaction and communication, also noted this aspect of the performance. Of particular importance was the relaxation that began early in the evening but did not result in feelings of apathy, but rather a heightened sense of awareness. It was as if the relaxation gave me the opportunity to pay even more attention to the details of the musical performance and the finely tuned interaction between singer and pianist that took this experience into the realms of truly memorable experiences. The state of relaxation opened the way for a more intense level of concentration or focused attention, and this was facilitated by a relaxed and open mind. This experience of mindfulness and being 'in the moment' was felt not only by myself, but was also noticed by a member of the audience thus

providing an example of the link between focused attention, concentration and mindfulness as they occur in an intensely enjoyable experience during collaborative music performance piano.

The experience of being 'in the moment' resonates with the meditative practices mentioned in May's (2005) intuitive inquiry of her creative practice. May explains her experience of mindfulness, a specific form of subjective awareness, while engaged in the creative practice of painting.

> This watchful self-reflective state is the same mental alertness achieved in the process of painting. While I paint I am focused on staying in the subjective now and become aware of many different states of mind…In painting I learned to come back to the present, just putting paint on the paper, again and again, teaching my mind to ignore its distractions, similar to when in a disciplined meditative practice I return my focus to the natural rhythmic action of breathing in and breathing out (May, 2005, p. 42).

This type of mindful awareness is particularly useful in music performance and I have found it useful to use my pre-performance routine of deep breathing to instil a mindful approach to my performance thus mediating any negative affects of music performance anxiety.

The role of long-term memory in piano accompaniment

The theme of focused attention that is so central to the phenomenon of flow can also be understood by considering the way long-term memory affects the experience of optimal music performance experience. Chun et al. (2011, p. 84) suggest that "long-term memory can also be a target of internal attention. Attention helps determine which information is encoded into long-term memory and how it is retrieved." The information in long-term memory can also be enhanced by the act of refreshing (Chun, et al., 2011). In my experiences of piano accompaniment where everything seems to come together in a seamless whole, my thorough understanding of performance practice and the style of the genre of music, learned over many years and continually refreshed through the continual process of playing accompaniments in many different styles has played a critical part.

In a performance of Liszt's *Die Lorelei*, the enjoyment of the experience is recalled in the narrative extract below:

Our Liszt lied had significant impact. Keith's strong tenor voice was more than capable of being heard above the thunderous accompaniment and the conclusion of the performance was met with enthusiastic applause….The combination of playing for the oratorio section and making an impact with a performance of a difficult lied led to many comments after the performance. The positive feedback gave me great personal encouragement as an accompanist and interpreter of challenging classical repertoire (Part 21).

This performance could not have happened without the ability to draw on discipline-specific knowledge (see the footnotes in Part 21) stored in my long-term memory. Similarly, in Part 23, my understanding of performance style was brought to bear on performances of vocal music by Vivaldi, Head and Rachmaninoff. In each case, as the accompanist, I drew upon my long-term knowledge of musical styles and performance practice allowing me to interpret the music sensitively and convincingly resulting in satisfying and memorable performances. The ability to tap into my long-term memory is particularly important when I am sight-reading new works. Sometimes this sight-reading occurs in situations where there is no time at all for a rehearsal as in the case of playing for auditions for a music theatre production. Each piece presented to me to play could be of a different style.

Some scores contain all the musical information you need for the performance, some are quite sparse and there is an expectation that the accompanist will add the necessary notes and rhythms to achieve the expected sound. Other scores contain too many notes, as in the cases of piano reductions of orchestral pieces. In this case, the accompanist must draw upon their long-term memory to determine the accepted stylistic approaches to performance as evident from the music. This includes knowledge about the composer and the period of composition. Once this is applied, the accompanist can safely eliminate some of the notes from the performance without detracting from its overall effectiveness and stylistic authenticity.

It is even more vital to draw on the long-term memory regarding music style and interpretation when performing a completely unknown work. The narrative recounts an experience performing an excerpt from the Andrew Lloyd Webber musical *Love Never Dies* soon after its official launch.

Although the music score itself was not difficult to play, the challenge came in finding an interpretation that would allow the combination of melody, harmony and lyrics to work together in a seamless whole. We had little time to rehearse together, and recordings of the songs were scarce leaving us only the music score to work with in developing our interpretation (Part 29).

This performance successfully captured the passion intended for the work and it was useful to draw upon my knowledge of similar musicals by Andrew Lloyd Webber and composers who write in similar styles such as Claude-Michel Schönberg the composer of *Les Misérables* (written in 1980). This knowledge allowed me to work with the singer and add expressive elements to the music, shifting its temporal aspects with *rubato* and dynamic variation to support the emotions expressed in the lyrics. The score contained only a minimal amount of markings to indicate dynamic and phrase and nothing with regard to *rubato*, so it was up to us, using our knowledge of the genre to create a credible performance from the basic score provided.

There have also been times while accompanying that I need to draw upon my long-term memory and recall theoretical aspects of the tonal and temporal characteristics of a style in order to create a successful performance. The narrative in Part 26 tells of an experience where the last two pages of music were missing and I only realised this during the performance just as I turned the last page of my music.

My music theory kicked in. What is the key? I quickly looked back at the key signature trying to process all the necessary information at lightening speed. What are the notes in the tonic, dominant, subdominant chords? Should there be a cadential 6/4 at the end? Make it up – stay in the style. My thoughts were racing even as my hands kept playing, trying to create an accompaniment that would seamlessly blend from written score to improvised performance all in the style of a Mozart aria (Part 26).

This part of the narrative demonstrates the use of my long-term memory to draw upon the core principles of music composition, and in particular harmonic structure, and apply them in a collaborative music performance that was threatened to end in complete disaster unless I was able to recreate the score on the spot.

Making effective use of my working memory

Chun et al. (2011, p. 85) make it clear that "working memory is at the interface between internal attention and external attention," while Baddeley (2003, p. 829) defines working memory as a "limited capacity system, which temporarily maintains and stores information, and supports human thought processes by providing an interface between perception, long-term memory and action." In my role as accompanist my working memory gives me the ability to control my thoughts and regulate what I think about thus staying focused during the performance.

The concept of working memory is important to understand as I consider the phenomenon of flow in music performance. My ability to manage the amount of information I deal with at any one time during performance helps to create the state of focused attention that is essential to the phenomenon of flow. It provides me with the capacity to switch quickly from one performance style to another. Accompanying ballet examinations requires a significant amount of working memory to manage the amount of musical information being processed at any one time. Similarly, in the following excerpt I describe a competition where I was accompanying eight different singers, almost one after the other. Through the control of my working memory I was able to change the focus of my attention quickly from one performance to the other.

> *I had eight arias to play and, as accompanist, I had to be the orchestra, creating the atmosphere by playing the music in the correct style with due attention to the musical details* (Part 26).

As a professional accompanist playing for vocal examinations, I often have to play for up to ten examinations in one day, each lasting from twenty to thirty minutes. The ability to switch quickly from one performance style to another recalls Williamon and Valentine's (2002, p. 2) observation that musicians "recall and execute a wide range of information during performance, but they must do so in different environments, under different levels of anxiety, and generally while considering and incorporating the ideas of conductors and other ensemble members."

Sometimes while engaging in a complex task, more than one thing will demand our attention. Depending on the complexity of the task, the attention required to execute these tasks can differ greatly as "dual-task conditions engage more attention control than single-task conditions, due to greater and more complex demands on

voluntary attention resource allocation" (Hahn, et al., 2008, p. 6). Owens and Sweller (2007, p. 17) note that musical activities require a large amount of working memory especially "activities such as score reading, where the auditory and/or visual tracking of large musical passages is often required." During the accompaniment of choirs I often find myself in the position where I have to read more than four music scores at the one time. After the writing of Part 33 of the narrative where I recall the level of concentration in the performance of Bach's *Christmas Oratorio*, it became clear to me that my working memory was also an important part of the rehearsal process. The choir rehearsals are equally as taxing as the performances because my task is to play all four melodic lines of the choir: soprano, alto, tenor and bass (and some of these are subdivided into two parts) as well as provide the appropriate tonal and temporal support while the singers learn the work. In contrapuntal works such as the *Christmas Oratorio*, each of the vocal lines assumes equal importance and an equal level of complexity in the musical texture, thus charging the accompanist with the challenging task of playing intertwining melodic lines, often at quite fast tempos, while the singers themselves are struggling to achieve musical mastery.

Zatorre, Chen and Penhune (2007) describe the cognitive processes involved in music performance as placing unique demands on the central nervous system. "Each action in a performance produces sound, which influences each subsequent action, leading to remarkable sensory–motor interplay" (Zatorre, et al., 2007, p. 547). In their paper on the advances in the research into motor interaction in music perception and production, they also define the concept of 'chunking,' a concept used to describe one of the functions of working memory, as the "re-organization or re-grouping of movement sequences into smaller sub sequences during performance. Chunking is thought to facilitate the smooth performance of complex movements and to improve motor memory" (Zatorre, et al., 2007, p. 549). Gudmundsdottir (2010) describes the process of chunking as being particular pertinent to musicians as they sight-read music. This was discussed in the previous chapter on the acquisition of skills in sight-reading and quick learning as an example of the balance between challenge and skills as a characteristic of the phenomenon of flow.

Attention control as a skill

A number of cognitive psychologists have explored the notion of attention as a skill and have come to the conclusion that it is possible to control attention and develop ways to improve it (Gopher, 1992). More recently this has been explored with tertiary music students studying in a conservatoire environment (Egner & Gruzelier, 2003), providing some useful research in the use of attention control interventions to help performers deal with music performance anxiety. Derryberry and Reed (2002, p. 226) describe attention control as a "general capacity to control attention in relation to positive as well as negative reactions" and suggest that "good attention control helps individuals to cope with threat and other negative stimuli." In a qualitative study of the mental skills of thirty highly expert classical musicians, Talbot-Honeck and Orlick (1998, p. 69) provided this comment from one of the participants:

> Concentration is the thing you have to learn first and foremost...Discipline is also a ground rule of the ability to concentrate, that you have to learn to turn off whatever thoughts are going around in a circle. These are very important. There are many things going through your head and you must see to it that these things bring you to one point and you leave the others.

Moran (1996, p. 39) points out that "concentration, or our capacity to focus mental effort on some specific target, is a highly valued practical skill." He notes that "skilled pianists often claim to practice musical pieces 'in their fingers' so that their minds are free to pay attention to other matters" (Moran, 1996, p. 58).

One of the important attention skills that accompanists need to develop, especially when working with an ensemble of a choir, is the ability to read multi-system scores and follow the directions of a conductor. Several sections of the narrative refer to this skill.

> *I had been performing the continuo part and true to its name, I played continually through the whole performance. The only breaks were momentary ones in between pieces – just enough time to turn the page, take in the new key*

signature, look at the tempo markings, watch the conductor for the starting
signal and go (Part 33).

The experience recalled in Part 33 demonstrates characteristics synonymous to the phenomenon of flow in that focused attention was required in the processing of all aspects of the music score and the ability to take in a range of external music cues from the conductor. Recent research in cognitive psychology has found that music reading requires several simultaneous processes including the "coding of visual information, motor responses and visual-motor integration" (Gudmundsdottir, 2010, p. 332). She goes on to state that music reading involves the processing of both pitch and rhythm information that must be combined in the motor output of music performance. "Success in music reading depends to a large extent on efficient chunking of pitch information. However, the decoding of timing information or reading of rhythm is no less important in music reading than decoding of pitch" (Gudmundsdottir, 2010, p. 335). The excerpt from the narrative suggests that my cognitive processes allowed me to chunk both pitch ("take in the new key signature") and rhythm ("look at the tempo markings") information.

This ability to be able to follow my own music score and the score associated with my music partner is one of the essential attention skills of the piano accompanist and links also to the music reading skills discussed in the previous chapter. In particular the narrative notes another important cognitive skill for the piano accompanist and that is the ability to quickly move from one section of music to another in response to the performance of the collaborative partner. The narrative points to a number of instances during my career where I had to put this ability into practice, thus demonstrating that my experience played in a big role in being able to manage this type of event during performance. Drake and Palmer (2000, p. 26) found that for pianists "improvements in the underlying beat and sensitivity to metrical structure have been demonstrated only over long-term learning." The piano accompanist needs to develop a highly sensitive awareness of all the temporal aspects of the performance, monitoring their own playing and also that of their musical partner. Of interest to this analysis, is that deliberate practice of a particular piece helped to maintain tonal and temporal control during performance.

'Jealousy' was easier to pull off in public than 'Fantasia on Greensleeves.'
There were fewer changes in tempo and it was written in a style where the

piano part mostly provided the rhythmic and harmonic basis for the music. By the time we had played this piece together a few times, we both instinctively knew the tempo and dynamics (Part 11).

Vigilance and focused attention

Chun et al. (2011, p. 76) describe vigilance as the "ability to sustain attention and focus over time." The notion of vigilance was earlier discussed by De Weerd (2002, p. 238) who described it as the "ability to orient attention and respond to randomly occurring, relevant events in the environment over an extended period." The ability to maintain vigilance has been linked to various personality traits (Finomore, Matthews, Shaw, & Warm, 2009) and for musicians performing collaboratively, the ability to focus attention over long periods of time is essential for successful performance. Several sections in the narrative describe events where I have applied vigilance, such as accompaniment for music examinations and ballet examinations.

But even more rewarding is the experience of being challenged to perform at the peak of one's ability, focusing intently throughout the forty-minute exam, and then, with just a minimal break, doing it all over again for another group of dancers. This goes on for a full day, so that sometimes I will be required to play up to eight ballet exams in a day (Part 32).

Sustaining focus of attention for a long period of time can be difficult, and occasionally this concentration will lapse causing problems in the performance as seen in this next excerpt. Despite the lapses in attention causing levels of anxiety during music performance, the ability to be vigilant and sustain the focused attention throughout a long performance can be very rewarding resulting in experiences described by Privette (1983, p. 1364) as peak performances where "the clarity of focus, the strong sense of self, and the awareness of the transaction share importance with the value and focus on the central object. The self is not lost." Teng (2011, p. 863) clarifies the link between peak performance and flow suggesting that "peak performance was defined as an episode of superior functioning. Peak performance may overlap with flow to a degree, but flow is unique by having fun (enjoyment) in its definition." Those times, as recalled in the narrative, when I have experienced this

sense of vigilance demonstrate that this also provides a sense personal fulfillment and enjoyment not unlike the phenomenon of flow.

> *It took a great deal of concentration to stay totally focused for each individual performance throughout the afternoon. The sense of personal satisfaction at the end was a reward for me. I knew I had given each performer a musical performance that was true to the style of the work that supported them in their interpretation and helped them overcome their own performance anxiety* (Part 21).

The following extract from the narrative highlights the fact that when the task is well practiced, such as playing piano accompaniments for singers with music theatre repertoire, which had become very familiar to me through years of accompaniment in this field, the issue of performance anxiety surfaces only momentarily, allowing my mind to focus on the other internal factors such as processing the music scores in front of me, and attending to the external factors of accompanying a singer and matching their performance interpretation.

> *Each singer put on a brave face, trying to mask the terror they felt inside as they shook hands with the director and made their way to the piano. They each had five minutes to sing one or two songs and demonstrate their talent for the panel.*

> *"What would you like to sing first?" I asked each as approached me. I smiled and tried to offer a reassuring voice to calm their stage fright.*

> *Each performer presented me with their folder of music and I had only a moment to glance at it before we were off. I was a little jittery for the first singer, but as the day wore on I had no nerves whatsoever and was quite relaxed about each performance. I could follow whatever they did with each song and could enjoy the performances that were being created. But more importantly, the lack of nerves on my part helped to create the ideal cognitive environment for the intense level of concentration required for this type of sight-reading* (Part 28).

The continuous nature of this type of piano accompaniment, with each auditionee presenting new music throughout the day demonstrated the importance of vigilance and focused attention. I have been able to develop this skill of vigilance over many

years allowing me to maintain focused attention throughout the audition process thus providing me with satisfying experiences of collaborative performance as a piano accompanist.

Summary of Chapter 6

Flow can occur when someone is involved in a intense and challenging activity that requires focused attention and complete concentration, yet it can seem effortless and so enjoyable that the participant will want to do it just for the sheer sake of doing it. In music "flow may involve mastering a difficult piece in a fully concentrated but seemingly effortless involvement" (Gabrielsson, 2010, p. 549). In this analysis chapter I discussed what it means to be in flow during music performance as a piano accompanist. Using examples from the narrative that describe some of my more memorable experiences as a piano accompanist, I began by looking at one of the central characteristics of the flow phenomenon in my experiences as a piano accompanist: focused attention.

The use of autobiographical narrative allows me to reflect on flow experiences, analysing them for their characteristics and comparing them to those experienced by other researchers in the field. Without this level of distance between the events, which occurred in real time as music performances, and the analysis, which is done through a study of the personal narrative, it would not be possible to understand the phenomenon of flow as I have experienced it during piano accompaniment.

The next chapter in this thesis will look at the last major concept to emerge from my analysis of the data as outlined in Chapter 4 and illustrated with the accompanying concept map: the 'autotelic' experience of flow. As with the previous analysis chapters, my analysis found that this central theme has a number of concepts that each contribute to an understanding of my experiences of flow during collaborative music performance. By examining each concept in turn, discussing its characteristics and comparing these characteristics to the findings in the relevant literature, the next chapter will add more depth to the theory that has emerged from the data in response to my research question around the phenomenon of flow in collaborative music performance.

Chapter 7: The characteristics of flow during collaborative performance

In this final chapter analysing the phenomenon of flow during my collaborative performance experiences as a piano accompanist, I will be examining the characteristics of the flow experience during collaborative performance as well as the emotional effect of flow. My discussion will begin by considering the flow dimensions relating to clear goals and feedback, as well as immersion in the performance, sense of personal control, loss of self-consciousness, the transformation of time and the sense of transcendence, with reference to examples from the narrative and the relevant scholarly literature. It will conclude with a discussion on the 'autotelic' characteristics of the flow experience during collaborative performance as a piano accompanist.

Clear goals and feedback as a characteristic of flow

Csikszentmihalyi's (e.g., 1990) descriptions of the feedback dimension of flow focus on the information provided by an activity that lets the person know about the progress he or she is making toward the desired goal. In flow, the activity presents the participant with clear goals, as well as a great sense of personal achievement and enjoyment when there is feedback and they know they are achieving these goals. In some activities the goals are not particularly clear and therefore it is difficult to gauge if one is meeting these goals during the activity. Composers are sometimes engaged in activities where it is not clear if a particular piece of music they are creating is 'right' or 'wrong' and so in "creative activities, where goals are not clearly set in advance, a person must develop a strong personal sense of what she intends to do" (Csikszentmihalyi, 2002, p. 55).

This type of internal feedback that needs to be generated during the pursuit of creative activities is similar to the types of feedback generated during music performance. The music performer needs to develop a strong personal sense of what must be done to achieve a fine performance, and this awareness can be cultivated and

developed over time. So far the previous chapter has discussed the various external and internal characteristics of attention that have particular relevance to my experiences as a piano accompanist. Understanding the importance of goals and feedback to the ability to maintain focused attention is confirmed by Chun et al. (2011, p. 74) who note that "information processing is modulated by task goals across all stages of sensation, object recognition, memory, emotions and decision-making."

The development of personal goals

Goal-setting is an important strategy we all use to provide a sense of direction for our activities (Locke & Latham, 1994). Csikszentmihalyi noted that many of his research participants who experienced flow were also actively involved in setting goals for their activities that stretched their skills to the maximum level in the achievement of new challenges.

This narrative provides numerous examples of short and long-term goals in my development as a piano accompanist. Zimmerman (2002) notes that the strategy of goal-setting is an important part of the skill-set of the self-regulated learner. He notes that these types of learners become adept at setting appropriate goals and modifying their behaviours so that they can achieve these goals. "These learners are proactive in their efforts to learn because they are aware of their strengths and limitations and because they are guided by personally set goals and task-related strategies" (Zimmerman, 2002, p. 65).

As a developing pianist and accompanist I had the privilege to interact with a number of inspiring performers and teachers. Their musical achievements were obvious to me and allowed me to develop my own set of personal achievement goals.

Bernice played the piano and electronic organ, and could play anything at sight. I first heard her play at a church family concert night when I was about eleven years old…I was in awe. How could someone just make up a performance like that without the music in front of her? …I decided then and there that I wanted to be able to play like Bernice. I wanted to play anything I liked – any music that was put in front of me, and even make things up on the spot. To me, this was the mark of a virtuoso pianist – or so I thought at eleven years old (Part 3).

Oettingen, Hönig and Gollwitzer (2000, p. 706) suggest that "students have multiple and often conflicting goals, influenced in many ways by their surroundings. Adolescent students, for example, have both interpersonal and achievement goals such as becoming a successful student, earning approval from others, making and keeping friendships, having fun, learning new things, getting things done on time." Furthermore, even if someone is adept at setting personal achievement goals, they may not have the necessary self-control and confidence to bring the goals to fruition. My early experience witnessing a performer of great ability, as recounted above, left an indelible mark on my memory. However, it is not possible to state that all subsequent actions were related to the actualisation of this goal.

The narrative also evokes instances where the goals were much more short-term. The short-term goals I set myself for playing at the Australian Music Examinations Board (AMEB) concerts as a soloist and as an accompanist with my sister were important milestones in my journey as an accompanist. *"Although I did not know it at the time, these AMEB concerts on those June Saturday afternoons at Elder Hall were formative in shaping my identity as a performer"* (Part 4). Highlighting the contribution of achievable short-term goals to levels of enjoyment, Bandura and Schunk (1981, p. 595) found that "children who set themselves attainable sub-goals progressed rapidly in self-directed learning, achieved substantial mastery of mathematical operations, and heightened their perceived self-efficacy and interest in activities that initially held little attraction for them."

The narrative includes a number of passages that relate to goal setting and the self-regulated thinking required to achieve these goals. At the very least, the self-regulated thinking allowed me to develop personal strategies that would eventually facilitate the achievement of these long-term goals.

> *This meant that practice at home needed to be a daily routine and I never recall my parents having to force me to practice. I did this of my own accord, and over the years, I began to select my own pieces for exams and leisure, and I was starting to think that the piano could be a career for me. Music was beginning to be a big part of my life* (Part 1).

The goal described above was very long-term. In fact, it lacked any real strategy for achievement, yet the inclusion in the narrative of this event is important in recalling

that landmark events such as this can play an important role in the choices we subsequently make in life.

In Part 24 of the narrative I recall the experience of performing four of the Paul Hindemith sonatas at four consecutive evening concerts with professional brass players. It was a great challenge and provided me with a short-term goal that was very tangible – I had to learn the music in a short space of time, with limited rehearsal with the soloist, and present a professional performance that was true to the style of the work and intention of the composer. As a result of this successful performance, I was given further professional opportunities for accompaniment. Each experience builds a pathway to the next, ultimately resulting in the realisation of these goals.

Feedback in performance

In some performance settings, feedback is a vital aspect of the flow experience. In the case of theatrical performers, the audience "becomes a mirror that transmits immediate and unambiguous feedback" (Sato, 1988, p. 109). This type of immediate feedback from an audience provides a "heightened sense of self to the participants through the enactment of a heroic role in front of a public, and through the use of skills and discipline" (Sato, 1988, p. 116). Hefferon and Ollis in their analysis of professional dancers' experience of flow (2006, p. 156) also support the concept of the importance of the relationship between the audience and the dancer's experience of flow. "Overall, the audience is a crucial predictor of the flow experience, with a small, non-existent or non-responsive audience hindering the performers' ability to achieve flow." Jackson (1992) also noted that elite figure skaters included audience response as a predictor of the flow experience. In my experience of the phenomenon of flow in piano accompaniment I did not find that feedback from the audience was an important predictor of flow. The narrative makes only passing remarks about the audience in performance. In Part 25, after the performance of the intense and difficult *Sonata for Flute and Piano* by Richard Meale, I was more interested in the reaction of my musical partner than that of the audience. *"The discerning audience appreciated our performance and my partner warmly congratulated me after the concert. He knew how hard it was to pull off a performance of this demanding work"* (Part 25). Similarly, in Part 29 the narrative describes an intensely emotional and memorable performance of an aria from Gershwin's opera *Porgy and Bess*.

It didn't matter for me what the audience were doing. I was totally wrapped up in our performance on the stage. My awareness of my own playing and the two singers totally filled my own psyche and I was almost totally unaware of the audience also watching this performance. Their reaction was also wildly positive, but that was not the most memorable part of the experience – what happened between us as three performers on the stage remains clearly in the memory as a high point of my musical experience (Part 29).

In this performance, the feedback from the audience was not important. The experience of flow was not predicated on their reaction. It was derived from the feedback generated from the performers on stage. Even when accompanying large groups, such as choirs, my experience of flow was not reliant on the reaction or feedback received from the audience but on the feedback generated through my interaction with the other performers. This is mostly because an audience provides their feedback, usually through applause, after a performance has occurred. Their feedback to the performers may in fact confirm an experience of flow but not necessarily facilitate this experience. The excerpt from the narrative confirms the reactive role of the audience in confirming the phenomenon of flow.

The feedback that is generated during a music performance between the players is communicated largely through physical gestures and bodily communication (Davidson, 2005; Good & Davidson, 2002). In order to facilitate good communication to generate this implicit feedback between the performers and myself during the actual performance, it is important for me to be in a physical position where I can attend to the gestures and bodily communication of those I am performing with, and they too need to be able to judge my communication through the external cues I provide. Ginsborg, Chaffin and Nicholson (2004) found in their case study of a collaborative performance that performance cues were important even from the first rehearsal. In my own experience working with a small vocal ensemble without a conductor, the rehearsal process was a chance to cement into place the interpretations of our performances. We would make clear decisions as to which singer would lead a particular section so that during rehearsals and performance we all could attend to their body language for those specific performance cues.

Relying heavily on body language to communicate musical ideas to each other, ensembles without a conductor can provide audiences with a dynamic and

exciting experience of music making. This body language is built on trust within members of the group and this can take some time to build before an effective ensemble performance can occur. Working as the accompanist of a small vocal ensemble for two years, I found that this trust was built over successive performances, and was particularly honed during several concert tours (Part 30).

Katz (2009, p. 137) stresses the importance of the accompanist being "in touch with breaths, diction issues, tempo adjustments" during performance. According to Chun et al. (2011, p. 79) spatial attention is central to vision and "facilitates processing at attended locations and inhibits neighbouring locations and items." In music performance, particularly collaborative performance, the musicians rely on the gestures provided by other players to communicate ideas about tonal and temporal variations during the course of a performance (Godøy & Leman, 2010). Davidson (2005) suggests that body movement can be used by performers to communicate with each other and also to convey to the audience a sense of the character and emotion of the music they are performing. All instrumental performers communicate through their body movements. For string players, the movement of the bow provides a good indicator for their intentions to start or finish a phrase, and for many violinists the act of creating the sound with the use of vibrato provides for the accompanist a useful indicator of their emotional intentions in the piece (Dahl & Friberg, 2007; Juslin & Timmers, 2010).

For a piano accompanist, much of the attention is directed to the performer with whom they are playing. The ability to use these visual cues and body language to sensitively adjust a performance in response to other musicians is an important skill for the piano accompanist (Davis, 2005; Kokotsaki, 2007; White, 2010). When the feedback generated through this type of communication in performance is clearly communicated, then as the accompanist, I know that I am contributing to a memorable performance and this is a very rewarding experience.

The collaboration between conductor, pianist and choir had pulled off this memorable performance and cemented the trust in this multi-faceted partnership. It was a clear example of collaborative music making in action. As accompanist I was an integral part of that partnership and felt I had an equal role in the musical direction of each performance. It is an ongoing relationship

and one that continues to be challenging and musically satisfying for me (Part 31).

Part of the bodily communication process between performers involves the use of breath, and this is a vital part of the communication between singer and accompanist providing continuous and instant feedback during the performance itself. "The primary building block of successful collaboration is surely the breath" (Katz, 2009, p. 7). My narrative tells of my recollection of being linked with the breath of the singer, becoming almost as one performer through the breath. The breath for a singer is not only a mechanism for sustaining the sound, but it is linked to the emotional quality of the performance and links to the very essence of the singer himself (Juslin & Laukka, 2003) creating channels of communication between performers and with the audience. This excerpt from my narrative expounds on this theme.

> *Robert was one such singer. I recall how easy it was to perform with him. I didn't have to look directly at him at all. I watched and read the music intently, but I could feel his intentions with his voice and body language. More importantly, I could hear his breath and I hooked onto his breathing patterns so that we became one as we performed the songs. His intake of breath and even the slightest of movements gave me important information about his intentions regarding the tempo, nuance of phrase as well as the intensity of the dynamic levels. Robert was so good at signalling these things. I could see and hear enough without directly watching him using my peripheral vision* (Part 27).

Järviö (2006) confirms the importance of breath as an expressive medium, to a singer.

> Breathing is not something we do. Rather, one could say that we are being breathed. There is in us a movement of breathing that is an expression of a life force in us. The freer and fuller our respiration is, the more responsive we are to the inner, vibrating space of our body (Järviö, 2006, p. 72).

She describes the experience of finding the breath in terms of a deep awareness of the breath and the body and "her findings stress the importance of recognising the spiritual in our accounts of mind and body and the possibilities of developing instructional practices that treat breath not as a technical skill, but the very background in and through which we come to know the possibilities of music and its

transformative powers" (Stubley, Arho, Järviö, & Mali, 2006, p. 41). Mali (2006) also describes a similar awareness that a pianist can experience when they study their own performance practice and comes to the conclusion that a pianist needs to understand the process of interpretation of a musical work as a "matter of bodily being in the sound, of being open to its myriad possibilities" (Stubley, et al., 2006, p. 41).

As part of the attention processes for a piano accompanist, breath is an important external factor that requires my attention whenever I accompany singers and wind players. Through this type of communication, I am able to attain the musical feedback during performance that allows me to know I am performing the music as it was intended. The breath allows me to become almost as one with the performer. *"I felt as though I had held my breath for the entire time of the performance, but I was actually trying to match my breath with that of the flautist"* (Part 25). Similarly, when working with brass players, the breath becomes an indication of the tempo and articulation of certain phrases.

> *Just as with singers, I found myself breathing with the wind players, allowing the phrases to be shaped by their breath. At times the rhythm was strict and our breath had to become short and sharp – quick intakes between the accented and driving melodies. At other times the rhythm took a more relaxed path and so our breath could be drawn in more slowly to match the melodic shape of each lyrical phrase* (Part 24).

While feedback during performance can be both positive and negative, Csikszentmihalyi does not make this distinction between positive and negative feedback in the phenomenon of flow. In a study by Jackson, Thomas, March and Smethurst (2001, p. 147) they found that during performance, if feedback was negative, focusing on errors, it "had the unwanted effect of generating more errors. The finding of a positive relationship between feedback and errors in this study indicates negative feedback may contribute to further errors (and thus less flow)." Conversely, in another study by Kirschenbaum, Owens, and O'Connor (1998), a group of golfers were able to improve their performance by focusing only on positive feedback.

My internal sense of feedback is especially heightened when I am in the recording studio. In Part 15, I describe my negative reaction to a mistake I created

during the final take of the recording for the film *Breaker Morant*.

> *In the rarefied atmosphere of this recording experience, I could hear every little mistake, every little hesitation. Right at the end of this second take, I had fluffed one chord. I was sure that it was obvious to everyone, but I was much too scared to even own up to it, or request another take. The second take was accepted as the master recording, and my 'blunder' remained for all to hear* (Part 15).

A similar experience is recalled in Part 30 when recording a whole album with a small vocal ensemble. I knew the musical details of the songs we were to record as well as the strengths and weaknesses of each member of the ensemble, but once I started to focus on negative feedback, the performance quickly degenerated with more and more errors occurring.

> *The first take was a mess. The emphasis had fallen on all the wrong notes. It sounded like a beginner pianist fumbling around instead of a professional recording artist.*
>
> *"Let's start again," I said. I was determined to do better.*
>
> *Breathe. Think. Relax. Take two was even clumsier than before. Why couldn't I get this right?*
>
> *I tried again. Each time the performance seemed to contain more mistakes than the previous. Even when I finally managed to record the introduction with the tenderness and emotion I was after, I had trouble focusing on the rest of the piece. I was beginning to fall apart mentally* (Part 30).

As stated by Jackson et al. (2001) the negative feedback created in this performance caused more errors to occur and a loss of flow resulted. The subsequent regaining of focus and attention, based on the positive feedback gained from listening to my performance of the music itself and not just the mistakes, led to a recovery and the recording session was able to conclude in the allotted time frame.

> *Fortunately, during the recording session I was able to relax sufficiently so that I could focus on the music and not on my mistakes…I tried to imagine each performer as I played their phrase and the whole process became a lot more accurate as well as musically interesting* (Part 30).

The flow experience in collaborative music performance

Sense of personal control over actions

An interesting characteristic of the phenomenon of flow is the sense of control one can feel while engaged in a highly absorbing and enjoyable activity. Even if perfection in the execution of the activity is not actually achieved, and is probably never achieved, the perception that this is indeed possible is one of the strongly reported characteristics of the flow experience (Csikszentmihalyi, 2002). My previous description of performing in an outdoor venue where the management of the elements of sun and wind absorbed most of my available attention provides an example of the absence of flow due to a lack of the sense of personal control over the situation.

Feeling in control about one's situation is a powerful motivational factor when engaged in any activity, whether related to the work one does every day or the leisure activities that are engaged in. Csikszentmihalyi explains that, "what people enjoy is not the sense of being in control, but the sense of exercising control in difficult situations" (Csikszentmihalyi, 2002, p. 61). When I first began to accompany a large choir I found the work challenging and difficult.

> *I found I had to use all my piano skills to adequately perform what were often orchestral reductions of large choral works from oratorios or operas. The choir numbered up to eighty members, and I had to match them with a sound that would support their singing and capture the intent and style of the music* (Part 19).

However, once I began to feel confident working with this choir as their accompanist I felt more in control of my actions since I was able to contribute to the artistic vision of the group. *"I began to feel not just an accompanist but also an integral part of the artistic realisation in each performance"* (Part 19). Furthermore, this part of the narrative provides a clear example of self-efficacy. The performance accomplishments were positive, and required an exertion of effort to master difficult performance tasks, resulting in the development a high level of self-efficacy. Bandura (1982, p. 133) asserts that "success in attaining desired outcomes through challenging performances can further verify existing competencies." My role as accompanist with

this choir allowed me to maintain high levels of pianistic skill as the music performed by the choir was always challenging and it opened up more opportunities for accompaniment with soloists, both vocal and instrumental, and more opportunities for flow during the music performances.

Schneiderman (1991, p. 96) comments on the sense of control that can still occur when one is totally immersed in the music during performance: "I feel that I am still in control despite the surrender. One controls events through the music even as you give yourself up to it. As I play, I feel secure, not adrift at sea." I knew this sense of immersion and control while accompanying a singer in a performance of songs by Rachmaninoff. *"The experience lifted the quality of my playing too. Such was the sense of being totally encapsulated by the emotion of the lyrics and the beauty of the musical score"* (Part 23). The performance allowed me to experience flow, as I was totally immersed in the experience of bringing the music to life, working with another musician who shared this common goal.

Immersion in the performance

When the skills and challenges are finely balanced so that one experiences a sense of enjoyment in stretching the skills to meet these new challenges, the experience can become so focused that "there is no excess psychic energy left over to process any information but what the activity offers. All the attention is concentrated on the relevant stimuli" (Csikszentmihalyi, 2002, p. 53). Part 33 of the narrative recalls a performance of Johann Sebastian Bach's *Christmas Oratorio*. It was a difficult work and during the performance I was able to engage a high level of focused attention and become completely immersed in the performance experience.

> *I was sitting on the edge of my chair and kept my eyes wide open and my mind racing. I was totally aware of everything around me – the conductor, each section in the orchestra in front of, the choir behind me, and the soloists who took turns singing the various arias. I was not aware of any personal discomfort, even though sitting forward and stiffly on the chair was not the most comfortable position to be in. Neither did I stop to give my eyes a rest. It was one of the first times I had experienced this type of eye fatigue, but the stage lighting was coming directly on to me and seemed to dry out my tear ducts* (Part 33).

While this was a physically demanding performance, there was also no psychic energy left for any other thoughts other than those associated with performing the music. This created a performance intensity and adrenalin 'rush' that lingered for several hours after the performance.

> *There was much frivolity as we all shared a meal after the performance, releasing the tension and concentration of the single performance, and basking in the compliments from discerning audience members who knew the work and could attest to the success of our performance. We already knew we had achieved our goal, but their confirmation was the 'icing on the cake'* (Part 33).

Gabrielsson (2010, p. 566) asserts that many people report a strong experience with music while singing in a choir. "The voice gets support and resonance from others, and it sounds better and louder than otherwise. One is part of something greater, sharing the expression and power that the choir may achieve." Although I was not singing in the choir, my role in this performance placed me in the centre of the orchestra. I had the choir behind me, the conductor in front and the other instruments around me. I was totally immersed physically and mentally in the performance.

Csikszentmihalyi postulates that, "although the flow experience appears to be effortless, it is far from being so. It often requires strenuous physical exertion, or highly disciplined mental activity" (Csikszentmihalyi, 2002, p. 54). However, the merging of actions and awareness, one of the characteristics of the flow phenomenon, adds to the optimal experience as it eliminates self-doubt and questioning. "In flow there is no need to reflect, because the action carries us forward as if by magic" (Csikszentmihalyi, 2002, p. 54). In Part 28 my description of the accompaniment skills needed during auditions points to their apparent ease by the onlooker, but this does not take into account that my performance is only generated through highly disciplined mental activity that allows the physical performance to sound so easy.

> *My performances slipped into the background as they supported the events on the stage – and this was exactly how I intended my playing to be. In fact, the sign of my success was that no one does really notice me. The accompaniments blend with the singers in a series of seamless performances* (Part 28).

This dimension of flow, immersion in the activity, has been linked with the idea that things seem to happen automatically (Kowal & Fortier, 1999). Martin and Cutler

the performance but rather there was a sense of being "keenly sensitised to tonal quality, volume level, nuance of melody and rhythm, harmonic progressions, pacing, melodic intervals" (Schneiderman, 1991, p. 90). During this same performance, I became totally aware of all aspects of the music so that they totally dominated my attention to the exclusion of everything else.

> *As I caught the excitement of these orchestral sections, the singers could then latch onto this emotional intensity and use it to propel them into the next phrase…The singers had the vocal capacity to realise this music to its full potential. I felt a part of that performance as I took the accompaniment and shaped to draw every last piece of expression from it. The spine-tingling finish left me breathless* (Part 29).

The loss of self-consciousness presents an interesting paradox in the study of the flow phenomenon. It is a subjective experience for each individual and provides a powerful motivation to continue in an enjoyable activity. However, if one were to analyse one's personal experience while in flow, the self-consciousness required for such study would stifle the depth of the experience. Schneiderman describes this phenomenon as experienced by herself in music performance:

> When I further attempt to define the very special state of mind I feel during this immersion it is elusive. If I ask myself "what am I thinking?" or "where is my attention focused?" my focus shifts to the training of attention itself and what I am thinking changes. The brain cannot examine itself (Schneiderman, 1991, p. 89).

It is only afterward, when the activity is over, can reflection and self-consciousness be used to examine the experience that has been enriched through the new skills and fresh experience.

> *As a musician, I have found the experience of writing this narrative both difficult and empowering. Difficult because written text is not my usual mode of expression…However, the process of creating this written narrative has been empowering because through this means I have found a way to document some of the elusive aspects of music performance…The narrative has enabled me to recreate some of the thought processes and personal struggles that have resulted in memorable performances* (Conclusion).

The transformation of time

Participants in many of the flow studies report that one of the defining characteristics of the flow phenomenon is the sense that time has been transformed in some way (Csikszentmihalyi, 2002). When one is intrinsically motivated to participate in an activity it can seem the hours pass like minutes (Conti, 2001, p. 24) acknowledging "time perception as a central element of motivational experience." Pace (2004) suggests that our experience of time changes with the amount of attention we direct towards it. The results of a study into the affect of music on the perception of time by Droit-Volet, Bigand, Ramos and Bueno (2010, p. 231) show that "time flies in the presence of music because it distracts our attention away from the processing of time, probably due to music's rich structure or the pleasure produced by listening to it." The music set for ballet examinations is both challenging and aesthetically enjoyable. Derived largely from the classical ballet repertoire, the piano music used in the examinations for the Royal Academy of Dance (RAD) draws me in to the performance and I can lose track of time during a long day of examinations, even though the physical and mental exertion of playing for several hours of examination in one day can be great. *"There is the palpable satisfaction gained from playing beautiful music, for the ballet examination repertoire features some aesthetically pleasing musical examples"* (Part 32).

My enjoyment of the ballet music could in fact be due to the high level of music training I have undertaken. Hargreaves and North (2010, p. 540) suggest that "people with high levels of musical training and/or musical ability prefer more complex music than do people with low levels of training and/or ability." Nevertheless, the pleasure I experience playing this music contributes to a sensation of the quick passing of time while participating in this activity and like the participants in Hefferon and Ollis' (2006) study of ballet dancers' experiences of flow found that the music was an important factor in enhancing the flow experience.

The sensation of time slowing down can also be a product of intense concentration. Csikszentmihalyi suggests that while losing track of time is not one of the major elements of enjoyment, "freedom from the tyranny of time does add to the exhilaration we feel during a state of complete involvement" (Csikszentmihalyi, 2002, p. 67). In the performance of Johann Sebastian Bach's *Christmas Oratorio*, I had to play continually for an hour at a time with an intense amount of concentration. *"The*

only breaks were momentary ones in between pieces – just enough time to turn the page, take in the new key signature, look at the tempo markings, watch the conductor for the starting signal and go" (Part 33). When the mind is really focused, things seem to become much clearer and it is possible to maintain a high level of focused attention and concentration across a long time period.

Transcendence

Csikszentmihalyi (1993) also acknowledges that flow has close links with the experience of transcendence, or going beyond oneself, and sensing oneself as being part of something larger (Maslow, 1971). Csikszentmihalyi (1993, p. xiv) notes that flow experiences are often accompanied by feelings of transcendence, where people feel at one with their surroundings and experience a sense of "universal harmony." Bernard (2009) provides examples of narratives that describe experiences of transcendence while playing music, linking these experiences with the phenomenon of flow.

The narrative excerpt below provides an example of the feeling of transcendence that can occur in music performance, and that I have experienced when accompanying a musician who was also totally committed to their performance, allowing us both to experience a sense of being apart from the music as we performed it.

> *This was particular evident in her performance of* How Could I Ever Know *from* The Secret Garden. *As with many of the songs presented in this recital, it was totally new to me…It is a heartfelt song and works easily in recital as it recounts the sense of loss that comes from bereavement yet looks forward to a life that is reconciled and accepting of the grief. As we got to know each other on a personal level and feel comfortable with each other as performers, we both started to empathise with the dramatic journey presented in the song. Lucy Simon's music was particularly well suited to the story, building strongly to the same climactic points as the lyrics. Given the closeness we had developed in our musical partnership, the performance of this song in particular was one of those spine-tingling moments when all elements of the performance came together perfectly and remains vivid in my memory* (Part 22).

My personal enjoyment of the music and the fact that we were both able to relate to

the music and the lyrics added to the particular enjoyment we experienced in this performance. The music itself is well written as the composer has deliberately linked the climactic points of the lyrics to the points of greatest tension in the music. When there is a bringing together of carefully crafted song with performer who commit to the text and the musical expression, then one can experience a sense of transcendence or being transported to a higher level of experience.

Emotional engagement with music

Our enjoyment of music is often linked to our emotions, and studies have shown that the more we understand the music we listen to, the more intense that emotional connection can be (Hargreaves & North, 2010; Kreutz, et al., 2008; Rentfrow & McDonald, 2010). Music performance can express the deepest of human emotions, even though the "music itself is inanimate and cannot be said to have emotions" (Trivedi, 2001, p. 411). Carr (2004, p. 266) adds to this debate by stating that "music has emotional significance, not merely because it causally arouses feelings (which we may nevertheless admit that it does) but by virtue of its intrinsic emotional character." It is not the origin of sound itself that is of interest, but "the intentional identity of what we hear in sounds when we hear them as music" (A. Hamilton & Scruton, 1999, p. 158).

In Part 23 of the narrative I recall an experience performing some Rachmaninoff songs with a professional singer.

> *As we began the performance I found myself becoming caught up in the despair of the young mother depicted in the song. My own experience as a mother allowed me to empathise with the story portrayed in these lyrics. Muriel's singing and the exquisite melodic and harmonic language of Rachmaninoff's music transported me to another place and I struggled to read the music through the tears filling my eyes. It is rare to have this sort of intense emotional experience in a performance, as there are often other distractions, most notably endeavouring to play the piece of music correctly, that get in the way of a deep emotional connection. However, this was one of those occasions of intense emotional connection between all the performers and the music itself. The experience lifted the quality of my playing too. Such was the sense of being*

totally encapsulated by the emotion of the lyrics and the beauty of the musical
score (Part 23).

In this performance I experienced a strong emotional connection to the music through the performance. This was especially potent as the text of the song resonated with my personal life at that time and the music was particularly appealing to me. As documented by Gabrielsson (2010) I have experienced strong emotional connection to music in several types of performance situations, including while singing in a choir. Part 23 of the narrative recalls several strong emotional experiences while accompanying and these all involved the performance of music that included text, but were also pieces of music that I loved and had an intellectual connection with (Rentfrow & McDonald, 2010).

Enjoyment: the 'autotelic' experience

Csikszentmihalyi (1996) found that when people were engaged in a flow-inducing activity where their skills were matched to the challenge of the activity and they were highly focused in the execution of that activity they experienced feelings of enjoyment and satisfaction that kept them motivated to continue in that activity. Of interest to Csikszentmihalyi (1996, p. 110) was that many creative people, in all disciplines of the sciences and arts, experienced this optimal experience, or flow, when engaged in activities that "stretched the person's capacity and involved an element of novelty and discovery." When the conditions for flow were present they described these experiences as very rewarding and enjoyable or 'autotelic', a term referring to experiences that are intrinsically rewarding and not done because one is expecting some future benefit, but rather because it is intensely satisfying in, and of, itself. He goes on to say that

> Most things in life are *exotelic*: We do them not because we enjoy them but in
> order to get at some later goal. And some activities are both: The violinist gets
> paid for playing, and the surgeon gets status and good money for operating, as
> well as getting enjoyment from doing what they do (Csikszentmihalyi, 1996, p.
> 113)

In my narrative, I describe a number of experiences while accompanying that demonstrated the characteristics of flow. Many of these experiences are very enjoyable and rewarding in and of themselves. Most of these experiences occurred in my professional capacity as an accompanist. Like the violinist in Csikszentmihalyi's example above, I was being paid as an accompanist but this did not preclude me from experiencing the type of enjoyment he describes as 'autotelic'.

The 'autotelic' experience in collaborative music performance

My work as a piano accompanist began primarily as a leisure activity and the early part of the narrative documents that journey as a secondary and tertiary student.

> *The orchestra joined the rehearsals in the last couple of weeks before opening night and this took the pressure off. I really enjoyed playing with the larger group, contributing to the overall musical experience of the show. There were three weeks of performances – Thursday to Saturday – a total of nine shows. It became my social life as well as my musical life. I had to juggle schoolwork, piano practice for my exams as well as rehearsals and the show, but I made so many new friends all with a common interest in the theatre. At first I was really sad when each show finished. It had become so much a part of my life that I could not imagine having a weekend without a rehearsal or performance. As the last chorus was sung, I often had a tear in my eye – as did a few of the cast members. We had become a real community and the conclusion of the season signalled an end to that intensity of working together to bring a polished product to a public performance* (Part 8).

My role as répétiteur was both demanding and enjoyable, and as noted in the above section from the narrative, was conducted in team environments. There was an intense social aspect to the enjoyment but it was the collective working together to create a piece of music theatre that provided the sense of satisfaction that I experienced. It kept me motivated to continue doing this activity even though it was often very difficult to juggle the time commitments of this type of accompaniment work with my school-work and continuing piano exam preparation. Cosma's study (1999, p. 46) on the experience of flow in teams concluded that "some dimensions of flow were more applicable to the team's experience than others. The most salient dimension from the data was the 'autotelic' experience with 93% of the teams referring to factors that

produced an enjoyable experience." Cosma goes on to note that while teams experience flow in different ways to individuals, the goals of the individual are important to the overall success of the team. "Individuals make up the team and it is each player's individualistic skills and desire to meet the challenge set before him or her that propagates a collective emergence" (Cosma, 1999, p. 47). Part 8 of the narrative points to the importance of the collective experience in producing flow.

In Part 10 I recount the experience of being involved in another collaborative music performance activity but in a new role. This time, instead of being the accompanist or répétiteur, I was on the stage as one of the performers.

> *The euphoria of performing on stage was quite intoxicating. The three performances slipped by so quickly. As soon as we entered the theatre for the final dress rehearsals and performances, the clock seemed to speed up relentlessly. Before we knew it, we were taking our final bows, hugging each other and packing up the dressing rooms. It was very exciting to be a cast member on stage, but looking back, the performance experience was so fleeting, and we were all filled with regret when the show was over* (Part 10).

Martin and Cutler (2002, p. 350) found that theatre actors "were highly motivated to participate in theatre because the experience of acting was stimulating and exciting and provided an opportunity to accomplish personal goals."

> *These feelings were quite intense at the time, even more so than when I was just a pianist in a musical production. As a singer on the stage, I had invested a great deal of emotional energy in the production. The whole experience of not only singing, but of getting dressed up and being part of the larger theatrical experience had been very challenging and extremely rewarding on a personal level. The end of the show left me feeling quite low* (Part 10).

The 'autotelic' experience as a professional accompanist

In Part 21 of the narrative, I discuss a turning point when piano accompaniment changed from being an amateur pursuit to a more professional activity.

> *These new challenges gave me a new sense of purpose as a musician. I felt I had now crossed a threshold from amateur to professional. I knew I still had much to learn to increase my technical abilities and incorporate new ideas about*

musical style, interpretation, but as I met these new challenges and my skill levels grew, I felt more confident to accept new challenges and take my piano accompaniment playing to new levels (Part 21).

While moving into a position where the accompaniment became part of my work, this did not lessen the level of enjoyment I experienced. The narrative continues to recount experiences of enjoyment even when the challenges became much higher and the expectations of the quality of my performance increased.

The discerning audience appreciated our performance and my partner warmly congratulated me after the concert. He knew how hard it was to pull off a performance of this demanding work. These types of experiences are characterised by great surges of adrenalin to get through the performance. The euphoria lasts for several hours and then I come crashing down. That night was no exception. I slept very well knowing that the performance had been a success and I had met the standards expected of me (Part 25).

In researching the phenomenon of optimal experience in work and leisure for physicians and teachers, Fave and Massimini (2003) found that they experienced satisfaction and enjoyment in both work and leisure. The research recounts the sense of optimal experience for physicians during surgery where the level of focused attention and concentration is high. Even in leisure these individuals sought out activities likely to provide them with optimal experience. "These activities belong to the category of serious, or structured leisure: they provide individuals with challenges, clear goals and well-defined rules, at the same time requiring concentration, prolonged effort, and skill development" (Fave & Massimini, 2003, p. 335).

My professional accompaniment experiences continued to provide enjoyment even as I reached a professional status. There was still the sense of euphoria after a performance, as recounted in the narrative extract below:

The sense of personal satisfaction at the end was a reward for me. I knew I had given each performer a musical performance that was true to the style of the work that supported them in their interpretation and helped them overcome their own performance anxiety (Part 21).

We broke off our conversation to return to our daily routine of teaching, intermingled with administrative tasks and incessant emails. These

performances were highlights in our working lives and reminded us both of why we were musicians (Part 27).

The euphoria of performance is also experienced by the subjects of Martin and Cutler's (2002) research on flow and motivation for theatre actors. They found that "subjects were strongly motivated to participate in theater [sic] because the experience of acting was stimulating and exciting and provided an opportunity to accomplish personal goals" (Martin & Cutler, 2002, p. 350).

Summary of Chapter 7

This chapter has discussed the characteristics of flow as they relate to my experiences in collaborative performance as a piano accompanist. Beginning with the types of goals formulated for collaborative performance and the way I have experienced feedback from my collaborative partners during performance, the chapter goes on to describe the how immersion in the performance, the sense of personal control over actions, the loss of self consciousness, the transformation of time and the sense of transcendence can create the phenomenon of flow.

One of the consistent themes woven through the narrative that forms the data for this study is the sense of enjoyment and pleasure that I have experienced as a piano accompanist over many years. The most enjoyable experiences were often associated with the most demanding of performances rather than those that were easy. After successfully performing a difficult and challenging work I felt a great deal of personal satisfaction and a sense that one has encountered an optimal experience or flow. The success of these performances was also instrumental in motivating me to pursue other accompaniment activities. McCormick and McPherson's initial study (2003, p. 47) into self-efficacy and music performance suggests that "whilst practice plays a vital part in the development of a musician's capacity to perform well, it should not be considered in isolation from motivational and related variables." For me, the other concepts included the opportunity to perform with similarly committed musicians and a variety of different musical groups and to continually challenge myself to engage with different musical styles and genres. As my understanding of different musical styles grew, my emotional connection with these different genres of music deepened thus further increasing the opportunities to experience the phenomenon of flow during

performance as a piano accompanist.

Csikszentmihalyi first described flow as an 'autotelic' experience with the term itself based on the Greek words *auto* (self) and *telos* (goal) (Nakamura & Csikszentmihalyi, 2002). Describing an experience that is intrinsically rewarding, the 'autotelic' experience or flow experience came to be associated with those times when one has total involvement in an activity. My narrative allows the reader to gain some understanding of my 'autotelic' experiences as a piano accompanist. The subsequent analysis draws out some of the particular characteristics of these 'autotelic' experiences in an effort to compare them with the findings of other studies on flow and optimal experience.

The final chapter in this thesis reflects on the overall analysis of this autobiographical narrative as encapsulated in the concept map presented in Chapter 4 and relates this analysis back to the research question that was posited at the beginning of this study. The theory presents several key themes that contribute to flow in collaborative performance, with each theme being informed by a number of concepts. Chapters 5, 6 and 7 have discussed the characteristics of each of these concepts and how they relate to the theory that addresses the research question of this thesis. Informed by the literature in related fields, the themes and concepts that form this theory for understanding the phenomenon of flow in collaborative performance will be summarised in the next chapter of the thesis.

Chapter 8: Conclusion to the study

The aim of this study has been to examine the phenomenon of flow during collaborative performance from the point of view of the piano accompanist. Studies into the experience of music performance as a piano accompanist are relatively rare in the literature (Kokotsaki, 2007; White, 2010), so this study makes a contribution to knowledge by bringing the insider's perspective on flow in music performance to the fore. 'Flow' describes a psychological and subjective experience that occurs when one is engaged in an enjoyable yet challenging activity, with clear goals and objectives that requires focused attention. This study shows that collaborative music performance as a piano accompanist can facilitate this type of experience. My piano accompaniment activity provides me with a great sense of personal achievement as it requires the application of several important pianistic skills to meet the many challenges that also require the application of concentration and focused attention. Furthermore, the collaborative nature of piano accompaniment creates clearly defined goals and a dynamic feedback that occurs in the act of music performance thus facilitating the phenomenon of flow.

The research question aimed to discover the nature of the phenomenon of flow during my collaborative performance experiences as a piano accompanist. By comparing my experience with the general dimensions of flow as defined by the American psychologist Mihalyi Csikszentmihalyi, I have been able to develop a theory for understanding my flow experiences in collaborative performance as a piano accompanist.

In order to address this research question that is inherently subjective in nature, an autoethnographic research design was adopted. The data for this particular autoethnography took the form of an autobiographical narrative that allowed me as both the researcher and researched to evocatively recreate for the reader some of the more memorable collaborative performance experiences as a piano accompanist. This autobiographical narrative is constructed as a series of chronologically ordered vignettes, using techniques associated with creative writing, including direct speech and scene setting. In order to create this narrative I drew upon a range of resources including personal journal notes, concert and theatre programs, newspaper clippings,

audio and video recordings and professional conversations with some of the people with whom I have performed as a piano accompanist.

The analysis of this narrative has used an iterative approach that has allowed me to develop a concept map of a theory for understanding the research question. The concept map is presented in Chapter 4 of this thesis, together with an overview of the autoethnographic analysis. The subsequent analysis chapters have elaborated on the various concepts that have arisen in this analysis, drawing examples from the narrative itself and comparing these concepts to the relevant literature, allowing the reader to gain more understanding of my subjective experience of flow during collaborative performance as a piano accompanist.

General discussion of the research findings

The analysis of the data suggests that the flow experience in my collaborative performance as a piano accompanist can be explained by considering three main themes:

1. The challenge-skills balance of the flow experience for a piano accompanist;

2. The role of attention as a characteristic of my flow experiences in collaborative performance as a piano accompanist and how this has facilitated a greater awareness of the other psychological aspects of music performance that have resulted in flow;

3. The resultant 'autotelic' experiences of flow that have allowed me to immerse myself in the music performance, communicate with my collaborative partners in the moment of performance and engage on an emotional level with the music I have performed.

The challenge-skills balance for a piano accompanist

One of the most consistent themes in my narrative has been around the development of my skills as a pianist and how these skills have grown and adapted to meet the challenges I have faced in collaborative performance as a piano accompanist. Of interest in the analysis are those sections of the narrative that describe the most

memorable performances when everything seemed to come together in a seamless whole. On each of these occasions I was confident that I had all the necessary skills to meet the challenges of these performances, and this allowed me to focus my attention fully on the performance and my emotional connection with the music, thus facilitating an experience of flow.

The concept map details my four main skill areas as a piano accompanist. Firstly, piano playing involves the development of very specific motor skills that are refined over many years. Research studies (Ericsson & Charness, 1994; Ericsson, et al., 1993) have clearly indicated that it takes no less then ten years for a person to move from novice to expert levels of music performance and this is achieved not through innate talent, but through deliberate practice. The debate about the role of talent in determining musical ability is complex (Gagné, 1999; Sloboda, 1990, 2005), yet my narrative outlines quite a long period where I had to work on specific technical skills to play the piano, and it was my deliberate practice that ensured I was ready to face the various challenges in subsequent piano accompaniment activities.

An equally important set of skills for a piano accompanist relate to the specific aural skills required in various accompaniment situations. The ability to listen to other performers while in the act of performance is a skill required of all music ensemble performers (Kokotsaki, 2007; Sutton, 2004) but is especially important for piano accompanists (Katz, 2009; Moore, 1962). While it may seem to the casual onlooker that such a skill is easily acquired, I had to work hard to hone this skill using various ensemble and piano accompaniment activities. My training as a pianist was not confined to studying the solo piano repertoire, and it was the exposure to a diversity of music ensemble activities throughout my training and subsequent professional life that has allowed me to develop these aural skills to a fine degree. These collaborative activities included playing piano in a jazz ensemble, as well as working with vocal ensembles with and without conductors. The absence of a conductor in an ensemble puts greater demands on the accompanist who must use a number of skills, including aural skills, to keep the ensemble together. Many of the instances of flow found in the narrative only occurred because the challenge-skills balance in the area of aural acuity was in place allowing me to focus on other nuances of the music performance.

The aural skills for the accompanist are also needed outside of the performance and rehearsal time and I have often been called upon to create arrangements,

transcriptions, transpositions and compilations of music for performances. The skill of transcription, in particular, relies on highly developed aural skills to recognise harmonic and melodic sequences as well as rhythmic patterns. The theoretical skills of music notation also need to be highly developed to recreate the aurally perceived music into an accurately notated score.

Music reading is an essential skill for any musician, but as the piano accompanist I am required to read and interpret scores in unconventional formats. This can include lead sheets, where only a melody line and chord progression are provided for the pianist, or orchestral reductions, where the piano accompaniment is written in a way that reproduces the orchestral part in a concerto or other large work, often resulting in an ungainly piano score that makes almost impossible demands on the pianist. Such challenges in music reading require the continual development of skills in music reading to ensure that the challenge-skills balance remains in place as an important characteristic of flow.

The narrative makes reference many times to the skills of sight-reading and quick learning that continue to dominate my experiences in piano accompaniment. In my early years as a collaborative pianist, I experienced many times where my skills were not good enough to meet the challenges presented to me as an accompanist and I experienced much anxiety in performance and rarely encountered moments of flow. Over the years I had many teachers and mentors who encouraged me to continually build my motor skills as well as those in aural acuity, and music reading, allowing me to overcome much of my music performance anxiety about sight-reading. As these specific music skills developed I came to enjoy the challenge of sight-reading and quick learning. Piano accompanists frequently find themselves learning music quickly and having to sight-read in lessons and auditions (Katz, 2009). Once my skills in sight-reading and quick learning had developed to meet the challenges, I found that I could more readily find myself in a flow situation as the challenges were evenly balanced with my skills as a competent sight-reader.

Attention as a key theme of flow

Csikszentmihalyi described focused attention as one of the key characteristics of the phenomenon of flow and this has been borne out in the results of my

autoethnographic study of flow in collaborative performance as a piano accompanist. The findings of my study demonstrate that collaborative performance requires me to modulate the demands on my external attention as well as my internal attention. The iterative approach of reading and re-reading the data has allowed me to consider each of these aspects of my attention in turn, giving me a greater understanding of the flow experience itself. Each of my most memorable experiences of flow have been as a result of highly focused attention in the performance itself allowing me to modulate and control all the sensory aspects of collaborative performance in the actual moment of performance.

As a collaborative pianist there are many demands on my external attention (Chun, et al., 2011). The physical space I perform in and the actual piano I perform on can demand much of my attention and can reduce or enhance the experience of flow. The narrative gives examples where I was performing in an environment where I was uncomfortable: uncomfortable with the quality of the piano, or uncomfortable with the acoustics making it difficult to hear my own playing as well as the sounds produced by my collaborative partners. None of these experiences resulted in flow as my attention was drawn to the problems of performance rather than the music itself. Conversely, when I have been playing in an environment where I feel comfortable with the quality and piano and the acoustics render my performance with clarity, then I am able to focus my attention on the music performance itself and not get distracted by these external factors.

All of my flow experiences occurred when I was playing an acoustic piano in an acoustically sensitive room or concert hall. When playing a digital piano in a large venue or outdoor setting, where my sound is modified through amplifiers and controlled by a sound engineer and not directly by myself, too much of my attention is taken up with concerns about the overall sound, which is out of my control and I rarely experience a sense of flow in performance. As a piano accompanist, I use my aural acuity to continually modulate the sound I make in response to my collaborative partner, and the phenomenon of flow only occurs when I feel I have control over the aural environment. A quality piano allows me to control the temporal and tonal elements of my performance and in an acoustic environment I have learnt to listen to the sound the piano makes in the whole room or concert hall and modulate all elements my performance to suit. By listening to my sound, and that created by my

collaborative partner, I can make adjustments to the tonal and temporal characteristics of the music in keeping with the acoustics of the room, the instrument and the stylistic demands of the music we are performing, and thus create an opportunity for flow to occur.

Not only is my external attention as an accompanist drawn to the spatial and physical elements of the performance but also my attention is drawn to the external elements in the performances of my collaborative partners. My peripheral vision is a vital tool in collaborative performance as I am able to use it to see when singers breathe, when instrumentalists start or end a phrase, how a conductor expresses a temporal variation or how a dancer moves their body in a choreographic sequence. Rarely can I watch my collaborative partners directly, as I need to attend to the performance of my own music score, so my peripheral vision plays an important role in maintaining the visual connection in performance. My peripheral vision can be remarkably sensitive to nuance in performance. Even the smallest breath from a singer, made in response to an emotional connection with a lyric, is translated into enough movement to be perceived in my peripheral vision. This concept of the theory also links the way communication between performers is used to facilitate the goals of the performance and provide dynamic feedback on the achievement of those goals during the performance itself, a phenomena discussed in Chapter 7 of this thesis.

Chun et al. (2011) suggest that attention can also be described by considering internally selected and modulated elements. Since flow depends of focused attention, it seems that the control of elements associated with my internal attention also contribute to the experiences of flow in collaborative performance. One of the most significant concepts that demand my internal attention in collaborative performance is that of performance anxiety. When my performance anxiety has been high, the phenomenon of flow did not occur, but during those performances where my performance anxiety was under control, flow was more likely to occur. The data analysis for this study found that the control of music performance anxiety could be achieved through the use of positive self-talk, carefully executed pre-performance routines, and the elimination of distracting and negative thoughts during performance. Together these strategies can result in a state of mindfulness. Even during a performance, I have found it is possible to train myself to stay in the moment of performance, neither judging a previous performance mistake nor dreading a

forthcoming difficult passage. The deliberate use of mindfulness strategies, through the control of the breath and thought, before and during a collaborative music performance is one of the important findings in this study. The data analysis suggests that through this control of performance anxiety, attention can be controlled and a sustained focus of attention, or vigilance, can be maintained throughout a collaborative performance, thus facilitating the conditions for flow. Developing this level of control as an aspect of internal attention is vital for collaborative performance, because as the piano accompanist I need to be ready to respond to many different types of performance events. A clear, cool head, devoid of music performance anxiety is needed to manage performance events that could include my collaborative partner suddenly changing their tempo, unexpectedly skipping to a different part of the music, failing to make an accurate entry, or suddenly finding that part of my own accompaniment music is missing during the actual performance.

The analysis of the data identified that both the short term (working) memory (Baddeley, 2003; Berz, 1995; Chun, et al., 2011) and the long term memory (Chun, et al., 2011; Stevens, Ginsborg, & Lester, 2011) play an important part in managing my internal response to events that occur in collaborative performance. The long term memory is associated with our internal attention (Chun, et al., 2011) and also plays an important role for a piano accompanist. My ability to recognise stylistic characteristics of music and apply them in performance is due to my ability to retrieve from my long term memory musical elements of various styles, ranging from classical to Broadway to contemporary popular. Even if this information is only partially represented on the musical score, as the piano accompanist I need to assimilate the style of a piece of music in response to the performance style of my collaborative partner. If my collaborative partner is inexperienced as a performer, such as with student performers, my choice of musical style can determine the direction of a performance as these student performers rely on my musical judgements drawn from years of experience and stored in my long term memory. The analysis of the data makes it clear that long-term memory plays an important role in the challenge-skills balance that is pertinent to the development of aural skills, music-reading skills, quick learning and sight-reading skills in collaborative music performance.

The working memory allows me to move quickly between performance styles such as when I accompany a range of different performers one after the other in a

competition or examination situation, or when I accompany ballet examinations and move between the different dance styles throughout the examination. Large amounts of information about the temporal and tonal elements of the music need to be processed in quick succession and the concept of 'chunking' (Luck & Vogel, 1997; Zatorre, et al., 2007), as one of the functions of working memory, describes how the brain is able to process larger pieces of visual information into groups or 'chunks' to allow for instant use. Gudmundsdottir (2010) acknowledges that 'chunking' is particularly pertinent when thinking about how a musician sight-reads, and as a piano accompanist, the ability to sight-read and learn music quickly underpins much of my collaborative activity. The link between working memory and the skill of sight-reading in collaborative performance is made clear in the analysis of the data for this study.

The notion of vigilance, the ability to sustain attention over a long period of time (De Weerd, 2002; Finomore, et al., 2009; Gillig & Sanders, 2011; Warm, Parasuraman, & Matthews, 2008) is another characteristic of the attention skills I have developed as a piano accompanist. Vigilance seems to link closely with the type of focused attention some of Csikszentmihalyi's research participants described when they experienced flow (Csikszentmihalyi & Csikszentmihalyi, 2006, 1988b; Csikszentmihalyi & LeFevre, 1989) and is a strong characteristic of my flow experiences in collaborative performance as a piano accompanist. As my ability to focus my attention during piano accompaniment has grown, the ability to maintain vigilance has also increased. Not every flow experience features vigilance, as some of my flow experiences were quite momentary and occurred in a short time during a performance. However, when I have been required to focus my attention during an extended performance of a challenging work, vigilance has allowed my to keep any music performance anxiety under control, harness a state of mindfulness to eliminate all distracting thoughts during the performance and allow my long-term and working memory to function at an optimal level controlling all apsects of my in-the-moment performance, thus facilitating an experience of flow.

The characteristics of flow in collaborative performance

This autoethnographic study has enabled me to present a theory to understand my experiences of the phenomenon of flow during collaborative performance as a piano accompanist. My research and analysis of this autobiographical case study

found that when there is a high level of communication between collaborative musicians who are confident they have all the skills to meet the challenges of the musical performance and are in a focused state of sustained attention, the possibility for an experience of flow is high. Csikszentmihalyi described a flow activity as one where the participants knew what they had to achieve (goals) and knew when they had achieved it (feedback). In collaborative performance as a piano accompanist, the goals are often musical goals, not expressed in words, and the feedback comes from the nuances of movement and breath that performers exude when they emotionally and intellectually engage with the music during performance (Juslin, Liljeström, Västfjäll, & Lundqvist, 2010).

The analysis of the data indicated a strong link between focused attention and immersion in performance, thus leading to an experience of flow. Once the focused attention is achieved, allowing me to select and modulate both my external and internal attention demands during a performance I am able to control my actions and experience a sense of immersion in the music performance. In these instances, I am aware that I am in full control of all aspects of the performance: I feel in control of my own playing, I have a strong musical connection with my collaborative partner and I feel I have the ability to manipulate and change the performance in the moment of performance.

This immersion in the music performance can lead to experiences of flow. The self ceases to matter at that time as each performer emotionally and intellectually connects to the music as it is performed (Juslin, et al., 2010; Juslin & Timmers, 2010). As the piano accompanist, I have experienced this type of immersion strongest when accompanying singers. When lyrics and music are well matched in an expertly written song, and the singer is able to immerse themselves in the communication of the intent and emotion of the song, my role as the accompanist is to also match the commitment of the singer and immerse myself in the performance of that song. This type of immersion in performance can also provide a strong emotional response from the performers and Welch (2005, p. 251) notes that "communication of emotion is at the heart of sung performance through the combined use of acoustical (vocal) and visual (facial) expressive cues." Such experiences of flow can be very memorable for the participants in the performance and are sometimes experienced by the audiences who witness that moment.

The 'autotelic' experience of collaborative performance

When Csikszentmihalyi began his research into the phenomenon of flow he quickly realised that, regardless of race or class, as humans we gain our greatest sense of happiness and contentment when we pursue activities that require the total absorption of our psychic energy and that we perceive as worthwhile (Csikszentmihalyi, 1997). Surprisingly, his study participants reported that these worthwhile and enjoyable activities could occur at work or during leisure (Csikszentmihalyi, 2000). Music is one of the activities that have been particularly noted for its propensity to produce these 'autotelic' experiences for it is an art form that draws upon and appeals to the physical, cognitive, emotional and spiritual dimensions of human kind.

Csikszentmihalyi (2002) used the term 'autotelic' to refer to intrinsically rewarding activities that are intensely satisfying in, and of, themselves and not because they have some future benefit. As demonstrated through the vignettes presented in the narrative I have found myself in a range of collaborative performance situations as a piano accompanist. Some of this accompaniment work was not particularly satisfying either because the music was very easy, or I was required to play it over and over again. This can occur in many accompaniment activities such as rehearsals, lessons or workshops where my job has been to repeat a piece of music incessantly making it difficult to find new challenges for my skills. Such instances can lead to feelings of boredom and apathy, thus not providing conditions to facilitate flow. The narrative only hints at these types of activities because they are rarely remembered, but there are instances in the narrative where I describe my thought processes in repetitive situations such as rehearsals where I did not encounter negative emotions of apathy or boredom. Enjoyment and flow can still be found in repetitive accompaniment activities if they are approached with the right attitude: constantly looking for ways to improve the expressiveness of a phrase, to tighten up the articulation of a rhythm or to coordinate more accurately with the tonal and temporal variations of my collaborative partner's performance.

Some of my piano accompaniment work was done professionally and the narrative makes specific reference to the time in my life when piano accompaniment became part of my professional work as a musician and music academic. However, what is of interest to me as I studied my narrative for themes and resonances is that

the flow experiences were not particularly linked to being at either the amateur or professional level. Each time the narrative vignettes describe an accompaniment experience that featured all or some of the characteristics of flow they were mostly associated with performances of music with which I had a strong emotional connection. Performing music for which I have a personal preference does not guarantee an experience of flow as other factors can inhibit the phenomenon of flow, such as the factors that take up too much of my externally and internally generated attention, but each of the flow experiences recounted in the narrative involved performances of music for which I had a strong personal preference. Preference in music can be altered through exposure to various styles of music and changes over time (Hargreaves & North, 2010). Rentfrow and McDonald (2010, p. 682) suggest that "individuals are drawn to certain styles of music because the psychological qualities associated with such music resonate with how they see themselves." My years of training in classical music styles has allowed me to develop a strong music preference for more serious music, but my interaction with a wide range of collaborative performance partners and groups has widened my musical understanding and allowed me to develop a varied set of musical preferences across a diverse set of musical genres.

The 'autotelic' experiences of flow in piano accompaniment have been instrumental in maintaining my interest in this field of music performance, allowing me to develop into a confident piano accompanist in many genres of music. This study has enabled me to untangle the phenomenon of flow and consider each of its characteristics in turn, so that I can gain a greater understanding of the collaborative performance process. Each part of the theory that has resulted from this autoethnographic study is closely connected, and the literature that pertains to each section has helped to add meaning to the narrative that recalls my flow experiences.

Limitations of the study

An autoethnography is by definition a case study of the self. Consistent with case study methodology (Stake, 1995, 2000, 2005; Yin, 2009), it is not possible to generalise the findings of my study for all piano accompanists in collaborative music performance situations. However, case studies have been shown to have value in

understanding a particular, subjective viewpoint. Contending for a renewed consideration of the use of case study methodology in the generation of knowledge, Flyvbjerg (2006, p. 228) argues, by providing examples from the history of science and social science, that "formal generalization is overvalued as a source of scientific development, whereas 'the force of example' is underestimated." Autobiography continues to be a strong literary genre providing written examples of the lives of people, and autobiographies of pianists (Goldsworthy, 2009) and accompanists (Moore, 1962; Newton, 1966) have provided insight and encouragement for other pianists and piano accompanists into the process of performance.

Despite the fact that autoethnography has faced criticism as a research methodology for being self-indulgent, narcissistic, introspective, and individualised (Atkinson, 1997, 2006; Sparkes, 2000, 2002a), autoethnography is proving to be a useful methodology for musicians who wish to gain more understanding of the creative process in composition, music learning and performance (Bartleet, 2009; Bartleet & Hultgren, 2008; de Vries, 2006; Dunbar-Hall, 2009; Emmerson, 2009; Mali, 2006; Schindler, 2009). In describing methodological framework of autoethnography, Ellis and Bochner (2000, p. 737) state "by exploring a particular life, I hope to understand a way of life," thus summing up the place of autoethnography in the field of qualitative research.

The data gathered in this study presents a personal account of many types of optimal experiences as a piano accompanist, and while other piano accompanists may empathise with these situations, they are unique to my own experience as a collaborative performer. The narrative that forms the data contains elements, such as direct speech, that are not exact representations of the actual events. As they were written well after the event occurred, I was not able to provide verbatim accounts of the conversations that may have occurred. However, making use of narrative devices such as direct speech and scenic description helps to create an evocative text "that is a powerful means of conveying complexity and ambiguity without rendering closure" (Sparkes, 2002b, p. 11) thus drawing the reader into my experiences of flow as a collaborative musician.

As with many forms of qualitative research that rely on the memory of the researcher or the research participants to describe an experience or an event, an autoethnographer also relies on memory, albeit aided by personal documentation such

as journal and diary entries, newspaper clippings, video and audio recordings and other similar artefacts. Tedlock (2000) observes that ethnographers have had to meet this type of challenge to their research for some time. While they may seek to triangulate their interview data with observation data, they too face challenges in the interpretation of their observations and dealing with the memory of their research participants. The passage of time, experience and the ontological perspective of the researcher can distort the memory of these events (Bochner & Ellis, 1996; DeVault, 1997) and it is only through the careful checking of data from a variety of sources that such distortions in the interpretation of qualitative data can be minimised. The data for my study has been created from a number of artefact sources as well as professional conversations with my musical collaborators that are mentioned in the narrative, thus achieving a greater sense of verisimilitude for the reader.

The analysis chapters in this thesis attempt to address these criticisms by focusing on the development of a theory for understanding the research question and supporting this emerging theory with references from a wide range of pertinent literature. Adding further depth to this understanding, George and Bennett (2004, p. 115) argue that case study methodologies can be appropriate for theory development and further suggest that "when theories are well developed, researchers can use case studies for theory testing." This study does not aim to provide a definitive theory and model for the complex interactions that occur in all collaborative performances or to pinpoint those aspects of collaborative performance that result in the experience of flow. However, by exploring one case, an autoethnographic study of my own experience, I aim to open the experience of flow in collaborative performance for a piano accompanist to a wider audience. This has the potential to add more understanding to the phenomenon of flow that was first defined by Csikszentmihalyi and subsequently studied by many other researchers in diverse fields in the arts and sciences.

Directions for future research

There now exists an opportunity to test and possibly develop the theory presented in this thesis with further qualitative research into the flow experiences of other piano accompanists. It could be compared to the flow experiences of piano

accompanists working professionally as repétitéurs for opera and music theatre companies as well as amateur accompanists who regularly accompany choirs, small ensembles and individual singers and instrumentalists.

A further research opportunity exists by exploring the implications of this research in the field of piano pedagogy, with particular application in the pedagogy for piano accompaniment. Some pianists see piano accompaniment as a less desirable field of endeavour either because of a perceived lack of status (Wristen, 1999) or from high levels of anxiety incurred during music performance (Wesner, et al., 1990). This study into the phenomenon of flow demonstrates that piano accompaniment can be intrinsically enjoyable ('autotelic') providing participants with an optimal experience in collaborative music performance. The results of this case study could form the basis of the development of pedagogy for pianists who wish to engage in collaborative music performance as a piano accompanist.

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